

NORTH AMERICAN ENERGY STANDARDS BOARD

Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials

February 6-7, 2007

North American Energy Standards Board

Executive Committee Meeting

**Wholesale Electric Quadrant
Retail Gas Quadrant
Retail Electric Quadrant**

February 6-7, 2007

NAESB Offices, Houston, Texas

NORTH AMERICAN ENERGY STANDARDS BOARD

Executive Committee Meeting – WEQ, REQ, RGQ, WGQ Meeting Materials

February 6-7, 2007

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TAB 1

Welcome and Opening Remarks

EC Members & Terms

Schedule of 2007 Meetings

- This section of the meeting materials includes the welcome and opening remarks, the antitrust statement guidance, the EC members and alternates terms, and the schedule of the 2007 meetings.
- No action is required by the EC for any of these documents.
- The meeting materials are references for agenda item 1 of each of the quadrant meetings.
- Laura Kennedy will call roll to establish quorum.

NORTH AMERICAN ENERGY STANDARDS BOARD

Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials

February 6-7, 2007

1. Welcome and Opening Remarks

The February 6-7 Executive Committee meetings will be held in Houston at the NAESB offices. Meeting arrangements and nearby hotels are posted and were contained in the meeting announcements. The meetings will take place on the 13th floor of 1301 Fannin, Houston, Texas 77002.

Tuesday, February 6	TIME: 10 am to 4 pm CT
	EVENT: WEQ EC Meeting (conference calling available)
	LOCATION: NAESB Office, 1301 Fannin, 13 th Floor, San Jacinto Room
Wednesday, February 7	TIME: 10 am to 4 pm CT
	EVENT: Retail EC Meeting (conference calling available)
	LOCATION: NAESB Office, 1301 Fannin, 13 th Floor, San Jacinto Room
	TIME: 8 am to 2 pm CT
	EVENT: WEQ Seams Subcommittee (conference calling and web cast available)
	LOCATION: NAESB Office, 1301 Fannin, 23rd Floor, NAESB Office
Thursday, February 8	TIME: 10 am to 4 pm CT
	EVENT: WGQ BPS Meeting on Gas Quality (conference calling and web cast available)
	LOCATION: NAESB Office, 1301 Fannin, 13 th Floor, San Jacinto Room

- For further assistance please reach:

Veronica Thomason at (713) 356 - 0060
- The officers and meeting administration presiding over the Executive Committee meeting are:

Jim Buccigross	- WGQ Chairman
Kathy York	- WEQ Chairman
Mike Novak	- RGQ Chairman
Ruth Kiselewich	- REQ Chairman
Rae McQuade	- President and COO
Laura Kennedy	- NAESB Counsel
Veronica Thomason	- NAESB Staff
LaRita Cormier	- Transcription Services
- Transcripts will be available and can be ordered either during the meeting through Ms. Cormier, or by contacting the NAESB office after the meeting for further information, 713-356-0060.
- To participate by phone, please call the NAESB Office (713-356-0060, naesb@naesb.org) for conference calling information. Because these meeting topics do not include extensive document editing or presentations, it was determined not to offer the meetings via web casting.

NORTH AMERICAN ENERGY STANDARDS BOARD

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Antitrust Guidelines

NORTH AMERICAN ENERGY STANDARDS BOARD

Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials

February 6-7, 2007

1. Antitrust Guidelines

- The antitrust guidelines will be covered by Ms. Laura Kennedy. The points are:

Antitrust guidelines direct meeting participants to avoid discussion of topics or behavior that would result in anticompetitive behavior including: restraint of trade and conspiracies to monopolize, unfair or deceptive business acts or practices, price discriminations, division of markets, allocation of production, imposition of boycotts, and exclusive dealing arrangements.

Any views, opinions or positions presented or discussed by meeting participants are the views of the individual meeting participants and their organizations. Any such views, opinions or positions are not the views, positions or opinions of NAESB, the NAESB Board of Directors, or any NAESB Committee or Subcommittee, unless specifically noted otherwise.

As it is not the purpose of the meeting to discuss any antitrust topics, if anyone believes we are straying into improper areas, please let us know and we will redirect the conversation.

NORTH AMERICAN ENERGY STANDARDS BOARD

Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials

February 6-7, 2007

EC Members & Terms



North American Energy Standards Board

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Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD 2007 EXECUTIVE COMMITTEE TERMS – Wholesale Gas Quadrant

PRODUCERS SEGMENT		TERM END:
Jim Busch	Director of Energy Policy and Regulation, BP Energy Company	12-31-2008
Pete Frost	Director – Regulatory Affairs, ConocoPhillips Gas and Power Marketing	12-31-2008
Chuck Cook	Manager - Regulatory Affairs, ChevronTexaco	12-31-2007
Richard Smith	Regulatory, ExxonMobil Gas & Power Marketing	12-31-2009
Mike Shepard	General Counsel, Mewbourne Oil Company	12-31-2009
PIPELINE SEGMENT		
Bill Griffith	Consultant, El Paso Natural Gas Company	12-31-2008
Kathryn Burch	Project Manager, Standards and Regulatory, Spectra Energy Transmission	12-31-2008
Dale Davis	Consultant, Williams Gas Pipeline	12-31-2007
Randy Young	Director Regulatory Compliance, Gulf South Pipeline	12-31-2009
Kim Van Pelt	Regulatory Compliance Manager, Panhandle Eastern Pipe Line	12-31-2009
LOCAL DISTRIBUTION COMPANY (LDC) SEGMENT		
Rodger Schwecke	Pipeline Products Projects Manager, Southern California Gas	12-31-2008
Dolores Chezar	Director, Regulatory Policy, KeySpan Energy	12-31-2008
Scott Butler	Projects Manager – Energy Markets Policy Group, Consolidated Edison Company of New York, Inc.	12-31-2007
Mike Novak	Assistant General Manager, National Fuel Gas Distribution	12-31-2009
Craig Colombo	Energy Trader III, Dominion Resources	12-31-2009
END USERS SEGMENT		
Diane McVicker	Sr. Principal Fuel Supply Analyst, Salt River Project	12-31-2008
Valerie Crockett	Energy Markets & Policy Specialist, Tennessee Valley Authority	12-31-2008
Kelly Daly	Partner, Stinson, Morrison & Hecker	12-31-2007
Dona Gussow	Contracts Coordinator, Florida Power and Light	12-31-2009
Tina Burnett	Natural Gas Operations Administrator, The Boeing Company	12-31-2009
SERVICES SEGMENT		
Suzanne Calcagno	Director – Regulatory Compliance, UBS Energy LLC	12-31-2008
Lisa Simpkins	Director Regulatory/Legislative Affairs, Constellation Energy Commodities Group	12-31-2008
Leigh Spangler	CEO, Latitude Technologies	12-31-2007
Jim Buccigross	Vice President, 8760 Inc.	12-31-2009
Keith Sappenfield	Regional Director – US Regulatory Affairs, EnCana Marketing (USA) Inc.	12-31-2009



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NORTH AMERICAN ENERGY STANDARDS BOARD 2007 EXECUTIVE COMMITTEE TERMS – Retail Electric Quadrant

SUPPLIERS SEGMENT		TERM END:
Bill Barkas	Manager of Retail State Government Relations, Dominion Retail, Inc.	12-31-2007
V A C A N C Y		12-31-2007
Jason Bear	Director – Market Advocacy, Direct Energy	12-31-2008
Jansen Pollock	Manager of Regulatory Affairs, Constellation NewEnergy	12-31-2008
DISTRIBUTORS SEGMENT		
Ruth Kiselewich	Director Special Projects and Supplier Services, Baltimore Gas & Electric Company (MAAC NERC Region)	12-31-2007
Terry Moran	Regulatory Issues Manager, PSEG (MAAC NERC Region)	12-31-2007
Judy Ray	Industrial Segment Manager – Contract Administrator, Alabama Power Company (SERC NERC Region)	12-31-2008
Mary Edwards	Senior Customer Choice Analyst – Regulation and Competition, Dominion Virginia Power (SERC NERC Region)	12-31-2008
END USERS SEGMENT		
V A C A N C Y		12-31-2007
V A C A N C Y		12-31-2007
Barbara Alexander	Consumer Affairs Consultant, State of Maine Public Advocate	12-31-2008
V A C A N C Y		12-31-2008
SERVICE PROVIDERS SEGMENT		
Jim Minneman	Controller, PPL Solutions LLC	12-31-2007
Jennifer Teel	Director – Business Solutions, EC Power	12-31-2007
Susan Munson	ERCOT Retail Market Liaison, ERCOT	12-31-2008
V A C A N C Y		12-31-2008



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NORTH AMERICAN ENERGY STANDARDS BOARD 2007 EXECUTIVE COMMITTEE TERMS – Wholesale Electric Quadrant

TRANSMISSION SEGMENT		TERM END:	SUBSEGMENT:
Patrick McGovern	Manger - System Services, Georgia Transmission Corporation	12-31-2007	Muni/Coop
Steven C. Cobb	Manager Transmission Services, Salt River Project	12-31-2008	Fed/State/Prov.
Dean Ulch	Principal Engineer, Transmission Policy and Services Group, Southern Company Services	12-31-2008	IOU
Edward Davis	Policy Consultant, Entergy Services, Inc.	12-31-2007	IOU
Julie Voeck	Manager Strategic Policy and Planning, American Transmission Company	12-31-2008	ITC
Bob Harshbarger	OASIS Trading Manager, Puget Sound Energy	12-31-2007	at large
Linda Campbell	Director of Reliability, Florida Reliability Coordinating Council	12-31-2007	At-Large
GENERATION SEGMENT			
William J. Gallagher	General Manager of Vermont Public Power Supply Authority	12-31-2007	Muni/Coop
Kathy York	Sr. Energy Markets & Policy Specialist, Tennessee Valley Authority	12-31-2008	Fed/State/Prov.
Jalal Babik	Manager – Electric Policy, Dominion Resource Services, Inc.	12-31-2008	IOU
John Ciza	Project Manager Energy Policy and Regulatory Affairs, Southern Company Services	12-31-2007	IOU
Barry Green	Director, Markets and Research Regulatory Affairs Division, Ontario Power Generation	12-31-2008	Merchant
Gary Hinners	Director- West regulatory Issues, Reliant Energy, Inc.	12-31-2007	at large
Neal Balu	Director of Transmission Policy, Wisconsin Public Service Corp. Resources	12-31-2007	at large
MARKETERS/BROKERS SEGMENT			
Clay A. Norris	Division Director, Planning, North Carolina Municipal Power Agency #1	12-31-2008	Muni/Coop
Clyde Harmon	Senior Manager, Trading Operations, Tennessee Valley Authority	12-31-2007	Fed/State/Prov.
V A C A N C Y		12-31-2006	Not IOU Affiliated
Mark Mitchell	Manger of Power Marketing Supply and Trading Department, Salt River Project	12-31-2007	at large
John Apperson	Director – Commercial and Trading, PacifiCorp Energy	12-31-2008	IOU
Joel Dison	Project Manager, Southern Company Generation and Energy Marketing	12-31-2007	IOU
V A C A N C Y		12-31-2007	at large



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DISTRIBUTION/LOAD SERVING ENTITIES (LSE) SEGMENT		TERM END:	SUBSEGMENT:
Robert Williams	Director of Regulatory Affairs, Florida Municipal Power Agency	12-31-2008	Muni/Coop
Robert Schwermann	Energy Coordinator, Sacramento Municipal Utility District	12-31-2007	Muni/Coop
Alan Pritchard	Senior Engineer, Duke Energy Corporation	12-31-2008	IOU
John McCawley	Director – Energy Acquisition, Exelon Energy Delivery, Exelon Corporation – PECO Energy	12-31-2007	IOU
Robert Martinko	Consultant FERC Compliance, FirstEnergy Service Company	12-31-2008	at large
Syd Berwager	Industry Restructuring Project Manager, Bonneville Power Administration/Power Business Line	12-31-2007	Other
V A C A N C Y		12-31-2007	At-Large
END USERS SEGMENT			
V A C A N C Y		12-31-2007	at large
V A C A N C Y		12-31-2008	at large
Lou Ann Westerfield	Policy Strategist, Idaho Public Utilities Commission, rep. National Association of Regulatory Utility Commissioners	12-31-2008	Regulator
V A C A N C Y		12-31-2007	at large
V A C A N C Y		12-31-2008	at large
John Hughes	Vice President Technical Affairs, Electricity Consumers Resource Council (ELCON)	12-31-2007	Large Industrial
Paul Sorenson	Director-Central Markets Strategy, Open Access Technology International, Inc.	12-31-2007	At-Large



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SUPPLIERS SEGMENT		TERM END:
Suzanne Calcagno	Director, Regulatory Compliance, UBS Energy, LLC	12-31-2007
V A C A N C Y		12-31-2008
V A C A N C Y		12-31-2007
Richard Zollars	Director, Data and Information, Dominion Retail, Inc.	12-31-2008
V A C A N C Y		12-31-2008
V A C A N C Y		12-31-2007
DISTRIBUTORS SEGMENT		
V A C A N C Y		12-31-2007
V A C A N C Y		12-31-2007
Leslie H. Nishida	Gas Federal Regulatory Supervisor, Wisconsin Public Service Corporation	12-31-2007
Michael Novak	Assistant General Manager, National Fuel Gas Distribution Corporation	12-31-2008
V A C A N C Y		12-31-2008
Phil Precht	Director of Gas Choice Programs – Pricing and Regulatory Services, Baltimore Gas and Electric Company	12-31-2008
END USERS SEGMENT		
V A C A N C Y		12-31-2008
V A C A N C Y		12-31-2008
V A C A N C Y		12-31-2008
V A C A N C Y		12-31-2007
V A C A N C Y		12-31-2007
V A C A N C Y		12-31-2007
SERVICE PROVIDERS SEGMENT		
V A C A N C Y		12-31-2008
V A C A N C Y		12-31-2008
George M. Behr	Director, Energy Services Group, Inc.	12-31-2008
V A C A N C Y		12-31-2007
V A C A N C Y		12-31-2007
V A C A N C Y		12-31-2007



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**NORTH AMERICAN ENERGY STANDARDS BOARD
2007 EXECUTIVE COMMITTEE ALTERNATES – Wholesale Gas Quadrant
As of January 12, 2007**

End User Segment	
Curt Brechtel	Arizona Public Service Company
Heather Stubblefield	Florida Power & Light Company
Distribution Segment	
George Simmons	NiSource Inc.
Rick Ishikawa	Transportation Contract Administrator, Sempra Energy - Southern California Gas Company
Marjorie Perlman	Director, Federal Regulatory Proceedings, Energy East Management Corporation (Rochester Gas & Electric)
Phil Precht	Director of Gas Choice Programs – Pricing and Regulatory Services, Baltimore Gas and Electric Company
Donald Petersen	Senior Regulatory Analyst, Pacific Gas and Electric Company
Elliot Tanos	Senior Specialist – Regulatory Affairs Washington Gas Light Company
Alonzo Weaver	Vice President of Customer Operations, Memphis Light, Gas & Water Division (rep. American Public Gas Association)
Amy Hamilton	Manager – Gas Regulation and Transportation Services, PECO Energy Company
Pipeline Segment	
Bill Grygar	Vice President, Panhandle Eastern Pipe Line
Scott Hansen	Questar Pipeline Company
Iris King	Director, Technical and Marketing Support, Dominion Transmission, Inc.
Paul Love	Director, Electronic Customer Services, Natural Gas Pipe Line Company of America
Mark Gracey	Consultant, Tennessee Gas Pipeline Company
Tom Gwilliam	Iroquois Gas Transmission System
Producer Segment	
David Ogden	Manager, Marketing Administration, Dominion E&P
Jim K. Hanrahan	Americas – Regulatory Analyst, ExxonMobil Gas Marketing
Services Segment	
Richard (Dick) Couron	President, Trinity Apex Solutions, Inc.



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**NORTH AMERICAN ENERGY STANDARDS BOARD
2007 EXECUTIVE COMMITTEE ALTERNATES – Retail Electric Quadrant
As of January 12, 2007**

Distribution Segment

Keith P. Hock	Director ARES Business Center, Ameren Services
Thomas Kilgore	General Manager-Customer Service, Gulf Power Company
Dorman Davis	Mississippi Power Company

End User Segment

Bruce Hayes	Senior Regulatory Analyst, Ohio Consumers' Counsel
Steve Ward	Office of Public Advocate, State of Maine

Services Segment

Yvette Camp	Policy & Planning, Southern Company Services

Supplier Segment



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**NORTH AMERICAN ENERGY STANDARDS BOARD
2007 EXECUTIVE COMMITTEE ALTERNATES – Wholesale Electric Quadrant
As of January 12, 2007**

End User Segment		Sub-Segment
Bill Heinrich	New York State Dept. of Public Service	Regulators
Distribution/LSE Segment		Sub-Segment
Shannon Black	Senior Regulatory and Contracts Specialist, Sacramento Municipal Utility District	Muni/Coop
Wendy Weathers	Principal Analyst, Salt River Project	Other
Gerry W. Cauley	Vice President and Director of Standards, North American Electric Reliability Council	At Large
Generation Segment		Sub-Segment:
Francis Halpin	Bonneville Power Administration	Fed/State/Prov.
Brian Evans-Mongeon	Manager, Power Supply and Marketing Services, Vermont Public Power Supply Authority	Fed/State/Prov
Scott Corse	Chairman, Board of Directors, Vermont Public Power Supply Authority	Muni/Coop
Tony Petrella	Ontario Power Generation	Merchant
Greg Olsen	Ontario Power Generation	Merchant
Marketer/Broker Segment		Sub-Segment:
Jeff Ackerman	Manager, CRSP-Energy Mgmt., Western Area Power Administration	Fed/State/Prov
Brenda Anderson	Bonneville Power Administration	Fed/State/Prov
Edison G. Elizeh	PacifiCorp	IOU Affiliated
Greg Locke	Manager, Strategic Analysis, Electricities of North Carolina	Muni/Coop
Valerie Crockett	Energy Markets & Policy Specialist, Tennessee Valley Authority	Fed/State/Prov
Carol McCrary	Electricities (North Carolina Municipal Power Agency #1)	Muni/Coop
Transmission Segment		Sub-Segment:
Barbara Rehman	Policy Manager, Bonneville Power Administration	Fed/State/Prov.
Mark Fidrych	Western Area Power Administration	Fed/State/Prov.
Tim Ponseti	Tennessee Valley Authority	Fed/State/Prov.
Chuck Feagans	Tennessee Valley Authority	Fed/State/Prov.
Jim Hicks	PacifiCorp	IOU
William O. Ball	Vice President, Transmission Planning, Policy and Support Services, Southern Company Services, Inc.	IOU



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**NORTH AMERICAN ENERGY STANDARDS BOARD
2007 EXECUTIVE COMMITTEE ALTERNATES – Retail Gas Quadrant
As of January 12, 2007**

DISTRIBUTORS SEGMENT

Joe Stengel	Federal Regulatory Affairs Manager, Philadelphia Gas Works
Paul J. Szykman	Director – Rates and Gas Supply, UGI Utilities, Inc.
Mike McShane	Gas Choice Programs Leader, Baltimore Gas and Electric Company

END USERS SEGMENT

Barbara Alexander	Consumer Affairs Consultant, rep. Indiana Office of Utility Consumer Counselor

SERVICE PROVIDERS SEGMENT

SUPPLIER SEGMENT

Paul Cherevka	Project Manager Data Warehouse, Dominion Retail

NORTH AMERICAN ENERGY STANDARDS BOARD

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February 6-7, 2007

Schedule of 2007 Meetings



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November 6, 2006

TO: NAESB Executive Committee and Interested Industry Participants
FROM: Rae McQuade, NAESB Executive Director
RE: Schedule of 2007 Meetings

Below is the schedule for 2007 meetings for the Executive Committee, Board of Directors and Advisory Council. Unless sponsors are noted for the meetings or the location has already been set as noted below, they will be held in Houston. Should other sponsors volunteer in the next few weeks, these locations may change:

Date	Meeting	Location
February 6-8	EC Meetings – WEQ, Retail and WGQ	
February 17	Advisory Council Meeting	Washington D.C. in conjunction with the NARUC Winter meetings
March 22	Board of Directors	Houston
May 8-10	Executive Committee Meetings (WEQ, Retail, WGQ)	
June 28	Board of Directors Meeting & Strategic Planning Session	
August 14-16	Executive Committee Meetings (WEQ, Retail, WGQ)	
September 27	Board of Directors Meeting & Strategic Planning Session	Houston
November 6-8	Executive Committee Meetings (WEQ, Retail, WGQ)	
December 13	Board of Directors	Houston

NORTH AMERICAN ENERGY STANDARDS BOARD
Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials
February 6-7, 2007

TAB 2

Agendas

- Contained in this section is the agenda and meeting announcement as posted on the NAESB web site.
- Each of the EC chairs for the respective quadrants will entertain motions from the EC members of that quadrant to adopt the agendas following that are specific to that quadrant. The motions to adopt are simple majority.
- The materials in Tab 2 correspond to agenda item 2 for each of the quadrant EC agendas.



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January 19, 2007

TO: NAESB Executive Committee and Interested Industry Participants
FROM: Rae McQuade, NAESB President
RE: Executive Committee Meeting Agendas

NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETINGS
NAESB Offices, Houston, Texas
February 6-7, 2006

As announced at prior Executive Committee meetings, meeting announcements and in other communications, the Executive Committee (EC) will meet via conference call and in person in Houston on February 6-7, 2007. Below are the meeting arrangements:

Tuesday, February 6	TIME: 10 am to 4 pm CT EVENT: WEQ EC Meeting (conference calling available) LOCATION: NAESB Office, 1301 Fannin, 13 th Floor, San Jacinto Room
Wednesday, February 7	TIME: 10 am to 4 pm CT EVENT: Retail EC Meeting (conference calling available) LOCATION: NAESB Office, 1301 Fannin, 13 th Floor, San Jacinto Room TIME: 8 am ¹ to 2 pm CT EVENT: WEQ Seams Subcommittee (conference calling and web cast available) LOCATION: NAESB Office, 1301 Fannin, 23rd Floor, NAESB Office
Thursday, February 8	TIME: 10 am to 4 pm CT EVENT: WGQ BPS Meeting on Gas Quality (conference calling and web cast available) LOCATION: NAESB Office, 1301 Fannin, 13 th Floor, San Jacinto Room
Contact:	Veronica Thomason 713-356-0060 (main number)

If you plan to attend the EC meetings, please RSVP to the NAESB office (naesb@naesb.org) by **Monday, January 29, 2007**. Hotel information is posted on the NAESB web site at the following link: http://www.naesb.org/pdf2/2007_houston_hotels.pdf.

If you plan to participate by conference call, please contact the NAESB Office (713-356-0060 or naesb@naesb.org) to obtain the calling number and pass code. The meetings are open to any interested party.

The materials for the EC meetings will be emailed to the participants and posted on the web site shortly. Agenda and materials for the WEQ Seams Subcommittee (http://www.naesb.org/weq/weq_seams.asp) and WGQ Business Practices Subcommittee (<http://www.naesb.org/wgq/bps.asp>) meetings will be posted on the NAESB web site in the links provided.

As always, the chair reserves the right to extend the time of the meeting to ensure that agenda items are addressed. The times indicated on the agenda will be followed to ensure that agenda items are allotted appropriate time slots. Should an agenda item conclude earlier than its stated time slot, the remaining time can be allotted to other agenda items at the discretion of the chair.

Please feel free to call the NAESB office should you have any questions, comments or work papers.

Best Regards,
Rae

¹ This time may change to start at 9:00 am C to accommodate phone participation from the west.



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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING

NAESB Office, Houston, Texas

Tuesday, February 6, 2007 - 10:00 am to 4:00 pm CT

WHOLESALE ELECTRIC QUADRANT (WEQ) DRAFT AGENDA

10:00 a.m. CT	1. Welcome • Antitrust Guidelines • Welcome to members and attendees • Introduction and Roll Call 2. Discuss and Adopt Wholesale Electric Quadrant Draft Agenda & Draft Minutes • Adoption of WEQ Agenda • Adoption of Draft Minutes of November 14 and December 19, 2006 WEQ EC Meetings 3. Discuss e-Tariff Activities 4. Consider, Discuss and Vote to Adopt Proposed Standards • Recommendation R04006C1 – Develop OASIS 1A capacity release request standards, (http://www.naesb.org/pdf2/r04006c1_rec.doc, comments due January 8, 2007) • Recommendation 2007 Annual Plan Item 3(a)(2) – Implementation of S&CP changes to support Standards of Conduct business practices, (http://naesb.org/pdf2/2007_weq_ap_i3a2_rec.doc, http://naesb.org/pdf2/2007_weq_ap_i3a2_rec_attachment.doc, comments due on February 5, 2007) • Minor Correction 5. Review Subcommittee Updates and Plan Updates and Modify 2007 Plan Accordingly • Triage Subcommittee • Business Practices Subcommittee (BPS) • ATC/TTC Joint Effort with NERC • TLR Joint Effort with NERC • Electronic Scheduling (ESS) and Information Technology (ITS) Subcommittees • OASIS Task Force • Joint Interchange Scheduling Working Group (JISWG) • Standards Review Subcommittee (SRS) • Seams Subcommittee • Identify and vote to adopt proposed changes to the 2007 Annual Plan 6. Review Board of Directors and Board Committee Updates and Regulatory Action Updates 7. New Business
4:00 p.m. CT	8. Adjourn

Attire – Business Casual



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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING

NAESB Office, Houston, Texas

Wednesday, February 7, 2007 - 10:00 am to 4:00 pm CT

JOINT SESSION OF RETAIL GAS AND RETAIL ELECTRIC QUADRANTS DRAFT AGENDA

10:00 am CT	1. Welcome • Antitrust guidelines • Welcome to members and attendees • Introduction and roll call 2. Discuss and Adopt Joint Retail Electric Quadrant & Retail Gas Quadrant Draft Agenda & Draft Minutes • Adoption of Joint Agenda • Adoption of Draft Minutes of November 15, 2006 EC Meeting 3. Consider, Discuss and Vote to Adopt Proposed Standards • Recommendation 2007 Retail Annual Plan Item 1(a) - Technical Electronic Implementation Standards – Billing & Payments, (http://naesb.org/pdf2/2007_retail_api1a_rec.doc, http://naesb.org/pdf2/2007_retail_api1a_rec_attachment.doc, Comments due February 5, 2007) • Recommendation 2006 Retail Annual Plan Item 2 - Technical Electronic Implementation Standards – Customer Information, (http://naesb.org/pdf2/2006_retail_api2_rec.doc, http://naesb.org/pdf2/2006_retail_api2_rec_attachment.doc, comments due February 5, 2007) 4. Review Subcommittee Updates and Plan Updates and Modify 2007 Plan Accordingly • Business Practices Subcommittee • Information Requirements Subcommittee • Technical Electronic Implementation Subcommittee • Glossary Subcommittee • Contracts Subcommittee • Identify and vote to adopt proposed changes to the 2007 Annual Plan 5. Discussion and set up of three task forces to address DSM, Texas Task Force and Gas Design Day Forecast 6. Discuss publication date for version 1.1 7. Review Board of Directors and Board Committee Updates and Regulatory Action Updates 8. New Business
4:00 pm CT	7. Adjourn

Attire – Business Casual

NORTH AMERICAN ENERGY STANDARDS BOARD
Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials
February 6-7, 2007

TAB 3

Minutes –November 14, 2006(WEQ)

Minutes –December 19, 2006 (WEQ)

Minutes – November 15, 2006(Retail)

- Contained in this section are three sets of minutes for approval.
- Each of the EC chairs for the respective quadrants will entertain motions from the EC members of that quadrant to adopt the minutes following that are specific to that quadrant. The motions to adopt are simple majority.
- The materials in Tab 3 correspond to agenda item 2 for each of the quadrant EC agendas.



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November 20, 2006

TO: NAESB Wholesale Electric Quadrant Executive Committee and Interested Industry Participants

FROM: DeDe Kirby, Meeting/Project Manager

RE: Wholesale Electric Quadrant Executive Committee Draft Minutes – November 14, 2006

NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING WHOLESALE ELECTRIC QUADRANT (WEQ)

Tuesday, November 14, 2006 – 10:00 am to 4:00 pm Central

Hosted by TXU Electric Delivery – Dallas, TX

DRAFT MINUTES

1. Welcome

Ms. York called the meeting to order and welcomed the participants. Ms. York thanked TXU Electric Delivery for hosting the meeting. Ms. Kirby read the antitrust advice and called the roll of Executive Committee (EC) members and alternates. Quorum was established.

Ms. York thanked Mr. Blevins and Mr. Miller for their participation on the WEQ EC as both had recently tendered their resignations from the WEQ EC.

2. Wholesale Electric Quadrant Draft Agenda & Draft Minutes

Adoption of WEQ Agenda: Mr. Schwermann asked that a discussion of the Seams Subcommittee be included in the agenda, as well as a discussion on funding mechanisms for NAESB. Both were added under agenda item #7 “New Business”. Mr. Green moved to approve the agenda as revised and Ms. Crockett seconded the motion. The revised agenda was adopted by consensus.

Adoption of Draft Minutes: A minor grammatical change was made to the August 2006 WEQ EC minutes. Mr. Prithchard moved to adopt the minutes as revised and Mr. Davis seconded the motion. The minutes were adopted as revised by consensus.

3. Subcommittee Updates and Plan Updates

Triage Subcommittee: Ms. McQuade stated that the non-controversial requests for standards development submitted to NAESB are now being balloted by email. She stated that if a Triage Subcommittee or EC member does not respond, their vote is recorded as “yes”. Requests R06013, R06014, and R06015 completed the Triage process on September 5th and were recorded as WGQ standards maintenance requests. Requests R06016 – R06023 were submitted by Texas Gas and completed the Triage process to be recorded as either WGQ business practice standards requests or WGQ maintenance requests.

Ms. McQuade stated that R06024 should be added to the Retail Quadrants 2007 Annual Plan on November 15th. She explained that currently it was assigned to the Retail Electric Quadrant, but that the effects of standards development could involve the WEQ as well. However, there is no need for WEQ involvement at this time. Ms. McQuade stated that the NAESB staff would monitor development of the request in the REQ and inform the WEQ when issues were raised that required the participation of WEQ members. However, she asked for WEQ volunteers to monitor the progress of the request when possible.



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Mr. Davis asked that the plans for development of standards under the Federal Energy Regulatory Commission (hereafter referred to as "FERC" or the "Commission") Docket No.'s RM05-5 and RM05-28 be discussed. Ms. McQuade stated that the dockets and related standards development would be discussed under the agenda item for the WEQ 2007 Annual Plan.

Business Practices Subcommittee: Ms. York referenced page 202 of the Executive Committee Book (EC Book). This section contains a summary of the BPS meetings from the August EC meeting to date. Ms. York stated that the BPS was currently devoting the majority of its efforts to joint work with the ESS/ITS for the development of standards related to ATC and AFC (R05004A). She stated that language for partial service requests (Item 1 B of R05004A) was posted for its second round of informal comments. She explained that the language had been posted in summer 2006 for informal comments and the comments had been reviewed by the joint group and by the NERC ATC Drafting Team (ATCDT). The language was subsequently revised following the informal comment period and posted for a second round of comments. Any comments on the revised language were due on November 13th and will be addressed by the WEQ ESS/ITS and BPS on November 15th. In addition, scoping questions for Items 1A, 1D, and 3E were also posted for informal comments with comments due on November 13th.

Ms. York stated that the NERC ATCDT had informed NAESB that they were close to posting the MOD 001 standard on ATC for industry comment. She added that NAESB had also provided feedback to NERC on the development of this standard at the October 4-5 joint NERC/NAESB ATC meeting in Houston, TX. However, the NAESB WEQ BPS and ESS/ITS was set to review the language again on November 15th to provide additional feedback to the NERC team. NERC plans to post MOD 001 for comments on December 1st, or soon after. Ms. York stated that every effort is being made by the WEQ ESS/ITS and BPS and the NERC ATCDT to follow the NERC/NAESB joint standards development plan.

Electronic Scheduling Subcommittee (ESS) and Information Technology Subcommittee (ITS): Mr. Sorenson stated that the majority of ESS/ITS work was concentrated on revising the OASIS Standards and Communication Protocols (S&CP) to accommodate the request submitted for Redirect Standards for Non-firm transmission service. He explained that most of these changes are to be outlined and listed in a technical implementation guide for OASIS and the WEQ. However, there is debate amongst the subcommittee members on whether to continue with these revisions.

Mr. Sorenson stated that the work under the upcoming OATT Reform Notice of Proposed Rulemaking (NOPR) and related standards development under R05004A would also take much of the subcommittee's time and effort for 2007. In addition, the ESS/ITS will continue to monitor changes to e-Tagging and Interchange drafted and recommended by the Joint Interchange Scheduling Working Group (JISWG).

Ms. Kennedy stated that the WEQ EC voted at the August meeting to ask for FERC direction on the rollover of redirects before the ESS/ITS moved forward with the standards. Mr. Wood stated that based on information received from the FERC, the ESS/ITS was set to put standard 9.7 on hold until the NOPR on OATT Reform was issued. Mr. Rosenberg stated that the issue would be addressed in the OATT Reform NOPR. Mr. Wood stated that work on rollover redirects and standard 9.7 would be included in the work currently being done on OATT Reform.

OASIS Task Force: Mr. Sorenson stated that the OASIS Task Force worked on issues concerning OASIS. He added that much of the work of the OASIS Task Force crossed over into the work of the ESS/ITS.



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JISWG: Mr. Harshbarger stated that the JISWG had completed a Systems Requirement Document for the Registry rewrite and sent it to NERC. He explained that NERC was currently in the "Request for Project" phase of the Registry rewrite.

The JISWG also completed changes to the e-Tag Specification of version 1.7.097, in order for the e-Tag tool to contain the necessary functions to implement the version 1 NERC INT standards and the NAESB R05001 Coordinate Interchange Business Practice Standard. Mr. Harshbarger stated that NERC was scheduled to hold meetings on the implementation of e-Tag Specification 1.7.097, currently set to go in effect on January 3, 2007.

Finally, the JISWG completed a set of standards for Public Key Infrastructure (PKI) under the WEQ 2006 Annual Plan Item 3 (b) (iii) and R03007. Mr. Sorenson stated that these standards codified the requirements of an entity that issues certificates for the secure exchange of data and lists their obligations to the industry. The standards also list the obligations of those entities that use the certificates. Mr. Harshbarger said the standards were voted out of subcommittee in early November and comments were due by December 7, 2006. Mr. Sorenson asked that the WEQ EC hold a conference call in mid-December to address the recommended standards. The conference call was set for December 19th from 2:00 p.m. to 3:00 p.m. Central. Mr. Sorenson stated that when these standards were approved and ratified by the industry they would become a mechanism for the secure exchange of data on OASIS, e-Tag, and for the EIDE standards of the Western Electric Coordinating Council (WECC). Mr. Sorenson added that the Sandia National Laboratories and conducted a surety assessment on NAESB technical standards, including the draft PKI standards for the WEQ. He added that after the release of the PKI surety assessment, the JISWG took the initiative to address some of the less substantive changes in the standard before voting it out of subcommittee and to the EC.

Ms. McQuade stated that in addressing the Sandia National Laboratories report, she would first send an official "thank you" to the Department of Energy for funding the surety assessment and Sandia National Laboratories for completing the report. She stated that the second part of the addressing the surety assessment was for NAESB to issue a report to the DOE and Sandia National Laboratories stating how the various recommendations included in the assessment were or were not addressed and the reasons behind those actions. Ms. McQuade reminded the EC that the surety assessment also included the WGQ version 1.8 technical standards and that she would officially write the NAESB report.

Mr. Ulch asked the value of the surety assessment and the reply NAESB report. Ms. McQuade stated that the surety assessment was an audit of NAESB standards and how they support the marketplace. She explained that a previous report in 2002 had led to the adoption of the WGQ technical standards by other industries.

Standards Review Subcommittee: Mr. Saini stated that the Standards Review Subcommittee (SRS) continued to review NERC Standard Authorization Requests (SARs) and recently balloted standards for commercial implications. He stated that the subcommittee had devoted much of its time to the development of a scoping document for R05026 (Thirteen Incremental Enhancements to OASIS). The ESS/ITS assisted in the scoping of this request. Ms. McQuade stated that the request included 13 incremental changes and that some of the changes could be included in standards development work being done to address the upcoming OATT NOPR. Mr. Saini stated that the WEQ SRS should finalize the report during the November 20th conference call.

Identify and vote to adopt proposed changes to the 2006 WEQ Annual Plan: Item 1 (a) (i) of the WEQ 2006 Annual Plan was moved to the 2007 WEQ Annual Plan. Item 1 (a) (ii) was completed and approved by the WEQ and ratified by WEQ membership on June 27, 2006.



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Item (b) of the 2006 Annual Plan was completed, with the exception of R05020. R05020 will be addressed by the JISWG in the first half of 2007. Item 1 (c) was moved to the 2007 WEQ Annual Plan. The WEQ EC noted that work on commercial business practices related to Operate Within Limits was delayed until development of the reliability standards begins. Item 1 (d) (i) was noted as complete but still awaiting filing with the FERC until the corresponding reliability standards were completed at NERC. Item 1 (d) (ii) was also noted as ongoing and awaiting NERC progress. Both items will be reflected in the 2007 WEQ Annual Plan.

Item 1 (f) was moved to the 2007 WEQ Annual Plan. Mr. Dison questioned if the JISWG might be the more appropriate group to address IDC issues. Ms. McQuade stated that there was discussion by NERC and NAESB management concerning NAESB drafting tools and standards for the IDC and for e-Tag. She stated that these discussions were ongoing and that she would keep the WEQ updated. Mr. Dison stated that Mr. Busbin of Southern Company was a member of the IDC Working Group and might be able to give guidance on IDC related standards. Item 1 (g) was moved to the 2007 Annual Plan and noted as being tied to the completion of the NERC split TLR reliability standards.

It was noted that item 2 will be reflected in the 2007 Annual Plan. The NAESB WEQ BPS and ESS/ITS plan to complete work on this annual plan item in the year 2007. Item 3 (a) (i) was ratified by the WEQ membership in the 3rd Quarter of 2006. Mr. Sorenson stated that item 3 (a) (ii) should be changed to state "relinquish" instead of "release." He explained the change had been made by the ESS/ITS in order to avoid confusion with a WGQ mechanism. He said that the NAESB should, as much as possible, submit these changes to OASIS in one package. He added that the OATT Reform NOPR might significantly affect these changes, and therefore the item should be moved to the 2007 WEQ Annual Plan. Mr. Sorenson noted that item 3 (a) (iii) should be assigned to the ESS/ITS and should be carried over to the 2007 Annual Plan.

The Systems Requirement Document for item 3 (a) (iv) was sent to NERC earlier in the year, but it has yet to be determined if the development of the new Registry at NERC will lead to the need for new commercial practices at NAESB. Items 3 (a) (v) and (vi) were completed earlier in the year. Mr. Sorenson noted that several needed enhancements to e-Tag had been completed by the JISWG (e-Tag Specification 1.7.097) for the implementation of the version 1 NERC and NAESB Coordinate Interchange Standards. However, more enhancements are already being discussed by the JISWG and the IS. Those updates and the e-Tag rewrite should be completed by the 3rd Quarter of 2007.

Mr. Sorenson and Mr. Wood stated that work on item 3 (a) (viii) should be coordinated with standards development efforts as related to the OATT Reform NOPR and the ongoing work on ATC/TTC standards. Item 3 (a) (ix) was noted as awaiting the completion of the related scoping document. The scoping document should be completed by the end of November 2006. The item was moved to the 2007 Annual Plan. Item 3 (a) (x) was noted as awaiting rulemaking on the OATT NOPR.

Item 3 (b) (i) was noted as underway. It is expected that the JISWG will write a recommendation stating that no business practices are needed. If so, the recommendation should be completed and sent to the WEQ EC by year end 2006. Item 3 (b) (ii) was noted as complete. The surety assessment will be reviewed with the relevant EC's and is contained in the EC Book.

Mr. Sorenson stated that a recommendation had been voted out of subcommittee and sent to the WEQ EC for item 3 (b) (iii). The WEQ EC will consider that recommendation during a December 19th conference call. Item 3 (c) was noted as complete. Item 3 (d) was moved to the 2007 WEQ Annual Plan. Ms. McQuade noted that although NAESB WEQ would continue to



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use DUNS numbers for the time being, the coding scheme of the DUNS numbers did not support the functional model because it did not allow for unique codes for the same company performing different functions. Mr. Dison asked why NAESB could not host a numbering scheme. Ms. McQuade stated that NAESB could, but to build a system it would most likely be contracted out to a third party.

Item 1 and 2 of "Provisional Items" will be carried over to the 2007 WEQ Annual Plan. Item 3 was updated to reflect the posting of the FERC Notice of Proposed Rulemaking on Dockets RM05-17 and RM05-25. Items 4, 5, 6, and 8 will carry over to the 2007 Annual Plan.

Mr. Dison moved to approve the 2006 WEQ Annual Plan as modified during meeting discussion for presentation to the Board at the December NAESB Board Meeting. Mr. Oberski seconded the motion. The 2006 WEQ Annual Plan was approved as revised by consensus. (Vote 1)

The revised 2006 Annual Plan is posted as an attachment to these minutes.

4. 2007 Annual Plan

Ms. York noted that Ms. Rehman had filed comments to the 2007 Annual Plan that are posted on the NAESB website and included in supplemental materials to the November EC Book. It was clarified that NAESB would be utilizing version number for standards. Therefore, Ms. Rehman rescinded her comments to item 1 (a) and all other related comments on version numbers. The EC accepted Ms. Rehman's changes to add in the NERC/NAESB coordination plan language to item 1 and to include the full name of the NERC Reliability Functional Model.

Item 1 (b) was included in the 2007 Annual Plan as a result of earlier discussions on the 2006 Annual Plan. Expected date of completion was listed as 2nd Quarter 2007. Expected dates of completion for item 1 (d) (i) and item 1 (d) (iii) were changed to 2nd Quarter 2007.

Ms. Rehman stated that items related to the development of business practices under Request R05004A did not wholly address the development of standards under FERC Docket No.'s RM05-17 and RM05-25. She clarified that the development of related business practices concerning transparency of NERC ATC reliability standards was not entirely included under R05004A. Therefore, item 2 was revised to reflect three separate tasks as related to the development of business practices in support of FERC RM05-25 and RM05-17 (OATT Reform).

Item 3 (a) (i) (1) was carried over to the 2007 Annual Plan from discussion on the 2006 Revised Annual Plan. Item 3 (a) (i) (2) was added to address the implementation of OASIS S&CP changes to support the WEQ Standards of Conduct business practice standards. The completion date for item 3 (a) (ii) was updated to 3rd Quarter 2007 and the assignment was revised and listed as ESS/ITS. The completion date for item 3 (a) (iii) was changed to 2nd Quarter 2007. The assignment for item 3 (a) (iv) was changed to the JISWG from the ESS/ITS, as the JISWG addressed e-Tag enhancements. The completion date for item 3 (a) (v) was changed to 4th Quarter 2007. Ms. Rehman's comments on the addition of a new item 3 (a) (vii) were addressed with the revisions made to item 2.

The originally listed item 3 (b) (i) on companion business practices for NERC's Cyber Standard (CIP002-009) was removed from the 2007 Annual Plan as it was noted the item could most likely be completed by the JISWG in 4th Quarter 2006. The development of PKI standards for OASIS and e-Tag was added under item 3 (b). Both items were listed with completion dates of 2nd Quarter 2007. The development of PKI OASIS standards was assigned to the ESS/ITS and the development of PKI e-Tag standards was assigned to the JISWG.

Ms. Rehman commented that NERC Resource and Transmission Adequacy effort had been moved to 2008; however, she asked that the item remain as provisional on the 2007 Annual



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Plan because the completion date could be changed back to 2007. Provisional item 5 was carried over from the 2006 Annual Plan. Mr. Schwermann volunteered to chair the Seams Subcommittee to address standards development activities/requests that were potentially identified in the seams catalog. He noted that the WECC had appointed a Seams Subcommittee to begin addressing seams issues.

Mr. Ulch moved to approve the 2007 Annual Plan as modified during the meeting. Mr. Williams seconded the motion. The 2007 Annual Plan as modified was approved by consensus. (Vote 2)

The proposed WEQ 2007 Annual Plan is posted as an attachment to these minutes.

5. Update on TLR Progress – Joint effort with NERC -

Ms. York and Mr. Dison are members of the NERC TLR Standards Authorization Request (SAR) Drafting Team (DT) and have been participating in the NERC meetings. Ms. York reminded the group that NAESB was waiting to file the ratified post-split TLR business practice standards until NERC had completed their portion (reliability standards) of the TLR split. She stated that the split of the TLR standard had been completed in June of 2005 and NAESB had ratified the split business practices in April of 2006. During that time, SARs to revise the NERC TLR standard have been submitted to NERC. Ms. York stated that this led NERC to propose one TLR SAR at NERC that includes the development of the post-split reliability standards and all other submitted TLR SARs. Mr. Dison stated that during the November 6th TLR SAR DT conference call, the SAR with the additions was split into four phases: phase 1 was listed as the development of the post-split TLR reliability standards and the general update with NAESB; phase 2 was listed as the PJM/MISO field test on a change in their curtailment threshold; phase 3 was listed as the SPP regional differences, and; phase 4 included all other incremental changes. It was noted by the NERC facilitator and members of the NERC TLR SAR DT that the development of phase 2 could be done concurrently with that of phase 1. It was also noted that NERC would ask the NERC Standards Authorization Committee (SAC) for permission to ballot each phase separately and to appoint the NERC TLR SAR DT as the NERC TLR Standards DT (NERC TLR DT). The NERC facilitator stated that NERC would also request the SAC to allow the NERC TLR DT to move forward with the drafting of the post-split reliability standards while the SAR was posted for comment.

Mr. Dison noted that if the SAC approved the SAR for posting and agreed to the requests of NERC and the SAR DT, the first meeting of the Standards DT should be December 5th in Houston. He stated that there would be changes to the NAESB ratified business practices, but most of those changes would address formatting. Mr. Dison stated that a single integrated document was a goal of the NERC TLR SAR DT, as it was a goal stated by several Operators in the comments on the original split SAR filed at NERC.

Ms. McQuade stated that the update given clarified that NERC was still in the request process of completing the standards. Mr. Dison agreed, but said the standards development should move quickly if the same team was allowed to be the Standards DT. Mr. Dison added that the SAR DT had already addressed the comments filed on the original split TLR SAR (also noted as the original General Update with NAESB SAR) and noted that there were not many dissenting comments on the correctness of the split of the business practices from the reliability standards.

Ms. McQuade asked Mr. Davis, a member of the SAC, if the SAC would most likely agree to the requests of the NERC TLR SAR DT. Ms. McQuade reminded the EC that NAESB had been updating the FERC on the progress of TLR and that the original commitment of NAESB and



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NERC had been to file the standards with the FERC by year end 2005. That date had been delayed to 2006 to allow for time for NERC to complete the reliability standards. Mr. Davis stated that the SAC should look at the SAR during the November 21st meeting. However, Mr. Davis noted that several requests noted by the TLR SAR DT were outside the SAC general process and would most likely be viewed as exemptions to that process; therefore it was more difficult to state an expectation of whether or not the SAC would approve the SAR. Ms. York stated that it was the NERC SAC that asked for additional items to be included in the General Update with NAESB SAR. She added that several members of the SAR Drafting Team had asked during NERC TLR SAR DT meetings whether this would delay the progress of the split standard. Mr. Davis noted that the NERC SAC was a process committee that did not intentionally delay the development of standards. Mr. Dison stated that he did not think it likely that the SAC would not approve the SAR due to the separate balloting provision, as the SAC had stated that the other items involving TLR should be included. However, he noted that because the SAR to be submitted was significantly different from the original General Update with NAESB SAR, it was likely the SAR would be posted for another industry comment period. Those comments would then have to be addressed by the SAR DT. Mr. Davis agreed with this statement. Mr. Davis added that the NERC Board of Trustees had made it clear during the last meeting that NERC should follow their normal process of standards development.

Ms. McQuade stated that the Joint Interface Committee had unanimously approved the split of the standard in August of 2004. She added that she was concerned with the joint standards development process in this area, due to an expected 3 year completion period. Mr. Davis stated that 6 out of 12 comments at NERC on the original SAR had questioned the need for split standards. Mr. Dison reminded the EC that most of these concerns were addressed by NERC and NAESB discussions on a joint standards manual. Mr. Davis added that commenters on the NAESB split standards had noted their concerns with the split standards. Ms. McQuade stated that standards had been ratified by 80% of the NAESB WEQ membership.

Mr. Desselle noted that he had informed the NERC Board of Trustees of the need to expediently complete the TLR standards and file them with the FERC, as NAESB was waiting to file the business practice standards. He also informed the NERC Board of Trustees that if significant process was not made at NERC, the NAESB Board could decide to go forward and complete their commitment to the FERC by filing the commercial standards. He added that in his opinion it could be viewed from the actions of the SAC that the industry was using the SAC to stall progress on TLR.

Mr. Dison disagreed with the statement and said that there was a significant portion of the industry that believed the TLR standard included several commercial standards that should be filed as such. Mr. Dison asked that NAESB await the decision of the SAC on the TLR SAR in order to determine a new timeline for the completion of the NERC TLR standards. Mr. Gallagher noted that it might be helpful for Ms. McQuade to develop a relationship with Mr. Sergel of NERC, as it appeared there was distrust on the part of NERC as to what the split standard could mean to NERC. Mr. Dison noted that he was not sure there was significant opposition to the development of the standard at NERC; rather, it appeared that NERC was being delayed because of their process. Mr. Dean noted that because other joint development standards could be affected by the success of this standard, NAESB should continue to support the NERC process but relay their concerns to NERC. Mr. Desselle that NAESB had noted its concerns to NERC several times on the development of this standard. Ms. York and Mr. Dison both noted that the NERC was getting closer to the development of the standard. Mr. Dison noted that for phase 1 of the NERC SAR (development of the split standards) a completion date for mid 2007 was potentially achievable.



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6. Board of Directors and Board Committee Updates and Regulatory Action Updates

Ms. McQuade stated that the December Board meeting would focus on the overall direction of the organization. Subcommittee updates would be given, as well as updates by the various Board Committees. Ms. McQuade stated that the Board Resources Committee had worked diligently over the last year to increase overall membership in NAESB. She explained that she had recently given a presentation on NAESB to the WECC Market Interface Committee and that several memberships could result because of the initiative organized by Mr. Wells and Mr. Schwermann. She thanked them for their assistance.

Mr. Ulch questioned the need for NAESB standards to be copyrighted. He stated that Southern Company was an IOU and dealt daily with municipals and coops. He explained that if Southern Company adopted voluntary NAESB standards and the municipals and coops did not, problems arose and coordination became difficult. He stated that it was his understanding the standards became free to the public once filed with the FERC. Ms. McQuade explained that the documents were not accessible free of cost after they were filed with the FERC because the FERC incorporated by reference. Ms. McQuade gave the example of building codes and their incorporation by reference. She stated that NAESB was the norm when it came to filing copyrights on standards and that the FERC was one of many agencies that incorporated by reference. She added that if there were specific instances where a standard was required, a request for waiver could be submitted to NAESB. She added that NAESB would be working with NERC for a waiver to access the NAESB post-split TLR standards. Mr. Schwermann asked if the waiver would allow WECC to teach those standards. Ms. McQuade stated that was legitimate when an industry wide waiver was given, or a waiver was given specific to that purpose. Ms. Westerfield stated that WECC and other standards organizations needed to inform members that NAESB standards could be purchased for a minimal fee.

Mr. Desselle said that the Board had approved a motion during their September meeting to provide direction to the WEQ Drafting Collaborative to change the NAESB WEQ Quadrant Procedures for the WEQ to provide for an ISO/RTO segment in NAESB. He explained that after the Quadrant Procedures had been modified to allow for the sixth segment, the modified procedures would be sent to the NAESB Board for their approval. Pending approval, they will be sent out to the WEQ membership for ratification. If ratified, a sixth segment of the WEQ will be added but the ISO/RTOs will no longer hold sub-segment seats in the other five segments. Mr. Desselle stated that this change would affect the at-large seats in each of the segments.

Ms. McQuade stated that Tab 6 of the EC book outlined the filings made with the FERC. Ms. McQuade stated that Mr. Mucci had represented NAESB at the recent OATT Reform Technical Conference and that his comments made to the Commission are posted on the NAESB website. Ms. McQuade stated that follow up comments to the Commission were also filed on November 2, 2006 regarding Technical Conference. R05001 Coordinate Interchange Business Practice Standard should be filed with the Commission later in the week. In addition, NAESB filed a minor correction to Manual Time Error on October 30th.

Mr. Desselle noted that Order 676-A¹ was issued in September that denied rehearing on NAESB WEQ business practices based on comments filed by Southern Company and Midwestern Transmission Independent System Operator. Mr. Desselle paraphrased the Order

¹ "Standards for Business Practices and Communication Protocols for Public Utilities", Order No. 676-A, Order Denying Rehearing, Docket No. RM05-5-002 (Issued September 21, 2006).



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and explained that the Commission had encouraged ISOs and RTOs to actively participate in the NAESB process to help develop standards that improve grid operations and coordination.

Mr. Desselle also noted that the Commission had issued an Order Instituting Inquires Into Gas-Electric Issues.² Mr. Desselle paraphrased this Order as well, explaining that it addressed electric scheduling timelines and how they interact with gas nominations. He explained that this had been an issue raised and discussed by the NAESB Gas-Electric Coordination Task Force. These discussions had raised policy issues that should be resolved by the industry. Mr. Desselle explained that the FERC had issued comment periods on both Orders.

Mr. Rosenberg noted that his interpretation of the purpose of the Order of Inquiry was to address ISO and RTO electric timelines to find ways to resolve scheduling issues when gas supply is interrupted, in order to make sure gas generators have time to address scheduling and pricing. He added that comments on the Order of Inquiry are due January 17, 2007. Ms. McQuade stated that if an intraday nomination period is introduced for gas nominations, it could give firm holders of gas transmission an extra level of flexibility of making nominations.

Mr. Oberski added that the Commission had clearly told ISOs and RTOs that scheduling problems needed to be fixed. If the problems can not be fixed, the Commission has asked for comments on why and how ISOs and RTOs would compensate for gas prices if the schedules are not in sync. Mr. Oberski encouraged entities to file comments on the Order of Inquiry. Ms. McQuade said that WEQ participation in WGQ discussions on intraday nomination standards would be helpful if the WGQ decides to address this issue. Mr. Desselle also encouraged the participation of ISOs and RTOs in order to address such issues fully.

Mr. Pritchard noted that he had concerns about the timeline for the filing of business practices on ATC/TTC, as stated in item 13 of the FERC Filing Proposed Schedule. Mr. Pritchard stated that NAESB was awaiting NERC on the development of many of the needed business practices, as they concerned the communication surrounding and the posting of many of the proposed NERC ATC standards. Ms. McQuade also noted her concerns. The item was changed to a timeline of "To Be Determined", rather than 2nd Quarter of 2007.

7. New Business

Mr. Schwermann asked if there was a method for the EC to ask the NAESB Board if they would consider other methods of funding for NAESB, such as dues. Ms. McQuade clarified that any member of NAESB could ask the Board to consider new options. Mr. Desselle noted that the issue had been raised previously to the Board. Ms. McQuade stated that the method of funding NAESB had not been changed since 1997. She added that although membership in other quadrants was not keeping pace with that in the WEQ, if the funding for the WEQ was changed it would most likely be changed for the entire organization. Mr. Desselle noted that the Board would most likely be open to the proposal and that a task force could be formed to address alternate methods of funding.

Mr. Desselle noted that there was a provision in the quadrant procedures to allow for vacancies on Board and EC seats to become "at large" sub-segment seats, if that seat remains vacant for a set number of days. He added that several seats fell into this category and that WEQ members would be alerted to this change when the upcoming elections were announced.

² Order Instituting Inquiries Into Gas-Electric Coordination Issues, Docket No.'s EL07-1 – EL07-6, (Issued October 25, 2006).



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Ms. McQuade noted there was a calendar of upcoming meeting on page 21 of the EC Book. She added that the February 17th Advisory Council meeting would correspond to the location and time of the winter NARUC meetings in Washington, D.C.

8. Adjourn

Mr. Schwermann moved to adjourn and Mr. Green seconded the motion. The meeting was adjourned by consensus at 3:50 p.m. Central time.



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11. Executive Committee Attendance and Voting Record³ (Vacancies not shown on the table)

TRANSMISSION SEGMENT		SUBSEGMENT:	ATTENDANCE	VOTE 1	VOTE 2
Patrick McGovern	Manger - System Services, Georgia Transmission Corporation	Muni/Coop	Absent		
Steven C. Cobb	Manager Transmission Services, Salt River Project	Fed/State/Prov.	In Person	S	S
Dean Ulch	Principal Engineer, Transmission Policy and Services Group, Southern Company Services	IOU	In Person	S	S
Edward Davis	Policy Consultant, Entergy Services, Inc.	IOU	In Person	S	S
Julie Voeck	Manager Strategic Policy and Planning, American Transmission Company	ITC	Absent		
Linda Campbell	Director of Reliability, Florida Reliability Coordinating Council	At-Large	Absent		
GENERATION SEGMENT					
William J. Gallagher	General Manager of Vermont Public Power Supply Authority	Muni/Coop	Phone	S	S
Kathy York	Sr. Energy Markets & Policy Specialist, Tennessee Valley Authority	Fed/State/Prov.	In Person	S	S
Louis Oberski	Director Electric Market Policy, Dominion Resource Services, Inc.	IOU	In Person	S	S
John Ciza Alt. for R. Carter	Southern Company Generation	IOU	In Person	S	S
Barry Green	Director, Markets and Research Regulatory Affairs Division, Ontario Power Generation	Merchant	In Person	S	S
MARKETERS/BROKERS SEGMENT					
Greg Locke Alt. for C. Norris	ElectriCities of North Carolina	Muni/Coop	Phone	S	S
Valerie Crockett, Alt. for C. Harmon	Tennessee Valley Authority	Fed/State/Prov.	In Person	S	S
Suzanne Calcagno	Director – Regulatory Compliance, UBS Energy LLC	Not IOU Affiliated	Absent		

³ Voting Record Legend: S = Support; O = Oppose; A = Abstain; B = Notational Ballot



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Mark Tallman	Managing Director, Commercial & Trading, PacifiCorp	IOU	Absent		
Joel Dison	Project Manager, Southern Company Generation and Energy Marketing	IOU	In Person	S	S
DISTRIBUTION/LOAD SERVING ENTITIES (LSE) SEGMENT					
Robert Williams	Director of Regulatory Affairs, Florida Municipal Power Agency	Muni/Coop	In Person	S	S
Robert Schwermann	Energy Coordinator, Sacramento Municipal Utility District	Muni/Coop	In Person	S	S
Alan Pritchard, Alt. for O. Frazier	Duke Energy	IOU	In Person	S	S
John McCawley	Director – Energy Acquisition, Exelon Energy Delivery, Exelon Corporation – PECO Energy	IOU	Absent		
Syd Berwager	Industry Restructuring Project Manager, Bonneville Power Administration/Power Business Line	Other	Phone	S	S
END USERS SEGMENT					
Lou Ann Westerfield	Policy Strategist, Idaho Public Utilities Commission, rep. National Association of Regulatory Utility Commissioners	Regulator	Phone	S	S
John Hughes	Vice President Technical Affairs, Electricity Consumers Resource Council (ELCON)	Large Industrial	Absent		
Paul Sorenson	Director-Central Markets Strategy, Open Access Technology International, Inc.	At-Large	In Person	S	S



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12. Additional Attendance

Name	Organization	Attendance
Shannon Black	SMUD	Phone
Neal Balu	Wisconsin Public Service Corp. Resources	In Person
Dawn Best	Tennessee Valley Authority	In Person
Christopher Burden	Williams Gas Pipeline	In Person
LaRita Cormier	Riverside Reporting	In Person
Michael Desselle	Southwest Power Pool	In Person
Dale Davis	Williams Gas Pipeline	In Person
Bob Harshbarger	Puget Sound Energy	Phone
Laura Kennedy	NAESB	Phone
DeDe Kirby	NAESB	In Person
Rae McQuade	NAESB	In Person
Marjorie Perlman	Energy East	Phone
Barbara Rehman	Bonneville Power Administration	Phone
Marv Rosenberg	FERC	In Person
Narinder Saini	Entergy	Phone
Pat Schaub	FERC	In Person
Veronica Thomason	NAESB	In Person
Mike Wells	WECC	In Person
JT Wood	Southern Company	Phone



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December 20, 2006

TO: NAESB Wholesale Electric Quadrant Executive Committee and Interested Industry Participants

FROM: DeDe Kirby, Meeting/Project Manager

RE: Wholesale Electric Quadrant Executive Committee Conference Call Meeting Draft Minutes – December 19, 2006

**NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE
CONFERENCE CALL MEETING
WHOLESALE ELECTRIC QUADRANT (WEQ)
Tuesday, December 19, 2006 – 2:00 pm to 3:00 pm Central
DRAFT MINUTES**

1. Welcome

Ms. York called the meeting to order and welcomed the participants. Ms. Kirby read the antitrust advice and called the roll of Executive Committee (EC) members and alternates. Quorum was not established; therefore the meeting was declared a working session and all standards votes will be distributed by notational ballot. Ms. Crockett moved to adopt the agenda as drafted and Mr. Sorenson seconded the motion. The agenda was adopted by consensus.

2. Consideration and vote on recommendation for standards with comments submitted

Recommendation WEQ 2006 Annual Plan Item 3(b)(iii)/R03007 – PKI Initiative (e-MARC)

Mr. Sorenson stated that the purpose of the standard was to build a Public Key Infrastructure (PKI) for use with Open Access Same-time Information System (OASIS) standards and e-Tag. The PKI standard provides guidelines for parties to follow in order to hold valid certificates. He explained that many systems require the presentation of certificates and a declaration of a Certificate Authority to conduct business under them. Certificate Authorities issue certificates for qualified applicants that certify the identification of the applicant to other entities involved in the system or business transaction. The PKI standard establishes the rules that Certificate Authorities must use to certify and establish an identification of an entity. The Certificate Authority, under the NAESB Certification Program, self-certifies that their service is compliant with the NAESB standards. NAESB would hold the records of those that have qualified as certified Certificate Authorities and those Certificate Authorities would then display the NAESB Certification Seal to the public.

The standards also contain a set of obligations to be performed by End-entities and relying parties to be certified. These parties must register with the NERC Registry and declare which authorized Certificate Authority they will conduct business under. An entity can declare more than one Certificate Authority. Rules and guidelines contained in the NERC Registry state that when an entity registers this information they are agreeing to abide by the obligations in the standard. These standards are written for Secure Sockets Level (SSL) certificates and do not accommodate digital signing of documents or encryption. Mr. Sorenson explained that OASIS and e-Tagging would benefit from the SSL certificate and that other types of certificates could be added in the future as necessary.



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Ms. York stated that one set of comments had been submitted by the Internet Engineering Task Force (IETF). (Those comments are posted at http://www.naesb.org/pdf2/weq_ec121906w2.doc.) She explained that the comments supported the manner in which the PKI standard had been drafted and stated that the standard did not violate the permitted uses of the IETF's Request for Comments. However, the comments did suggest a change to footnote 1. Mr. Sorenson stated that the change should be approved as it mainly addressed style and formatting and that the JISWG had tried to review the comment on two different occasions, but the meetings were cancelled due to the unavailability of the chairs of the working group because of severe weather and power outages in the Pacific Northwest. Mr. Oberski moved to adopt the Recommendation with the revision to footnote 1, as found in the IETF comments. Ms. Crockett seconded the motion. The motion was supported by all EC members and alternates present on the phone. (The recommendation as revised by the EC in redline form is posted at http://www.naesb.org/member_login_form.asp?doc=weq_ec121906a2.doc. In clean form it is posted at http://www.naesb.org/member_login_form.asp?doc=weq_ec121906a1.doc.)

Ms. York stated that a notational ballot would be distributed by the NAESB office for Recommendation WEQ 2006 Annual Plan Item 3 (b) (iii)/R03007. She added that the ballot should be due sometime after the first of the year and depending on the outcome of that vote, would then be submitted for ratification to the WEQ membership.

3. New Business

No new business was discussed at this time.

4. Adjourn

Ms. Crockett moved to adjourn and Mr. Oberski seconded the motion. The conference call meeting was adjourned by consensus at 2:28 p.m. Central time.



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5. Executive Committee Attendance and Voting Record¹ (Vacancies not shown on the table)

TRANSMISSION SEGMENT		SUBSEGMENT:	ATTENDANCE	VOTE 1
Patrick McGovern	Manger - System Services, Georgia Transmission Corporation	Muni/Coop	Absent	
Steven C. Cobb	Manager Transmission Services, Salt River Project	Fed/State/Prov.	Absent	
Dean Ulch	Principal Engineer, Transmission Policy and Services Group, Southern Company Services	IOU	Absent	
Edward Davis	Policy Consultant, Entergy Services, Inc.	IOU	Present	S
Julie Voeck	Manager Strategic Policy and Planning, American Transmission Company	ITC	Absent	
Linda Campbell	Director of Reliability, Florida Reliability Coordinating Council	At-Large	Absent	
GENERATION SEGMENT				
William J. Gallagher	General Manager of Vermont Public Power Supply Authority	Muni/Coop	Present	S
Kathy York	Sr. Energy Markets & Policy Specialist, Tennessee Valley Authority	Fed/State/Prov.	Present	S
Louis Oberski	Director Electric Market Policy, Dominion Resource Services, Inc.	IOU	Present	S
John Ciza	Project Manager for Energy Policy and Regulatory Affairs, Southern Company Services	IOU	Absent	
Barry Green	Director, Markets and Research Regulatory Affairs Division, Ontario Power Generation	Merchant	Present	S
MARKETERS/BROKERS SEGMENT				
Carol McCrary, Alt. for C. Norris	ElectriCities of North Carolina	Muni/Coop	Present	S
Valerie Crockett, Alt. for C. Harmon	Tennessee Valley Authority	Fed/State/Prov.	Present	S
Suzanne Calcagno	Director – Regulatory Compliance, UBS Energy LLC	Not IOU Affiliated	Absent	

¹ Voting Record Legend: S = Support; O = Oppose; A = Abstain; BS = Notational Ballot in Support; BO = Notational Ballot in Opposition



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Mark Tallman	Managing Director, Commercial & Trading, PacifiCorp	IOU	Absent
Joel Dison	Project Manager, Southern Company Generation and Energy Marketing	IOU	Absent

DISTRIBUTION/LOAD SERVING ENTITIES (LSE) SEGMENT

Robert Williams	Director of Regulatory Affairs, Florida Municipal Power Agency	Muni/Coop	Absent
Robert Schwermann	Energy Coordinator, Sacramento Municipal Utility District	Muni/Coop	Absent
Ollie Frazier	Manager of Regulatory Research, Duke Energy	IOU	Absent
John McCawley	Director – Energy Acquisition, Exelon Energy Delivery, Exelon Corporation – PECO Energy	IOU	Absent
Syd Berwager	Industry Restructuring Project Manager, Bonneville Power Administration/Power Business Line	Other	Absent

END USERS SEGMENT

Lou Ann Westerfield	Policy Strategist, Idaho Public Utilities Commission, rep. National Association of Regulatory Utility Commissioners	Regulator	Absent
John Hughes	Vice President Technical Affairs, Electricity Consumers Resource Council (ELCON)	Large Industrial	Absent
Paul Sorenson	Director-Central Markets Strategy, Open Access Technology International, Inc.	At-Large	Present

S



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12. Additional Attendance

Name	Organization
Christopher Burden	Williams Gas Pipeline
Dale Davis	Williams Gas Pipeline
Rick Franklin	Riverside Reporting
Laura Kennedy	NAESB
DeDe Kirby	NAESB
Marjorie Perlman	Energy East



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November 27, 2006

TO: NAESB Executive Committee and Interested Industry Participants
FROM: Laura B. Kennedy, Meeting/Project Manager
RE: Draft Minutes from the NAESB Retail Electric Quadrant and Retail Gas Quadrant Executive Committee Meeting – November 15, 2006

**Retail Gas Quadrant and Retail Electric Quadrant
 Joint Executive Committee Meeting
 Wednesday, November 15, 2006 – 10:00 am to 4:00 pm Central
 Hosted by TXU – Dallas, TX
 Draft Minutes**

1. Welcome

Mr. Novak called the meeting to order and welcomed the Executive Committee members and other participants. Ms. Kennedy gave the antitrust advice and called the roll of the Retail Electric Quadrant (REQ) and Retail Gas Quadrant (RGQ) Executive Committee members. A quorum was established for both the REQ and RGQ.

2. Joint Retail Electric Quadrant & Retail Gas Quadrant Draft Agenda & Draft Minutes

Adoption of Joint Agenda: Ms. Kiselewich proposed modifying the agenda to add a discussion regarding the REQ Distributors Segment procedures. Mr. Novak proposed modifying the agenda to include a discussion regarding the elimination of the requirement for seconding motions. Mr. Precht moved, seconded by Ms. Edwards to adopt the agenda as revised. The motion passed without opposition.

Adoption of Draft Minutes: The draft minutes from the August 16, 2006 Joint REQ and RGQ Executive Committee meeting were reviewed. Ms. McCain submitted redlines to the draft minutes that were included on pages 47-52 of the Executive Committee book. In addition to the redlines submitted by Ms. McCain, Mr. Precht stated that an extra period on page 2 should be deleted. Mr. Precht also noted that the word “by” was omitted in the second paragraph on page 2. In the next to last paragraph on page 4, the phrase “demand side management” was deleted to remove a redundancy. Mr. Precht moved, seconded by Ms. Edwards, to adopt the minutes as the final minutes of the August 16, 2006 Executive Committee meeting. The minutes are posted on the NAESB website: http://www.naesb.org/pdf2/retail_ec081606fm.doc.

3. Discuss Retail Contracts Recommendation (R05013) and Comments and Vote to Approve

Next, the Executive Committees reviewed the recommendation for R05013 to develop a model retail electric/gas contract drafted by the Retail Contracts Subcommittee. The recommendation is included in the Executive Committee book on pages 234-265. Ms. McCain noted that the Contracts Subcommittee submitted a revised Base Contract to the Executive Committee after reviewing the comments that were submitted during the formal thirty day comment period. This revised draft was posted as a supplemental material for the Executive Committee meeting: [Supplemental Material Recommended changes of the Retail Contracts Subcommittee to the Retail Base Contract for the Sale and Purchase of Natural Gas or](#)



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Electricity, based on comments received. The Executive Committee used the revised draft as a starting point for the discussion.

The Executive Committee considered the recommendation from the Contracts Subcommittee as a motion to adopt the recommendation. Ms. Edwards seconded the motion. Ms. McCain reviewed all of the comments submitted in response to the request for comments and provided the response of the Contracts Subcommittee for each comment and also reviewed the minor corrections the Contracts Subcommittee made in the revised draft.

Ms. McCain first reviewed the comments she submitted on behalf of Duke Energy Gas Transmission (included in the Executive Committee book on page 267). Items 1-7 and Items 10-18 were incorporated into the revised draft by the Contracts Subcommittee. Items 8 and 9 were not incorporated into the revised draft. Item 19 was made moot by the fact that the language in the section for Performance Obligation and Contract Quantity was removed by the Contracts Subcommittee in the revised draft.

Two sets of comments were submitted on behalf Sprague Energy Corporation by Ms. Fudali. The first set was included on page 268 of the Executive Committee book. Ms. McCain stated that the modification to the Cover Page and the modification to Section 1.2 proposed by Ms. Fudali in the comments were adopted by the Contracts Subcommittee in the revised draft.

Ms. Fudali stated that interstate pipelines should be included in the definition of "Firm". Ms. McCain stated that the Contracts Subcommittee did not recommend adoption of this modification. Mr. Novak stated that he supported inclusion of interstate pipelines in the definition of "Firm". Mr. Overtree stated that the Force Majeure language in Section 8 would excuse delivery no matter where the Force Majeure occurred. After further discussion, Mr. Precht suggested removing the phrase "by Distribution Companies" from Item 8.2 (iii). Mr. Overtree and Mr. Novak supported this modification.

The definition for Termination Option (2.42) was removed by the Contracts Subcommittee in the revised draft in response to Ms. Fudali's comments. Section 12.15 was added to the revised draft to state "This contract may be terminated upon 30 Days written Notice, but shall remain in effect until the expiration of the latest Delivery Period of any Transaction Confirmation(s)" in response to Ms. Fudali's comment requested that a 30 or 45 day termination option be added to the contract. In Section 4.4, the word "Energy" was removed in the revised draft in response to Ms. Fudali's comment that the term "Energy Imbalance Charges" is not a defined term. The term "Imbalance Charges" is a defined term. The Contracts Subcommittee did not incorporate Ms. Fudali's comment on Section 8 to add Interstate Pipeline after Distribution Company because the term is covered by the definition of Distribution Company.

The second set of comments submitted by Ms. Fudali on behalf of Sprague Energy was posted as supplemental material for the Executive Committee meeting: [Supplemental Material Late R05013 Supplemental Comments Submitted by K. Fudali, Sprague Energy Corp.](#) The Contracts Subcommittee incorporated Ms. Fudali's comments on "Term" by adding Section 12.15 to the revised draft.

The Contracts Subcommittee did not adopt Ms. Fudali's comment on "Credit". Ms. McCain stated that subcommittee members researched different credit provisions and determined that the language was so disparate that it would be difficult to reach a consensus on language that would be universally applicable. The Contracts Subcommittee determined that it would add language to the User Guide to note that parties should consider special provisions regarding Credit provisions. The Contracts Subcommittee similarly did not adopt Ms. Fudali's comment



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on “Adequate Assurance”. For the comment on “Survival Clause”, Mr. Overtree noted that the Contracts Subcommittee provided Ms. Fudali with a reference to Section 12.12 and language in the User Guide that addresses the comment on “Survival Clause.” For the comments on “Failure to Pay” and “Breach of Performance Obligations”, Mr. Overtree stated that the Contracts Subcommittee could not find a pattern to incorporate within the contract as all organizations have different billing and payment processes. The Contracts Subcommittee did not think that it would be appropriate to include one process over the other.

Comments were also submitted by Mr. Mason on behalf of EnergyWindows. These comments were posted as supplemental material for the Executive Committee meeting: [Supplemental Material Late R05013 Comments Submitted by J. Mason, Energy Window](#). Ms. McCain stated that the Contracts Subcommittee included modifications to address each of Mr. Mason’s comments in the revised draft.

Comments were submitted by Mr. Seymour on behalf of Suez Energy Marketing posted as supplemental material for the Executive Committee meeting: [Supplemental Material Late R05013 Comments Submitted by C. Seymour, SUEZ](#). These comments were addressed by the modification made to Section 1.2.

Mr. Precht submitted comments on behalf of Baltimore Gas and Electric included in the Executive Committee book on page 266. The comments were supportive of the efforts of the Contracts Subcommittee.

For the REQ, Ms. Edwards moved, seconded by Ms. Munson, to adopt the revised recommendation including the revised draft of the Retail Base Contract with the additional modification to Section 8.2 (iii) made by the Executive Committees. The outcome of the motion could not be determined as an additional vote was needed by an Executive Committee member in the REQ Supplier Segment in order to garner the required 40% affirmative vote that is required for a super majority vote to be successful. Ms. Kennedy stated that she would send a notational ballot to the individuals on the REQ Executive Committee who did not vote during the meeting. [Vote 1].

For the RGQ, Mr. Precht moved, seconded by Mr. Nishida, to adopt the revised recommendation including the revised draft of the Retail Base Contract with the additional modification to Section 8.2 (iii) made by the Executive Committees. The motion unanimously passed a super majority vote of the RGQ Executive Committee. [Vote 1]. The revised recommendation is posted as an attachment to these minutes: [Attachment - Recommendation R05013](#); [Attachment - R05013 Attachment 1 / Appendix A as revised by the Retail Executive Committees on 11/15/06](#); [Attachment - R05013 Attachment 2 / Appendix B](#).

4. Discuss Customer Enrollment Recommendation (REQ/RGQ 2006 Annual Plan Item 4(i)) and Comments and Vote to Approve

Next, the Business Practices Subcommittee reviewed the recommendation submitted by the Retail Business Practices Subcommittee for Retail 2006 Annual Plan Item 4(i), included in the Executive Committee book on pages 269-294. One set of comments was submitted for this recommendation by Mr. Precht on behalf of Baltimore Gas and Electric, included on page 295 of the Executive Committee book.

Mr. Precht stated that the recommendation includes the model business practices for Customer Enrollment. Ms. Kiselewich noted a typographical error on page 8 of the recommendation. Ms. Kennedy stated that she would correct the typographical error before the recommendation is posted for ratification.



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The Executive Committees considered the recommendation of the Business Practices Subcommittee as a motion to adopt the recommendation. Ms. Edwards seconded the motion. The motion unanimously passed a super majority vote of the RGQ Executive Committee but there not sufficient votes to garner a super majority for either the REQ Executive Committee or the RGQ Executive Committee. For the REQ, an additional vote was needed in the Supplier Segment in order to garner the required 40% of the Segment. For the RGQ, a vote is needed in the Service Providers Segment in order to garner the required 40% of that Segment. Ms. Kennedy stated that she would send a notational ballot to the individuals on the REQ Executive Committee who did not vote during the meeting. [Vote 2].

5. 2007 Annual Plan Drafting and Update of 2006 Annual Plan

Update 2006 Annual Plan and Vote to Approve Changes: Next, the Executive Committee updated the Retail 2006 Annual Plan (pages 301-305 of the Executive Committee book).

Ms. Alexander moved, seconded by Mr. Precht, to adopt the revisions to the Retail 2006 Annual Plan made during the meeting. The motion unanimously passed the REQ and RGQ Executive Committees. The revised Retail 2006 Annual Plan will be presented to the Board of Directors for approval during the December 14 meeting. The revised plan is posted as an attachment to these minutes: http://www.naesb.org/pdf2/retail_ec111506a1.doc.

Discuss all comments for 2007 plan; Determine if comments are to result in change to plan for 2007 and draft language for such; Determine response to comments where the suggested project is not included in the plan: The Executive Committee reviewed the comments submitted in response to Ms. McQuade's e-mail requesting industry participants to submit items for inclusion in the Retail 2007 Annual Plan. All of the comments submitted are included in the Executive Committee book on pages 307-312.

The subcommittee drafted a proposed Retail 2007 Annual Plan based on the discussion during the meeting. The proposed plan is posted as an attachment to these minutes: [Attachment - 2007 Retail Annual Plan](#). The proposed plan was endorsed through a unanimous vote of the EC members present.

6. New Business

REQ Distributors Segment Procedures: Ms. Kiselewich noted that the REQ Distributors Segment Procedures require a maximum of two Executive Committee and Board members per NERC Region. Ms. Kennedy stated that this requirement was not keeping participants from running for seats on the Executive Committee and Board as the REQ Distributors segment is one of the few segments that have little or no vacancies.

Elimination of Seconds to Motions: Mr. Novak stated that Robert's Rules of Order do not require a motion to be seconded and propose that both Retail Quadrants eliminate the requirement for a second at the Executive Committee and subcommittee levels. Mr. Novak proposed that instead of a second that there would be co-sponsors to motions, one from each quadrant. The Executive Committee unanimously supported this change to the procedures.

8. Adjourn

Ms. Teel moved to adjourn. The meeting adjourned at 3:27 PM Central.



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9. Executive Committee Attendance and Voting Record¹ (with Vacancies Omitted)

2006 EXECUTIVE COMMITTEE – Retail Gas Quadrant

SUPPLIERS SEGMENT		ATTENDANCE	VOTE 1	VOTE 2
Suzanne Calcagno	Director, Regulatory Compliance, UBS Energy, LLC	Absent	SB	SB
Richard Zollars	Director, Data and Information, Dominion Retail, Inc.	Absent		
DISTRIBUTORS SEGMENT				
Leslie H. Nishida	Gas Federal Regulatory Supervisor, Wisconsin Public Service Corporation	In Person	S	S
Michael Novak	Assistant General Manager, National Fuel Gas Distribution Corporation	In Person	S	S
Phil Precht	Director of Gas Choice Programs – Pricing and Regulatory Services, Baltimore Gas and Electric Company	In Person	S	S
END USERS SEGMENT				
Barbara Alexander, Alt. for Vacancy	Consumer Affairs Consultant, rep. Indiana Office of Utility Consumer Counselor	In Person	S	S
SERVICE PROVIDERS SEGMENT				
George M. Behr	Director, Energy Services Group, Inc.	Phone	S	

2006 EXECUTIVE COMMITTEE – Retail Electric Quadrant

SUPPLIERS SEGMENT		ATTENDANCE	VOTE 1	VOTE 2
Bill Barkas	Manager of Retail State Government Relations, Dominion Retail, Inc.	Phone	S	S
Jason Bear	Director – Market Advocacy, Direct Energy	Absent		
Jansen Pollock	Manager of Regulatory Affairs, Constellation NewEnergy	Absent		
DISTRIBUTORS SEGMENT				
Ruth Kiselewich	Director Special Projects and Supplier Services, Baltimore Gas & Electric Company (MAAC NERC Region)	In Person	S	S
Terry Moran	Regulatory Issues Manager, PSEG (MAAC NERC Region)	Phone	S	S
Judy Ray	Industrial Segment Manager – Contract Administrator,	Phone	S	S

¹ Voting Record Legend: S = Support; O = Oppose; A = Abstain; B = Ballot



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Mary Edwards	Alabama Power Company (SERC NERC Region) Senior Customer Choice Analyst – Regulation and Competition, Dominion Virginia Power (SERC NERC Region)	In Person	S	S

END USERS SEGMENT

Barbara Alexander	Consumer Affairs Consultant, State of Maine Public Advocate	In Person	S	S

SERVICE PROVIDERS SEGMENT

Jim Minneman	Controller, PPL Solutions LLC	Phone	S	S
Jennifer Teel	Director – Business Solutions, EC Power	In Person	S	S
Susan Munson, Alt. for R. Connell	Retail Market Liaison, ERCOT	In Person	S	S
Mark S. Jarrett	Team Leader – Market Information and Analysis, Market Intelligence, Southern Company	Absent		

10. Other Attendance

Name	Organization	Attendance
Mariam Arnaout	American Gas Association	In Person
Dawn Best	TVA	In Person
LaRita Cormier	Riverside Reporting	In Person
Cindy Herron	TVA	In Person
Laura Kennedy	NAESB	In Person
David Koogler	Dominion Virginia Power	Phone
Jack Mason	EnergyWindows	Phone
Marcy McCain	Duke Energy Gas Transmission	In Person
Debbie McKeever	TXU Electric Delivery	In Person
Rae McQuade	NAESB	In Person
Ed Overtree		Phone
Michael Strohmeier	Constellation NewEnergy, Inc.	Phone
Veronica Thomason	NAESB	In Person

NORTH AMERICAN ENERGY STANDARDS BOARD

Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials

February 6-7, 2007

TAB 4

Triage Outstanding Requests

- Contained in this section are the dispositions for requests R06025 – R06027. The Triage Committee and the EC are considering these requests.
- The materials in Tab 4 correspond to agenda item 5 on the wholesale electric quadrant EC agenda.



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February 1, 2007

Via email and posting

TO: NAESB Executive Committee (EC) Members, Triage Subcommittee Members
FROM: Rae McQuade, President
cc: EC Alternates
RE: NAESB Triage Actions Pending for R06025-27 – Request Reply

Dear Triage Committee and EC members,

We have three requests to triage – R06025 to R06027, all provided below as hyperlinks. The NAESB office recommends the following actions:

For [R06025](#) – submitted by [Bob Harshbarger](#) of Puget Sound Energy:

This request is (1) found within scope; (2) to be assigned to the Wholesale Electric Quadrant (WEQ); and (3) because it is a request to modify Appendix D of WEQ 004 to add an explanation for the terms "required" and "correctable", to add a sentence clarifying that tag data elements are not correctable and are not required, and to make the element of Energy Product Type required, it is assigned to the WEQ Joint Interchange Scheduling Working Group (WEQ JISWG). There was nothing in the request indicating that it should be assigned a high priority, therefore, it should be addressed in the normal course of business of the WEQ JISWG.

For [R06026](#) – submitted by [Bob Harshbarger](#) of Puget Sound Energy:

This request is (1) found within scope; (2) to be assigned to the Wholesale Electric Quadrant (WEQ); and (3) because it is a request to modify WEQ-004 Coordinate Interchange Business Practice Standard requirement 2.2 and the table contained in Appendix A part B, to exempt WECC, it is assigned to the WEQ Joint Interchange Scheduling Working Group (WEQ JISWG). There was nothing in the request indicating that it should be assigned a high priority, therefore, it should be addressed in the normal course of business of the WEQ JISWG.

For [R06027](#) – submitted by [Jim Hansen](#) of Seattle City Light on behalf of the NERC/NAESB JISWG:

This request is (1) found within scope; (2) to be assigned to the Wholesale Electric Quadrant (WEQ); and (3) because it is a request to develop an enhanced functionality specification for an Electric Industry Registry for the wholesale electric industry where the functions described in the specification would be classified as commercial in nature, it is assigned to the WEQ Joint Interchange Scheduling Working Group (WEQ JISWG). There was nothing in the request indicating that it should be assigned a high priority, therefore, it should be addressed in the normal course of business of the WEQ JISWG.

If you have any questions on a specific request, please contact the requestor directly -- their email addresses are provided above. If you have any concerns on the above actions, please respond via email with your concern stated, and we will convene a conference call for its resolution. If no concerns are raised, then on February 7, triage notes will be posted on the NAESB web site indicating that the Triage Subcommittee and the EC agrees with the above actions, and the requests will be forwarded to the chairs of the subcommittees to which they have been assigned.

Thanks, Rae

NORTH AMERICAN ENERGY STANDARDS BOARD

Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials

February 6-7, 2007

TAB 5

Board Updates

- For informational and update purpose only. No action is needed.
- This section includes the minutes of the December Board meeting.
- Tab 5 corresponds to agenda item 6 for WEQ, and agenda item 7 for Retail Quadrants.



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January 2, 2007

TO: NAESB Board Members, Posting for Interested Industry Participants
FROM: Laura Kennedy, NAESB Meeting/Project Manager
RE: Draft Minutes from the NAESB Board of Directors Meeting – December 14, 2006

**NORTH AMERICAN ENERGY STANDARDS BOARD
 NAESB BOARD OF DIRECTORS MEETING
 December 14, 2006 in Houston, TX
 Draft Minutes**

1. Administration and Welcome

Mr. Boswell read the antitrust guidelines. Mr. Stepenovitch welcomed the Board Members and guests. Ms. Kennedy called the roster of the Board members and quorum was established. Mr. Desselle moved, seconded by Mr. Lucas, to adopt the agenda. The motion passed unanimously. Next, the Board members reviewed the draft minutes from the September 21, 2006 Board meeting. The draft minutes were included in the Board Book behind Tab 3, beginning on page 15. Ms. Crockett noted that a correction should be made on page 5, paragraph 3, line 6: R0303B should be changed to R03035B. Mr. Templeton moved, seconded by Mr. Desselle, to adopt the draft minutes from the September 21, 2006 meeting as revised as the final minutes. The motion passed unanimously. The final minutes from the September 21, 2006 Board meeting are posted on the NAESB website at <http://naesb.org/pdf2/bd092106fm.doc>.

2. Reports from Board Committees

Resources Committee: Mr. Brown provided the update of the work of the Resources Committee. The material in the Board Book provided by the Resources Committee was included behind Tab 4, on pages 28-55. Mr. Brown reported that overall the efforts of the Resources Committee have contributed to the membership of sixty-five new members. There have been sixty-two member resignations. Since the September Board meeting, there have been eleven new members. Mr. Brown encouraged the Board members to submit any potential membership leads to the NAESB office or the Resources Committee. In the last quarter, the members of the Resources Committee met with trade associations to provide membership information. The trade associations included WECC and EPSA. EPSA has since joined NAESB.

Ms. McQuade noted that the NAESB office would be working to prepare a monthly electronic newsletter that will help to increase awareness of NAESB activities. On December 18-19, 2006, Ms. McQuade, Mr. Buccigross, and Ms. York will hold a NAESB seminar for FERC staff in at FERC's offices in Washington, DC.

Mr. Brown stated that it is the expectation that the Retail Quadrants' Demand Side Management Effort will result in increased participation in the Retail Quadrants and hopefully new memberships.



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Retail Structure Review: Mr. Bourbonnais provided the update of the work of the Retail Structure Review Committee (RSRC). The material in the Board Book provided by the RSRC was included behind Tab 4, on pages 56-74.

Mr. Bourbonnais presented the RSRC 2006 Report on behalf of the RSRC. The presentation was posted after the meeting on the NAESB website: [Presentation - RSRC 2006 Report and Recommendations](#). The options discussed by the RSRC in the 2006 Report to address the membership levels in the Retail Quadrants are similar to the options presented in the 2005 Report: Revision of the NAESB Bylaws; Merging the two Retail Quadrants, Continuing to Expand the Focus of the Retail Quadrants to Include Projects for Regulated Markets Along with Customer Choice Markets, and Delaying Any Structural Changes at This Time.

It was the recommendation of the RSRC that “the NAESB Board of Directors continue to delay any structural changes to the Retail Quadrants at this time...” to “allow the Retail Quadrants to complete their original work plan of customer choice business practices, continue work on one and develop the two new 2007 business practices for both customer choice and regulated retail markets and continue to attempt to increase retail quadrant memberships through the current outreach and new business practice initiatives. The RSRC also recommended “that the NAESB Board direct the RSRC to continue its work into 2007 to: complete a review of the need for structural changes to the two Retail Quadrants beyond 2007 based on quadrant membership levels, progress and interest in initiatives for business practices for both retail customer choice and regulated markets and complete a strategic plan for the quadrants beyond 2007.”

A draft resolution was submitted and included on page 74 for Board adoption of the RSRC Recommendation:

WHEREAS, the Retail Structure Review Committee voted to endorse the actions to be taken for the Retail Gas and Retail Electric Quadrants,

BE IT RESOLVED, that the Board of Directors of NAESB approves the Retail Structure Review Committee recommendations for the structure and operation of Retail Gas and Retail Electric Quadrants in 2007.

Mr. Bourbonnais moved, seconded by Mr. Templeton, to adopt the resolution included on page 74. The motion unanimously passed a simple majority vote. [*Vote 1*].

3. Updates on Specific Standards Development

TLR Timeline: Ms. York provided the report on the development of the TLR business practice standards. A summary of recent meetings regarding TLR can be found in the Board book behind tab 5, pages 76-78. Ms. York reported that the NERC SAR Drafting Team was formed in July 2006. The SAR was to not only include the split of the NERC TLR Reliability standards with the NAESB TLR business practices, but also all of the outstanding revisions to TLR that had been submitted to NERC including: modifications requested by Southwest Power Pool (SPP), a field test for PJM and Midwest ISO, and SPP to change the market curtailment threshold from 0% to 3% for reliability purposes, and any other incremental changes that need to be made to the TLR procedure. On December 5, 2006, the NERC Standards Committee Executive Committee agreed that the portion of the SAR that included the split would not need to be re-posted. The NERC Standards Committee Executive Committee asked the TLR SAR Drafting Team to continue working on drafting the standards while an official Standards Drafting Team is named.



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The NAESB WEQ Business Practices Subcommittee and the NERC TLR Drafting Team will meet jointly starting January 10, 2007. NERC has reported that it plans to complete the standards drafting by the end of February. Ms. York stated that during the WEQ Leadership call, she asked if NAESB could postpone the filing of the TLR standards until March to determine if progress can be made on the development of the NERC TLR standards. The WEQ Leadership supported postponing the filing of the NAESB TLR standards until March.

ATC Efforts: Ms. York reported on the progress of the work on the ATC standards by NERC and NAESB. A summary of NAESB meetings on this effort can be found in the Board book behind tab 5, pages 79-83. Ms. York reported that at the most recent meeting of the NAESB groups that work on the ATC standards, the BPS and ESS/ITS, the subcommittee drafted language for scheduling and granting partial service and reviewed the NERC proposed revisions to MOD001. It is the expectation that the NERC ATC Drafting Team will post MOD001 on January 2, 2007 for comment. It is the expectation that the FERC Final Order on the OATT Reform will be issued in early 2007. This effort will take a large part of the resources of the WEQ in 2007.

JISWG: The Joint Interchange Scheduling Working Group is a joint NERC and NAESB subcommittee. The JISWG has held thirteen meetings in 2006. A meetings summary for the JISWG can be found in the Board book behind tab 5k pages 83-84. The most recent development of the JISWG was the creation of the NAESB standards for Public Key Infrastructure. The WEQ Executive Committee is scheduled to vote on this recommendation at a special conference call on December 19.

Retail Contracts: Mr. Novak stated that the Retail Executive Committees adopted a recommendation for a Contract for Purchase Sale of Electricity and Gas (Request No. R05013) during the November 15, 2006 meeting. The recommendation has been posted for member ratification, with ballots due on January 7, 2007. The recommendation submitted by the Retail Contracts Subcommittee is included in the Board book behind tab 5, pages 85-87. The Retail Executive Committees adopted the recommendation with a few minor modifications.

OASIS Enhancements: Ms. York reported that the WEQ ESS/ITS have met ten times to continue to develop enhancements to OASIS. The majority of the work included development of new standards for Resales and Transfers, Capacity Release, and modifications to Multiple Requests and Redirects. The ESS/ITS has also modified the Standards of Conduct to amend definitions and numbering for affiliate standards. It is the expectation that the ESS/ITS will have a significant amount of work to revise the OASIS pursuant to the Final Order on OATT Reform when it is issued by the FERC.

WEQ Structure – 6th Segment: Mr. Desselle reported that on November 28, 2006 the WEQ Drafting Collaborative met via conference call and reached a consensus on amendments to the WEQ Procedures to support the creation of a sixth segment – Independent Grid Operator/Planners. A notational ballot was distributed on November 29, 2006 for all WEQ Board members to vote on the changes proposed to the WEQ Quadrant Procedures proposed by the WEQ Drafting Collaborative. The ballot is included behind tab 5, pages 93-95 of the Board book. A provision was added to state that creation of any new segment would require the definition of sub-segments within nine months of its creation. Another stipulation that was added to the WEQ Quadrant Procedures was that if it appears that there will be a segment block at the Executive Committee, then the item will come to the Board of Directors for discussion and possible direction to the WEQ Executive Committee. This stipulation will not have the effect of overriding a vote of the Executive Committee on a standard. The notational



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ballots are due on December 28. To date, the majority of the votes that have been returned have been in support of the proposed modifications.

Sandia Report: Mr. Buccigross reported that the Department of Energy Sponsored Information Assurance Work for NAESB (included on pages 96-139 of the Board book) has been released. Sandia conducted the surety assessment on behalf of the Department of Energy. The report illustrates where potential problem areas exist within the NAESB WGQ, WEQ, and Retail electronic transport standards and public key infrastructure standards. Overall the assessment issued by Sandia was that there are no major holes or obvious vulnerabilities, but there were items identified that will be addressed by the appropriate subcommittees.

4. Copyright Update

Mr. Boswell provided the update on the NAESB Copyright Policy. The information that corresponds to this agenda item can be found on the Board book behind tab 6, pages 141-177. Mr. Boswell reported that NAESB has adopted a formal site license agreement that is available for companies sign.

Mr. Ackerman asked about the use of the NAESB copyrighted materials in the instances of training processes. He noted that the NAESB business practice standards will become increasingly significant in relation to the NERC reliability standards. Mr. Ackerman stated that the NAESB copyright could pose roadblocks for proper training for those in the industry that are required to comply with NAESB and NERC standards, such as members of WECC. Mr. Ackerman noted that there are many members of WECC that cannot afford the NAESB membership and rely on the WECC to provide training for the NERC and NAESB standards.

Ms. McQuade noted that for organizations to have access to NAESB standards, membership is not required. A company that is not a NAESB member can be compliant with the copyright policy for \$150. Ms. McQuade added that NAESB is working with NERC to create a revenue neutral waiver so NERC can include NAESB standards in its own publication.

Mr. Ackerman stated that while he was not disputing the need for the NAESB Copyright Policy, there should be some way to find a solution for the training issue. Mr. Winterfeld noted that there is a distinction between using the standards for textbook materials and the ongoing use of the standards. Mr. Winterfeld suggested that if the standards are to be used for textbook purposes, that the materials would be collected at the end of the training session.

5. Executive Committee Reports

Wholesale Electric Quadrant: Mr. Oberski reviewed the WEQ Annual Plan as revised by the WEQ Executive Committee during the November 14, 2006 meeting. The revised WEQ 2006 Annual Plan can be found in the Board book behind tab 7, pages 187-192. The three areas that were the focus of the WEQ during 2006 were the complementary business practice standards to the NERC reliability standards, the ATC efforts, and OASIS enhancements. These areas will remain the focus of the WEQ during 2007 with the entire OATT Reform added to the work.

Retail Quadrants: Mr. Novak reviewed the Retail 2006 Annual Plan revised by the Retail Executive Committees during the November 2006 meeting. The revised plan is included on pages 193-197 of the Board book. Mr. Novak stated that during 2006 the Retail Quadrants made additional progress on the customer choice items, adopted a model contract, completed the model business practices portion of the request from Wal-Mart to adopt standards for



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Electronic Retail Billing (Request No. R05016), and completed the model business practices portion of Annual Plan Item 4 – Customer Enrollment.

Wholesale Gas Quadrant: Mr. Buccigross reviewed the progress of the WGQ Executive Committee. The WGQ 2006 Annual Plan as revised by the WGQ Executive Committee during the November 16, 2006 meeting is included behind Tab 7, pages 198-201 of the Board book. Mr. Buccigross stated that the majority of the items on the 2006 Annual Plan have been completed and were completed on time. The WGQ also published Version 1.8 of the Wholesale Gas Quadrant standards. The only two carryover items will be the review of the PKI standards as necessary once the WEQ adopts the standards and review of the Sandia Surety Assessment.

Mr. Desselle moved, seconded by Ms. Ogenyi, to adopt the revisions to the three annual plans as proposed by the Executive Committees. The motion unanimously passed a simple majority vote. [Vote 2].

Standards Adopted Since the September 21 Board Meeting: Ms. McQuade stated that the standards adopted since the September 21 Board meeting can be found in summary format on pages 179-181 of the Board book. The WGQ adopted three recommendations that were primarily maintenance revisions. The Retail Quadrants adopted two recommendations that are currently posted for ratification: the retail contract and the model business practices drafted for Customer Enrollment. The WEQ adopted business practice standards to include a Standards of Conduct link on the OASIS page; amended definitions, terms, and numbering of the WEQ Order 2004 (affiliate) standards; and standards for Resales and Transfers of transmission service.

Ms. McQuade noted that the Requests received since the last meeting are included on page 182-184 of the Board book. This includes Request No. R06024 submitted by Advanced Energy to standardize the method for quantifying benefits, savings, cost avoidance and/or the reduction in energy demand derived from the implementation of demand side management and energy efficiency programs.

Filings with the FERC: Since the September 21 Board meeting, NAESB submitted three reports to the FERC. On October 30, NAESB filed Minor Correction to the Manual Time Error Correction Standards under Docket No. RM05-5. On November 2, 2006, NAESB provided comments to the FERC regarding the October 12 Technical Conference on OATT Reform. On November 16, NAESB filed an Update to the Coordinate Interchange business practice standards in Docket No. RM05-5.

The proposed FERC Filing Schedule can be found on page 186 of the Board book.

Review and Adoption of 2007 Annual Plans:

Retail Quadrants: Mr. Novak presented the proposed Joint Retail 2007 Annual Plan drafted by the Retail Executive Committees during the November meeting. The proposed Joint Retail 2007 Annual Plan can be found in the Board book behind tab 7, pages 202-212 of the Board book. Mr. Novak stated that most items on the 2007 plan are items that were also on the 2006 plan. He noted that for Item 4 – Customer Enrollment, Drop and Account Information Change Using a Registration Agent, the business practices will be created using the Texas model. The Retail Executive Committees formed a Texas Task Force to create a recommendation that includes the mechanics of the Registration Agent Model. Item 9 – Consider and develop as needed model business practices to support Gas Design Day Forecast and Item 10 – Review and develop needed model business practices for a standardized method for quantifying benefits, savings, cost avoidance and/or the reduction in energy demand and usage derived



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from the implementation of demand side management and energy efficiency programs are attempts to move to development of model business practices for non-retail choice markets.

Wholesale Electric Quadrant: Ms. York presented the proposed WEQ 2007 Annual Plan drafted by the WEQ Executive Committee during the November meeting. The proposed 2007 plan can be found in the Board book behind tab 7, pages 213-218.

Ms. McQuade noted that the NAESB received two sets of comments from Mr. Bilke on behalf of Midwest ISO. The comments were also included in the Board book on pages 219-221. Mr. Oberski provided a response to the comments submitted by Mr. Bilke and noted that it was the recommendation of the WEQ Executive Committee leadership to not revise the WEQ 2007 Annual Plan based on the response to the comments.

For the comment regarding Item 1(c) – Develop business practice standards to support Operate within Limits (R03017): Mr. Oberski stated that while this item is not a high priority, it is a request and must be addressed appropriately within NAESB's process. It is a possibility that the outcome of this Request will be to take no action, but the request must work through the process.

For the comment regarding Item 1(f) – Develop jointly with NERC a Joint NERC/NAESB Operating training manual: Mr. Oberski stated that during offline discussions with Midwest ISO representatives, Midwest ISO understands the need for split standards to be published in a joint operating manual and modified its original comment in the form of a second set of comments. The comments stated that Midwest ISO will not prejudice the usefulness of the joint manual, but cautioned NAESB on what would be included in the manual.

For the comment on Item 3a(iii) – Registry: Determine and develop needed business practice standards to support the registry functions currently supported by NERC (Request No. R04037): Mr. Oberski stated that request has been assigned to a joint NERC/NAESB group, the JISWG. Mr. Oberski stated that it is the recommendation of the leadership of the WEQ Executive Committee to allow the JISWG members to determine whether NERC or NAESB will maintain the Registry.

Ms. McQuade stated that she asked someone from Midwest ISO to attend this meeting via conference call in order to present their comments. She noted that it is NAESB's intention to work with NERC to obtain a revenue neutral solution in place so that NERC can determine what standards it would like to include in the joint operating manual.

Wholesale Gas Quadrant: Mr. Buccigross presented the proposed WGQ 2007 Annual Plan drafted by the WGQ Executive Committee during the November 16 meeting. The proposed plan is included on pages 222-226 of the Board book. Mr. Buccigross stated that the WGQ 2007 Annual Plan is divided into 4 categories: Damage Reporting for Natural Gas Pipeline Facilities; Electronic Delivery Mechanisms and Related Activities, Contracts Activities, and Gas-Electric Interdependency. The plan also includes the ongoing standards maintenance and provisional activities.

A proposed resolution for the Board to adopt the three 2007 Annual Plans was included on page 226 of the Board book:

WHEREAS, under the guidance of each Quadrant Executive Committee the proposed 2007 Annual Plans were developed,

WHEREAS, each Quadrant Executive Committee approved its annual plan for 2007 and presents them to the Board for approval, and



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WHEREAS, under Article III, Section 4 of the Certificate of Incorporation of NAESB requires that the Annual Plan(s) of the organization be approved by the Board of Directors through a simple majority vote;

BE IT RESOLVED, that the Board of Directors of NAESB approves the Annual Plans of each of the four Quadrants for 2007.

Mr. Desselle moved, seconded by Mr. Lucas, to adopt the resolution as drafted. The motion unanimously passed a simple majority vote. [Vote 3].

6. Financial Report

Ms. McQuade reviewed the membership report that was included behind tab 8, pages 228-241 of the Board book. Ms. McQuade noted that there are six new members since the membership chart was created. Ms. McQuade also reviewed the chart of the Accrual Based Income and Expenses as of October 2006. Ms. McQuade noted that the estimated \$62,000 net income will be applied to retained earnings. She noted that this amount was achieved by not replacing outgoing staff. Ms. Wishart reviewed the Financial Report for October 2006 included on page 248 of the Board book. Ms. Wishart noted that the October Financials reflect Total Assets and Liability/Equity of \$1,035,732.31 and accounts receivable of \$574,500.

Review and Adoption of 2007 Budget: Ms. Wishart reviewed the proposed 2007 budget included on page 250 of the Board book. A proposed resolution was included on page 251 of the Board book:

WHEREAS, the NAESB office working with Ms. Wishart drafted the 2007 budget based on income and expenses YTD October augmented by expectations for revenue and expenses through year-end 2006,

WHEREAS, the 2007 budget estimates for a slight positive net income to offset previous years negative retained earnings,

WHEREAS, under Article III, Section 4 of the Certificate of Incorporation of NAESB, the Board of Directors is given the responsibility for approving the budget of the organization through a simple majority vote;

BE IT RESOLVED, that the Board of Directors of NAESB approves the 2007 budget.

Mr. Templeton moved, seconded by Mr. Mucci, to adopt the budget resolution as proposed. The motion unanimously passed a simple majority vote. [Vote 4].

Promotional Dues Program: Ms. McQuade noted that the Promotional Dues Program has been in place since the creation of the Retail Quadrants and the current provision for the Promotional Dues Program will end on December 31, 2006. A proposed resolution was included on page 251 of the Board book:

WHEREAS, the NAESB current provision for the promotional dues program will end on December 31, 2006,

WHEREAS, under Article V, Section 6 of the Certificate of Incorporation of NAESB, the Board of Directors is given the responsibility to approve promotional dues programs through a vote of at least seventy-five (75%) from the Board, including an affirmative vote of at least forty percent (40%) from the Directors representing each Segment within each Quadrant,



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BE IT RESOLVED, that the Board of Directors of NAESB approves the continuation of a special promotional dues program that will permit three representatives from recognized consumer advocacy groups and an unlimited number of regulators and their staff (with the provision that any given state is only represented once per quadrant) to join the End-User Segments of the RGQ, the REQ, and the WEQ of NAESB at a reduced annual membership of \$500 each. The program will be reviewed to determine if it should be continued no later than December 31, 2010.

7. Plan for March 2007 Board Meeting

Ms. McQuade noted that the Schedule of 2007 Meetings is included on page 255 of the Board book. The Advisory Council meeting is scheduled on February 17, 2007 in Washington, DC. The March 2007 Board meeting is scheduled on March 22 in Houston, Texas.

8. Old and New Business

Liaisons with external groups:

Ms. McQuade noted that NAESB representatives will teach a seminar on NAESB process and the specific standards to FERC staff on December 18-19 at FERC's offices in Washington, DC.

On page 253-254 of the Board book, there is a summary of NAESB meetings with external entities since the September Board meeting including the panel at the OATT Reform NOPR Technical Conference, OATI, the NERC Standards Workshop in Dallas, Sandia and the Department of Energy, WECC, EPSA, FERC, NARUC, the International Gas Union, and EASEE.

Dr. Foss stated that the University of Texas Center for Energy Economics is working with the NGC on issues facing the natural gas industry. She stated that if anyone is interested in this project to contact her.

9. Adjourn

Mr. Lucas moved, seconded by Mr. Desselle, to adjourn. The meeting adjourned at 12:12 PM Central.



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10. Board Attendance (Vacancies Omitted)

Wholesale Gas Quadrant Board Members

PRODUCERS SEGMENT		ATTENDANCE	VOTE 1	VOTE 2	VOTE 3	VOTE 4
Jay Ellzey	Manager – Regulatory and Opco Support, ChevronTexaco Natural Gas	In Person	S	S	S	S
William T. Benham	Vice President – Regulatory Affairs, BP Energy Company	Absent				
Keith Sappenfield	Regional Director – US Regulatory Affairs, EnCana Oil & Gas (USA) Inc.	In Person	S	S	S	S
Pete Frost	Director - Regulatory Affairs, ConocoPhillips Gas and Power Marketing	Phone	S	S	S	S
PIPELINE SEGMENT						
Jim Goldmann	Vice President for Transportation Services and Development, Alliance Pipeline	In Person	S	S	S	S
Larry Smith	Vice President Commercial Operations, Tennessee Gas Pipeline Company	In Person	S	S	S	S
Bill Grygar	Vice President, Panhandle Eastern Pipe Line	In Person	S	S	S	S
Anne Bomar	Vice President, Dominion	Absent				
Richard Kruse	Senior Vice President, Duke Energy Gas Transmission	Phone	S	S	S	S
LOCAL DISTRIBUTION COMPANY (LDC) SEGMENT						
Clifton Olson	Vice President of Supply and Transmission, Energy East Corporation	Absent				
Adrian Chapman	Vice President, Regulatory Affairs & Energy Acquisition, Washington Gas	Phone	S	S	S	S
Reed Horting	Vice President, Gas Supply & Transportation, PECO Energy Co.	Phone	S	S	S	S
Mike Novak	Asst. General Manager, National Fuel Gas Distribution Corporation	Phone	S	S	S	S
Lee Stewart	Senior Vice President, Gas Transmission, Southern California Gas Company	In Person	S	S	S	S
END USERS SEGMENT						
Valerie Crockett	Tennessee Valley Authority	In Person	S	S	S	S
Joe Stepenovitch		In Person	S	S	S	S
Diane McVicker	Senior Principal Fuel Analyst, Salt River Project	In Person	S	S	S	S
Terry Morrison	Vice President of Energy Marketing and Trading, Florida Power & Light	Phone	S	S	S	S
Jim Templeton	Principal, Comprehensive Energy Services	In Person	S	S	S	S
SERVICES SEGMENT						
John Bretz	Vice President - Gas Marketing, Anadarko Energy Services Company	Absent				
Michael Smith	Vice President—Regulatory and Legislative Affairs, Constellation Energy Commodities Group	Absent				
Jim Buccigross	Vice President Energy Industry Practice, Group 8760 LLC	Phone	S	S	S	S
Bill Hebenstreit	Manager – Contract Administration, Cheniere Marketing, Inc.	In Person	S	S	S	S



North American Energy Standards Board

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Retail Electric Quadrant Board Members

SUPPLIERS SEGMENT		ATTENDANCE	VOTE 1	VOTE 2	VOTE 3	VOTE 4
Peter Kelly-Detwiler	Director of Operations, Constellation NewEnergy	Absent				
Richard Zelenko	General Manager, Dominion Retail Inc.	Phone	S	S	S	S
DISTRIBUTORS SEGMENT						
David Koogler	Director – State Regulation, Dominion Virginia Power (SERC NERC Region)	In Person	S	S	S	S
Dennis Derricks	Director Regulatory Policy and Analysis, Wisconsin Public Service Corporation	In Person	S	S	S	S
Ruth Kiselewich	Director Special Projects and Supplier Services, Baltimore Gas & Electric Company (MAAC NERC Region)	Absent				
Leonard Haynes	Executive Vice President, Supply Technologies, Renewables, and Demand, Southern Company Services (SERC NERC Region)	Phone	S	S	S	S
END USERS SEGMENT						
Sonny Popowsky	Consumer Advocate, Pennsylvania Office of Consumer Advocate	Absent				
SERVICE PROVIDERS SEGMENT						
Jim Minneman	Director of Business Services, PPL Solutions LLC	In Person	S	S	S	S
J Cade Burks	President, EC Power	In Person	S	S	S	S

Wholesale Electric Quadrant Board Members

TRANSMISSION SEGMENT		SUB-SEGMENT	ATTENDANCE	VOTE 1	VOTE 2	VOTE 3	VOTE 4
Dan Klempel	Director Transmission Regulatory Compliance, Basin Electric Power Cooperative	Muni/Coop	Absent				
W Terry Boston	Executive Vice President – Transmission/Power Supply Group, Tennessee Valley Authority	Fed/State/Prov.	Phone	S	S	S	S
John E. Lucas	Manager, Transmission Services, Southern Company	IOU	In Person	S	S	S	S
Michael Desselle	Chief Administrative Officer and Vice President of Process Integrity – Southwest Power Pool	IOU	In Person	S	S	S	S
Paul McCoy	Managing Director & Chief Operating Officer, Trans-Elect	ITC	Absent				
Ken Wiley	President and Chief Executive Officer, Florida Reliability Coordinating Council	At-Large	Absent				
GENERATION SEGMENT							
Curtis Winterfeld	Vice President of Power Marketing, Deseret Generation & Transmission Cooperative	Muni/Coop	Phone	S	S	S	S
Belinda Thornton	Senior Manager – Real Time Trading, Tennessee Valley Authority	Fed/State/Prov.	Phone	S	S	S	S
Charles W. Severance	Manager – Supply & Wholesale Services, Wisconsin Public Service Corporation	IOU	In Person	S	S	S	S
Michael Gildea	Executive Director, Regulatory Affairs, Constellation	Merchant	Phone	S	S	S	S



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Gloria Ogenyi	Generation Group						
Ron Mucci	Vice President Energy Policy, Conectiv Energy Supply, Inc.	Merchant	Phone	S	S	S	S
	Manager - Regulatory Affairs, Williams Power Company	At-Large	In Person	S	S	S	S
MARKETERS/BROKERS SEGMENT							
Roy True	Manager of RTO Market Development, ACES Power Marketing	Muni/Coop	In Person	S	S	S	S
Jeff Ackerman	Manager, Colorado River Storage Project Energy Management and Marketing Office, Western Area Power Administration	Fed/State/Prov.	In Person	S	S	S	S
Michael Grim	Director of Markets and Regulation, TXU Business Services	Not IOU Affiliated	Absent				
Joseph Hartsoe	Vice President and Associate General Counsel, American Electric Power Service Corp.	IOU	Phone	S	S	S	S
R. Scott Brown	Vice President and Director, Exelon Generation Power Team	IOU	In Person	S	S	S	S
Rick Smead	Director, Navigant Consulting, Inc.	At-Large	In Person	S	S	S	S
DISTRIBUTION/LOAD SERVING ENTITIES (LSE) SEGMENT							
Arthur G. Fusco	Vice President and General Counsel, Central Electric Power Cooperative Inc.	Muni/Coop	Phone	S	S	S	S
Barry R. Lawson	Manager-Power Delivery, National Rural Electric Cooperative Association	Muni/Coop	Absent				
Mark Crosswhite	Senior Vice President & General Counsel – Generation and Energy Marketing, Southern Company	IOU	Phone	S	S	S	S
Frank Johnson	Senior Vice President Electric Transmission and Distribution, Consumers Energy	IOU	Absent				
Bruce Ellsworth	New York State Reliability Council	At-Large	In Person	S	S	S	S
END USERS SEGMENT							
Carol Guthrie	General Manager, Electric Market Strategies, ChevronTexaco Energy Research and Technology Company	End Use (Self Generator)	Absent				
John Reese	Senior Policy Advisor & Director of the Office of Economic Development and Policy, New York State Department of Public Service	Regulator	Absent				
Jeanne Zaiontz	Director, Regulatory Affairs, BP Energy Co.	Large Industrial	Absent				
John A. Anderson	President and CEO, Electricity Consumers Resource Council (ELCON)	Large Industrial	Absent				
Michehl Gent	Open Access Technology International, Inc.	At-Large	In Person	S	S	S	S

Retail Gas Quadrant Board Members

SUPPLIERS SEGMENT		ATTENDANCE	VOTE 1	VOTE 2	VOTE 3	VOTE 4
Kathy Fudali	Manager, Contract Administration, Sprague Energy Corp.	In Person	S	S	S	S



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DISTRIBUTORS SEGMENT

Craig White	Craig White	Phone	S	S	S	S
William Bourbonnais	William Bourbonnais	In Person	S	S	S	S
Ralph Cleveland	Senior Vice President – Engineering and Operations, AGL Resources, Inc.	Phone	S	S	S	S

END USERS SEGMENT

SERVICE PROVIDERS SEGMENT

Leigh Spangler	President, Latitude Technologies Inc.	In Person	S	S	S	S
Dave Darnell	President & CEO, Systrends USA	Phone	S	S	S	S
Greg Lander	Principal, Commerce Energy Group	Absent				

11. Other Attendance

Name	Organization	Attendance
Bill Boswell	NAESB	In Person
Kathryn Burch	Duke Energy Gas Transmission	In Person
Christopher Burden	Williams Gas Pipeline	In Person
Craig Colombo	Dominion Resources	In Person
LaRita Cormier	Riverside Reporting	In Person
Dale Davis	Williams Gas Pipeline	In Person
Rhonda Denton	BP Energy Co.	In Person
Chuck Feagans	Tennessee Valley Authority	Phone
Michelle Foss	UT Center for Energy Economics	In Person
Mark Gracey	Tennessee Gas Pipeline Co.	In Person
Bill Griffith	El Paso Natural Gas Co.	In Person
Laura Kennedy	NAESB	In Person
Bill Lohrman	NERC	In Person
Terry McGill	Enbridge Energy Company, Inc.	In Person
Rae McQuade	NAESB	In Person
Lou Oberski	Dominion	In Person
Denise Rager	NAESB	In Person
Marv Rosenberg	FERC	In Person
Sharri Sparks	Arizona Public Service	In Person
Nicole Spaur	Sprague Energy	In Person
Veronica Thomason	NAESB	In Person



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Name	Organization	Attendance
Kim Van Pelt	Panhandle Eastern Pipe Line	In Person
Darla Wishart	NAESB	In Person
Kathy York	Tennessee Valley Authority	In Person

NORTH AMERICAN ENERGY STANDARDS BOARD
Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials
February 6-7, 2007

TAB 6

FERC Actions

- Action may be required of the WEQ EC and WGQ EC to amend annual plans to promote e-Tariff efforts to the active portions of the annual plans.
- This section includes the agenda of the e-Tariff meeting held on February 1 and a work paper provided by the FERC.
- Tab 6 corresponds to agenda item 3 and 6 for WEQ, and agenda item 7 for Retail Quadrants.



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January 30, 2007

TO: Interested Parties in the Electric, Gas, and Oil Industries and Industry Trade Organizations (AOPL, AGA, INGAA, EPSA, EEL, ELCON, APPA, APGA, NRECA, NEMA, NGSA, IPAA, NERC, IRC, TIA)
FROM: Rae McQuade, NAESB President
RE: **Meeting on e-Tariff Development – Updated with Speakers**

An industry meeting has been scheduled on Thursday, February 1, 2007 from 10:00 AM to 4:00 PM Eastern for the electric, gas, and oil industries to meet in order to begin the process of helping develop an e-Tariff program that would allow tariff and rate schedule revisions to FERC to include sufficient metadata to permit these filings to loaded into a database.

FERC staff recently requested NAESB support to determine a set of standards, data formats or guidelines for submittal of tariff and rate schedule revisions that would provide FERC with sufficient information to create an e-Tariff database. The database would contain tariffs and rate schedules, organized either by sheets as they are today, or by sections if more acceptable to the industry so that they and the industry can easily see the portions of the tariff that are effective, the proposed changes and the status on the proposed changes. FERC staff has indicated that they are willing to not use previously developed software for the e-tariff system if a solution can be proposed that meets their requirements and has industry support. NAESB is coordinating with the Association of Oil Pipelines to ensure that any NAESB recommended action that would address wholesale gas and wholesale electric tariff filings, would not be inconsistent with any solutions proposed to address oil pipeline filings.

The specifics of the meeting are:

WHEN: Thursday, February 1, 2007 – 10:00 AM to 4:00 PM Eastern
WHERE: FERC Commission Meeting Room
 FERC Offices, 888 First Street, N.E., Washington, DC 20426

This meeting is an open meeting. Any interested party is eligible to attend. If you plan to attend, please RSVP to the NAESB office (naesb@naesb.org) by January 26 with the following contact information: your name, the organization you are representing, email address and phone number. If you are unable to attend but would like to be put on our distribution for this effort, please send in the same contact information and indicate that you should be added to the distribution list. All confirmed attendees will be added to the distribution list unless they specifically indicate that they do not want to receive e-Tariff information from NAESB.

NAESB will post all e-Tariff related information on its site at the following address (<http://www.naesb.org/etariff.asp>). Please note that any interested party can access this address.

With Best Regards,

Rae McQuade



North American Energy Standards Board

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NORTH AMERICAN ENERGY STANDARDS BOARD

February 1, 2007 – 10:00 AM to 4:00 PM Eastern

AGENDA

10:00 AM	1.	Opening Remarks
10:30 AM	2.	Administrative • Housekeeping • Antitrust Guidance
10:45 AM	3.	Background on e-Tariff presented by Commission Staff
11:15 AM	4.	Requirements for e-Tariff presented by Commission Staff
11:45 AM	5.	Comments from Association of Oil Pipelines • Steve Milbourne, Buckeye Pipeline Services Co.
<i>Lunch – 12:15 pm to 1:15 pm</i>		
1:15 PM	6.	Comments from INGAA • Steven Kirk, Northern Natural Gas • Molly Nagle, Tennessee Gas Pipeline
1:45 PM	7.	Comments from EEI • Henri Bartholomot, Edison Electric Institute • Jennifer Key, Steptoe & Johnson • Charlotte Glassman, Duke Energy • KC Hairston, Balch & Bingham • Marcus Lotto, Southern California Edison
2:15 PM	8.	Comments from Texas Pipeline Association • Lee Baskin, Kinder Morgan
2:45 PM	9.	Plan for Addressing Needs of Industry and FERC
3:15 PM	10.	Organization, Tasks and Assignments
3:45 PM	11.	Next Steps and Meetings
4:00 PM	12.	Adjourn



**RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: WEQ**

Requesters:

Request No.: WEQ 2007 Annual Plan Item (3)(a)(2)

**Request Title: Implementation of S&CP changes to support
Standards of Conduct business practices**

1. RECOMMENDED ACTION:

☒ Accept as requested
☐ Accept as modified below
☐ Decline

**EFFECT OF EC VOTE TO ACCEPT
RECOMMENDED ACTION:**

☒ Change to Existing Practice
☐ Status Quo

2. TYPE OF DEVELOPMENT/MAINTENANCE

Per Request:

☐ Initiation
☒ Modification
☐ Interpretation
☐ Withdrawal

☐ Principle
☐ Definition
☐ Business Practice Standard
☐ Document
☐ Data Element
☐ Code Value
☐ X12 Implementation Guide
☐ Business Process Documentation

Per Recommendation:

☐ Initiation
☒ Modification
☐ Interpretation
☐ Withdrawal

☐ Principle
☐ Definition
☐ Business Practice Standard
☐ Document
☐ Data Element
☐ Code Value
☐ X12 Implementation Guide
☐ Business Process Documentation

3. RECOMMENDATION

SUMMARY:

Paragraph 47 of FERC Rule Making Order RM5-05 states the following: "It would be useful if the WEQ would adopt standards comparable to those NAESB adopted regarding standards of conduct on the gas side."

In response to FERC's request, the WEQ Business Practice Subcommittee drafted business practices for a standardized method of accessing Standards of Conduct information on an organization's OASIS site. This recommendation was adopted by the WEQ Executive Committee on August 15, 2006, ratified on October 2, 2006, and can be accessed at the following link: [2006 WEQ Annual Plan Item 3 \(c\)\(i\) Final Action](#).

The recommendation referenced in the link below as an attachment to this recommendation is submitted to modify the S&CPs as needed to implement the business practices ratified in the above referenced action. It is submitted under WEQ 2007 Annual Plan item 3(a)(2)



**RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: WEQ**

Requesters:

Request No.: WEQ 2007 Annual Plan Item (3)(a)(2)

**Request Title: Implementation of S&CP changes to support
Standards of Conduct business practices**

(Implementation of S&CP changes to support Standards of Conduct). This standard provides for a standardized method of accessing Standards of Conduct information on an organization's OASIS site.

The proposed revisions to the S&CP are posted as an attachment to this Recommendation at the following link: http://naesb.org/pdf2/2007_weq_ap_i3a2_rec_attachment.doc

RECOMMENDED STANDARDS:

Please see the proposed revisions to the S&CP by clicking on the following link:
http://naesb.org/pdf2/2007_weq_ap_i3a2_rec_attachment.doc

4. SUPPORTING DOCUMENTATION

a. Description of Request: WEQ 2007 Annual Plan Item (3)(a)(2) (Implementation of S&CP changes to support Standards of Conduct business practices)

b. Description of Recommendation:

Please see above.

c. Business Purpose:

To provide changes to the S&CP for a standardized method of accessing Standards of Conduct information on an organization's OASIS site.

d. Commentary/Rationale of Subcommittee(s)/Task Force(s):

Please reference the following minutes that provide additional commentary to the drafting of this recommendation:

WEQ ESS/ITS Meeting Date	Draft Minutes
October 23-24, 2006	Final Minutes
December 4, 2006	Draft Minutes
January 4, 2007	Final Minutes

Business Practices for Open Access Same-Time Information Systems (OASIS) Standards & Communication Protocols

Business Practices Requirements:

002-1 INTRODUCTION

002-1.1 DEFINITION OF TERMS

The following definitions are offered to clarify discussions of the OASIS in this document.

a. **Transmission Services Information (TS Information)** is transmission and ancillary services information that must be made available by public utilities on a non-discriminatory basis to meet the regulatory requirements of transmission open access.

b. **Open Access Same-Time Information System (OASIS)** comprises the computer systems and associated communications facilities that public utilities are required to provide for the purpose of making available to all transmission users comparable interactions with TS Information.

c. **Open Access Same-Time Information System Node (OASIS Node)** is a subsystem of the OASIS. It is one computer system in the (OASIS) that provides access to TS Information to a Transmission Customer.

d. **Transmission Provider (TP or Primary Provider)** is the public utility (or its designated agent)

that owns, operates or controls facilities used for the transmission of electric energy in interstate commerce. (This is the same term as is used in Part 35.3).

e. **Transmission Customer (TC or Customer)** is any eligible Customer (or its designated agent) that can or does execute a transmission service agreement or can or does receive transmission service. (This is the same term as is used in Part 35.3).

f. **Secondary Transmission Provider (ST, Reseller, or Secondary Provider)** is any Customer who offers to sell transmission capacity it has purchased. (This is the same as Reseller in Part 37).

g. **Transmission Services Information Provider (TSIP)** is a Transmission Provider or an agent to whom the Transmission Provider has delegated the responsibility of meeting any of the requirements of Part 37. (This is the same as Responsible Party in Part 37).

h. **Value-Added Transmission Services Information Provider (VTSIP)** is an entity who uses TS Information in the same manner as a Customer and provides value-added information services to its Customers.

002-2 NETWORK ARCHITECTURE REQUIREMENTS

002-2.1 ARCHITECTURE OF OASIS NODES

a. **Permit Use of Any OASIS Node Computers:** TSIPs shall be permitted to use any computer systems as an OASIS Node, so long as they meet the OASIS requirements.

NAESB OASIS Standards and Communication Protocol (S&CP) – WEQ-002

b. **Permit Use of Any Customer Computers:** OASIS Nodes shall permit the use by Customers of any commonly available computer systems, as long as they support the required communication links to the Internet.

c. **Permit the Offering of Value-Added Services:** TSIPs are required, upon request, to provide their Customers the use of private network connections on a cost recovery basis. Additional services that are beyond the scope of the minimum OASIS requirements are also permitted. When provided, these private connections and additional services shall be offered on a fair and non-discriminatory basis to all Customers who might choose to use these services.

d. **Permit Use of Existing Communications Facilities:** In implementing the OASIS, the use of existing communications facilities shall be permitted. The use of OASIS communication facilities for the exchange of information beyond that required for open transmission access (e.g., transfer of system security or operations data between regional control centers) shall also be permitted, provided that such use does not negatively impact the exchange of open transmission access data and is consistent with the Standards of Conduct in Part 37.

e. **Single or Multiple Providers per Node:** An OASIS Node may support a single individual Primary Provider (plus any Secondary Providers) or may support many Primary Providers.

002-2.2 INTERNET-BASED OASIS NETWORK

a. **Internet Compatibility:** All OASIS Nodes shall support the use of internet tools, internet directory services, and internet communication protocols necessary to support the Information Access requirements stated in Section 4.

b. **Connection through the Public Internet:** Connection of OASIS Nodes to the public Internet is required so that Users may access them through Internet links. This connection shall be made through a firewall to improve security.

c. **Connection to a Private Internet Network:** OASIS Nodes shall support private connections to any OASIS User (User) who requests such a connection. The TSIP is permitted to charge the User, based on cost, for these connections. The same internet tools shall be required for these private networks as are required for the public Internet. Private connections must be provided to all users on a fair and nondiscriminatory basis.

d. **Internet Communications Channel:** The OASIS Nodes shall utilize a communication channel to the Internet which is adequate to support the performance requirements given the number of Users subscribed to the Providers on the Node (see Section 5.3).

002-2.3 COMMUNICATION STANDARDS REQUIRED

a. **Point-to-Point Protocol (PPP) and Internet Protocol Control Protocol (IPCP)** (reference RFCs 1331 and 1332) shall be supported for private internet network dial-up connections.

Draft Recommendation for Modifications to S&CPs to address business practices adopted for WEQ 2007 Annual Plan Item 3(a)(2)

NAESB OASIS Standards and Communication Protocol (S&CP) – WEQ-002

- b. **Serial Line Internet Protocol (SLIP)** (reference RFC 1055) shall be supported for private internet network dial-up connections.
- c. **Transport Control Protocol and Internet Protocol (TCP/IP)** shall be the only protocol set used between OASIS Nodes whenever they are directly interconnected, or between OASIS Nodes and Users using private leased line internet network connections.
- d. **Hyper Text Transport Protocol (HTTP)**, Version 1.0 (RFC 1945), shall be supported by TSIPs so that Users= web browsers can use it to select information for viewing displays and for downloading and uploading files electronically.
- e. **Internet Protocol Address:** All OASIS Nodes are required to use an IP address registered with the Internet Network Information Center (InterNIC), even if private connections are used.

002-2.4 INTERNET TOOL REQUIREMENTS

Support for the following specific internet tools is required, both for use over the public Internet as well as for any private connections between Users and OASIS Nodes:

- a. **Browser Support:** OASIS Nodes shall insure that Users running minimally either Netscape's Navigator version 4.0.x or Microsoft's Internet Explorer version 4.0.x browsers (or any other commercially or privately available browser supporting that set of capabilities common to both of these industry standard browsers) shall have a fully functional user interface based on the Interface Requirements defined in Section 4.
- b. **HTML Forms** shall be provided by the TSIPs to allow Customers to enter information to the OASIS Node.
- c. **Domain Name Service (DNS)** (ref. RFC 1034, 1035) shall be provided as a minimum by the TSIPs (or their Internet Service Provider) for the resolution of IP addresses to allow Users to navigate easily between OASIS Nodes.
- d. **Simple Network Management Protocol (SNMP)** is recommended but not required to provide tools for operating and managing the network, if private interconnections between OASIS Nodes are established.
- e. **The Primary Provider shall support E-mail** for exchanges with Customers, including the sending of attachments. The protocols supported shall include, as a minimum, the Simple Messaging Transfer Protocol (SMTP), Post Office Protocol (POP), and Multipurpose Internet Mail Extensions (MIME).

002-2.5 NAVIGATION AND INTERCONNECTIVITY BETWEEN OASIS NODES

- a. **World Wide Web Browsers:** TSIPs shall permit Users to navigate using WWW browsers for accessing different sets of TS Information from one

Draft Recommendation for Modifications to S&CPs to address business practices adopted for WEQ 2007 Annual Plan Item 3(a)(2)

NAESB OASIS Standards and Communication Protocol (S&CP) – WEQ-002

Provider, or for getting to TS Information from different Providers on the same OASIS Node. These navigation methods shall not favor User access to any Provider over another Provider, including Secondary Providers.

b. **Internet Interconnection across OASIS Nodes:** Navigation tools shall not only support navigation within the TSIP's Node, but also across interconnected OASIS Nodes. This navigation capability across interconnected Nodes shall, as a minimum, be possible through the public Internet.

002-3 INFORMATION ACCESS REQUIREMENTS

002-3.1 REGISTRATION AND LOGIN REQUIREMENTS

a. **Location of Providers:** To provide Users with the information necessary to access the desired Provider, all Primary Providers shall register their OASIS Node URL address with www.tsin.com. This URL address should include the unique four letter acronym the Primary Provider will use as the PRIMARY_PROVIDER_CODE.

b. **Initial User Registration:** TSIPs shall require Users to register with a Primary Provider before they are permitted to access the Provider's TS Information. There must be a reference pointing to registration procedures on each Primary Provider's home page. Registration procedures may vary with the administrative requirements of each Primary Provider.

c. **Initial Access Privileges:** Initial registration shall permit a User only the minimum Access Privileges. A User and a Primary Provider shall mutually determine what access privilege the User is permitted. The TSIP shall set a User's Access Privilege as authorized by the Primary Provider.

d. **User Login:** After registration, Users shall be required to login every time they establish a dial-up connection. If a direct, permanent connection has been established, Users shall be required to login initially or any time the connection is lost. Use of alternative forms of login and authentication using certificates and public key standards is acceptable.

e. **User Logout:** Users shall be automatically logged out any time they are disconnected. Users may logout voluntarily.

002-3.2 SERVICE LEVEL AGREEMENTS

Service Level Agreements: It is recognized that Users will have different requirements for frequency of access, performance, etc., based on their unique business needs. To accommodate these differing requirements, TSIPs shall be required to establish a "Service Level Agreement" with each User, which specifies the terms and conditions for access to the information posted by the Providers. The default Service Level Agreement shall be Internet access with the OASIS Node meeting all minimum performance requirements.

002-3.3 ACCESS TO INFORMATION

Draft Recommendation for Modifications to S&CPs to address business practices adopted for WEQ 2007 Annual Plan Item 3(a)(2)

NAESB OASIS Standards and Communication Protocol (S&CP) – WEQ-002

- a. **Display:** TSIPs shall format all TS Information in HTML format such that it may be viewed and read directly by Users without requiring them to download it. This information shall be in clear English as much as possible, with the definitions of any mnemonics or abbreviations available on-line. The minimum information that is to be displayed is provided in the Templates in Section 4.3.
- b. **Read-Only Access to TS Information:** For security reasons, Users shall have read-only access to the TS Information. They shall not be permitted to enter any information except where explicitly allowed, such as HTML transaction request forms or by the Templates in Section 4.3.
- c. **Downloading Capability:** Users shall be able to download from an OASIS Node the TS Information in electronic format as a file. The rules for formatting of this data are described in Section 4.2.
- d. **On-Line Data Entry on Forms:** Customers shall be permitted to fill out on-line the HTML forms supplied by the TSIPs, for requesting the purchase of services and for posting of products for sale (by Customers who are Resellers). Customers shall also be permitted to fill-out and post Want- Ads.
- e. **Uploading Capability:** Customers shall be able to upload to OASIS Nodes the filled-out forms. TSIPs shall ensure that these uploaded forms are handled identically to forms filled out on-line. TSIPs shall provide forms that support the HTTP input of Comma Separated Variable (CSV) records. This capability shall permit a Customer to upload CSV records using standard Web browsers or additional client software (such as fetch_http) to specify the location of the CSV records stored on the Customer's hard disk.
- f. **Selection of TS Information:** Users shall be able to dynamically select the TS Information they want to view and/or download. This selection shall be, as a minimum, through navigation to text displays, the use of pull-down menus to select information for display, data entry into forms for initiating queries, and the selection of files to download via menus.

002-3.4 PROVIDER UPDATING REQUIREMENTS

The following are the Provider update requirements:

- a. **Provider Posting of TS Information:** Each Provider (including Secondary Providers and Value-Added Providers) shall be responsible for writing (posting) and updating TS Information on their OASIS Node. No User shall be permitted to modify a Provider's Information.

- b. **General Postings**

- (i) **INFO.HTM:** Each Provider shall provide general information on how to use their node and describe all special aspects, such as line losses, congestion charges and assistance. The address for the directory of this information shall be INFO.HTM (case sensitive), an HTML web page, linked to the Provider's

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registered URL address. See section 4.5 for information required to be on the web page INFO.HTM.

(ii) **Standards of Conduct:** The Transmission Provider shall establish a link entitled "Standards of Conduct," located on the OASIS home page at the Transmission Provider's registered URL address.

c. **OASIS Node Space for Secondary Provider:** To permit Users to readily find TS Information for the transmission systems that they are interested in, TSIPs shall provide database space on their OASIS Node for all Secondary Providers who have purchased, and who request to resell, transmission access rights for the power systems of the Primary Providers supported by that Node.

d. **Secondary Provider Posting to Primary Provider Node:** The Secondary Providers shall post the relevant TS Information on the OASIS Node associated with each Primary Provider from whom the transmission access rights were originally purchased.

e. **Secondary Provider Posting Capabilities:** The TSIPs shall ensure that the Secondary Providers shall be able to post their TS Information to the appropriate OASIS Nodes using the same tools and capabilities as the Customers, meet the same performance criteria as the Primary Providers, and allow users to view these postings on the same display page, using the same tables, as similar capacity being sold by the Primary Providers.

f. **Free-Form Posting of non-TS Information:** The TSIP shall ensure that Providers and Customers may post non-TS Information, such as Want-Ads and that this information is easily accessible by all Users. The TSIP shall be allowed to limit the volume and/or to charge for the posting of non-TS Information.

g. **Time Stamps:** All TS Information shall be associated with a time stamp to show when it was posted to the OASIS Node.

h. **Transaction Tracking by an Assignment Reference Number:** All requests for purchase of transmission or ancillary services will be marked by a unique accounting number, called an assignment reference.

i. **Time-Stamped OASIS Audit Log:** All posting of TS Information, all updating of TS Information, all User logins and disconnects, all User download requests, all Service Requests, and all other transactions shall be time stamped and stored in an OASIS Audit Log. This OASIS Audit Log shall be the official record of interactions, and shall be maintained on-line for download for at least 90 days. Changes in the values of posted Capacity (Available Transfer Capability) must be stored in the on-line Audit Log for 20 days. Audit records must be maintained for 3 years off-line and available in electronic form within seven days of a Customer request.

j. **Studies:** A summary description with dates, and programs used of all transmission studies used to prepare data for the Primary Provider's ATC and

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TTC calculation will be provided along with information as to how to obtain the study data and results.

~~k. **Organizational Charts:** As required in 83 FERC 61,301, each Provider shall provide the company's organizational chart, job descriptions, and personnel names, using formats viewable and downloadable directly (i.e., without the use of external or third-party plug-ins or application software) by the browsers listed in Section 2.4a.~~

002-3.5 ACCESS TO CHANGED INFORMATION

a. **General Message & Log:** TSIPs shall post a general message and log that may be read by Users. The message shall state that the Provider has updated some information, and shall contain (or point to) a reverse chronological log of those changes. This log may be the same as the Audit Log. The User may use the manual capability to see the message.

b. **TSIP Notification Design Responsibilities:** The TSIP shall avoid a design that could cause serious performance problems by necessitating frequent requests for information from many Users.

002-3.6 USER INTERACTION WITH AN OASIS NODE

There are three basic types of User interactions which must be supported by the OASIS Node. These interactions are defined in Section 4.3.

a. **Query/Response:** The simplest level of interactions is the query of posted information and the corresponding response. The User may determine the scope of the information queried by specifying values, through an HTML form, a URL string, or an uploaded file, using Query Variables and their associated input values as defined with each Template in Section 4.3. The response will be either an HTML display or a record oriented file, depending on the output format that the User requests. The TSIP may establish procedures to restrict the size of the response, if an overly broad query could result in a response that degrades the overall performance of the OASIS Node for their Users.

b. **Purchase Request:** The second type of Customer interaction is the submittal of a request to purchase a service. The Customer completes an input form, a URL string or uploads a file and submits it to the OASIS Node. The uploaded file can either be a series of Query Variables or a record oriented file. The Seller of the service, possibly off-line from the OASIS Node, processes the request and the status is updated accordingly. If the Seller approves the purchase request, then the Customer must again confirm it. Once the Customer confirms an approved purchase, a reservation for those services is considered to exist, unless later the reservation is reassigned, displaced, or annulled.

c. **Upload and Modify Postings:** Customers who wish to resell their rights may upload a form, create the appropriate URL or upload a file to post services for sale. A similar process applies to eligible Third Party Sellers of ancillary services. The products are posted by the TSIP. The seller may monitor the

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status of the services by requesting status information. Similarly the Seller may modify its posted transmission services by submitting a service modification request through a form, a URL query, or by uploading a file.

002-4 INTERFACE REQUIREMENTS**002-4.1** INFORMATION MODEL CONCEPTS

a. **ASCII-Based OASIS Templates:** For providing information to Users, TSIPs shall use the specified OASIS Templates. These Templates define the information that must be presented to Users, both in the form of graphical displays and as downloaded files. Users shall be able to request Template information using query-response data flows. The OASIS Templates are described in section 4.3. The Data Element Dictionary, which defines the Data Elements in the OASIS Templates, is provided in Appendix A. Data elements must be used in the exact sequence and number as shown in the Templates when file uploads and downloads are used. Although the contents of the graphical displays are precisely defined as the same information as in the Templates, the actual graphical display formats of the TS information are beyond the scope of the OASIS requirements. Due to the nature of graphical displays, there may be more than one graphical display used to convey the information in a single Template.

b. **ASCII-Based OASIS File Structures:** For uploading requests from and downloading information to Users, TSIPs shall use specific file structures that are defined for OASIS Template information (see section 4.2). These file structures are based on the use of headers that contain the Query Variable information, including the name of the OASIS Template. These headers thus determine the contents and the format of the data that follows. Although headers may not be essential if file transfers contain the exact sequence and number of Data Elements as the Templates, this feature is being preserved for possible future use when additional flexibility may be allowed.

002-4.2 OASIS NODE CONVENTIONS AND STRUCTURES**002-4.2.1** OASIS Node Naming Requirements

The following naming conventions shall be used to locate information posted on an OASIS Node. OASIS naming conventions shall conform to standard URL structures.

002-4.2.1.1 OASIS Node Names

In order to provide a consistent method for locating an OASIS Node, the standard Internet naming convention shall be used. All OASIS Node names shall be unique. Each Primary Provider OASIS Node name and home directory shall be registered with the master OASIS directory site at <http://www.tsin.com>. OASIS Node names shall be stored in an Internet DNS name directory.

002-4.2.1.2 OASIS Node and Primary Provider Home Directory

Draft Recommendation for Modifications to S&CPs to address business practices adopted for WEQ 2007 Annual Plan Item 3(a)(2)

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The home directory name on an OASIS Node shall be "OASIS" (all upper case) to identify that the directory is related to the OASIS. The directory of each Primary Provider shall be listed under the "OASIS" directory:

http://(OASIS Node name)/OASIS/(PRIMARY_PROVIDER_CODE)

Where:

(OASIS Node name) is the World Wide Web URL address of the OASIS Information Provider.

(PRIMARY_PROVIDER_CODE) (Case sensitive) is the 4-character acronym of the primary provider.

PRIMARY_PROVIDER_CODES shall be registered with the master OASIS directory site at <http://www.tsin.com>. A pointer to user registration information shall be located on the Primary Provider's home page.

002-4.2.1.3 Script Names

Common Gateway Interface (CGI) scripts shall be located in the directory "data" as follows (case sensitive): **http://(OASIS Node name)/OASIS/(PRIMARY_PROVIDER_CODE)/data/(cgi script name)?(Query Variables)**

Where:

(cgi script name) is the OASIS Template name in lower case (see Section 4.3). Other cgi scripts may be defined as required to implement the HTML interface to the documented Templates.

(Query Variables) is a list of query variables with their settings formatted as defined by the HTTP protocol (i.e., URL encoded separated by ampersands).

Example:

To request the hourly schedule Template at Primary Provider WXYZ Co.

http://www.wxyz.com/OASIS/WXYZ/data/schedule ?templ=schedule& ver=1.2& fmt=data &stime=19960412040000PD &sptime=19960412100000PD& pprov=wxyz

002-4.2.2 Data Element Dictionary

The following are the requirements for the Data Element Dictionary:

a. Definition of OASIS Information Elements: All OASIS Information Data Elements shall be defined in the Data Element Dictionary which will be stored in the OASIS Node directory:

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- **[\(http://\(OASISNode Name\)/OASIS/\(PRIMARY_PROVIDER_CODE\)/\(datadic.htm | datadic.txt\)\)](http://(OASISNode Name)/OASIS/(PRIMARY_PROVIDER_CODE)/(datadic.htm | datadic.txt))**
- Where:
- **datadic.htm is the HTML version of the Data Element dictionary (case sensitive)**
- **datadic.txt is the ASCII text version of the Data Element dictionary (case sensitive)**
- The Data Element Dictionary is defined in Appendix A.

b. **Provider-specific Data Element Values:** The valid values that certain OASIS Information Data Elements may take on, such as PATH_NAME, etc., are unique to a Primary Provider. Names that must be uniquely identified by Primary Provider shall be listed on-line on the OASIS Node via the LIST Template (see Section 4.3.5). In posting OASIS information associated with Data Elements which are not free-form text, TSIPs shall use only the accepted Data Element values listed in the Data Element Dictionary and/or those values posted in the LIST of provider specific names provided on the OASIS Node.

002-4.2.3 OASIS Template Constructs

002-4.2.3.1 Template Construction

Section 4.3 lists the set of OASIS Templates that shall be supported by all OASIS Nodes. These OASIS Templates are intended to be used precisely as shown for the transfer of data to/from OASIS Nodes, and identify, by Data Elements names, the information to be transferred. The construction of the OASIS Templates shall follow the rules described below:

- a. **Unique OASIS Template Name:** Each type of OASIS Template shall be identified with a unique name which shall be displayed to the User whenever the OASIS Template is accessed.
- b. **Transfer Protocol:** OASIS Templates are transferred using the HTTP protocol. Templates shall support both the "GET" and "POST" methods for transferring "query string" name/value pairs, as well as the OASIS specific "comma separated value" (CSV) format for posting and retrieval of information from OASIS Nodes. HTML screens and forms shall be implemented for each OASIS Template.
- c. **Source Information:** Each OASIS Template shall identify the source of its information by including or linking to the name of the Primary Provider, the Secondary Provider, or the Customer who provided the information.
- d. **Time Of Last Update:** Each OASIS Template shall include a time indicating when it was created or whenever the value of any Data Element was changed.
- e. **Data Elements:** OASIS Templates shall define the elementary Data Element Dictionary names for the data values to be transferred or displayed for that Template.

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f. **Documentation:** OASIS Information shall be in non-cryptic English, with all mnemonics defined in the Data Element Dictionary or a glossary of terms. TSIPs shall provide on-line descriptions and help screens to assist Users understanding the displayed information. Documentation of all formats, contents, and mnemonics shall be available both as displays and as files that can be downloaded electronically. In order to meet the "User-Friendly" goal and permit the flexibility of the OASIS Nodes to expand to meet new requirements, the OASIS Templates shall be as self-descriptive as possible.

002-4.2.3.2 Template Categories

OASIS Templates are grouped into the following two major categories:

a. **Query/Response:** These Templates are used to query and display information posted on an OASIS Node. Each query/response Template accepts a set of user specified Query Variables and returns the appropriate information from data posted on the OASIS Node based on those Query Variables. The valid Query Variables and information to be returned in response are identified by Data Element in Section 4.3.

b. **Input/Response:** These Templates are used to upload/input information on an OASIS Node. The required input information and information to be returned in response are identified by Data Element in Section 4.3, Template Descriptions.

002-4.2.3.3 Template HTML Screens

Though the exact form and content of the HTML screens and forms associated with the OASIS Templates are not dictated by this document, the following guidelines shall be adhered to for all HTML screens and forms implemented on an OASIS Node:

a. **Data Element Headings:** Data displayed in an HTML screen/form shall be labeled such that the associated data value(s) is(are) easily and readily identifiable as being associated with a particular OASIS Template Data Element. HTML "Hot-Links" or other pointer mechanisms may be provided for Data Element headings in OASIS Templates which permit the User to access documentation describing the meaning, type, and format of the associated data.

b. **Display Limitations:** HTML screens and forms shall be implemented in such a way to allow the display of all data specified for each OASIS Template. This may take the form of "wrapping" of lines of information on the screen, the use of horizontal and/or vertical scrolling, or the use of "Hot-Links" or other pointer mechanisms. There is not necessarily a one-to-one relationship between HTML screens implemented on OASIS Nodes, and their associated Template. However, all Template Data Elements shall be viewable through one or more HTML screens.

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c. **Template Navigation:** HTML "Hot-Links" or other pointer mechanisms may be provided to assist the navigation between screens/forms associated with related OASIS Templates.

002-4.2.4 Query/Response Template Requirements

Retrieval of information posted on an OASIS Node is supported by the Query/Response Templates. The "query" identifies the OASIS Template and optionally supplies additional Data Elements that may be used to select specific information to be returned in the "response".

002-4.2.4.1 Query Requirements

Query information is transferred to an OASIS Node using the HTTP protocol as a string of Query Variables in the form of name/value pairs. Query Variable name/value pairs are specified as a collection of encoded strings (e.g., blank characters replaced by plus (+) character, etc.) in the form of **name=value**, with each name/value pair separated by ampersands (&) (see section 4.2.6). OASIS Nodes shall support the following methods for Users to input Query information:

a. **HTML:** HTML FORM input and/or hypertext links shall be provided to allow Users to specify OASIS Template Query Variables. This will be the easiest way to obtain information and should be the choice of most casual Users and for simple requests. The exact nature and form of these HTML screens are not specified, and may differ between OASIS Nodes.

b. **GET Method:** The HTTP GET method for specifying query information appended to a standard OASIS URL shall be supported. Using this method, the **name=value** formatted Query Variables preceded by a question mark (?) are appended to the URL. Each "name" in a name/value pair corresponds to a Data Element name associated with that Template. OASIS Nodes shall support the specification of all Data Elements associated with a Template by both their full name and alias as defined in the Data Dictionary. The "value" in a name/value pair represents the value to be associated with the Data Element being specified in the appropriate format as defined in the Data Dictionary and encoded according to the HTTP protocol.

c. **POST Method:** The HTTP POST method for specifying query information in the message body shall be supported. Using this method, the **name=value** formatted Query Variables shall be transferred to an OASIS Node using the **"Content-length:"** HTTP header to define the length in bytes of the encoded query string and the **"Content-type: application/x-www-form-urlencoded"** HTTP header to identify the data type included in the message body. Each "name" in a name/value pair corresponds to a Data Element name associated with that Template. An OASIS Node shall support the specification of all Data Elements associated with a Template by both their full name and alias as defined in the Data Dictionary. The "value" in a name/value pair represents the value to be associated with the Data Element being specified in the appropriate format as defined in the Data Dictionary and encoded according to the HTTP protocol.

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User queries using any of the above methods are supported directly by the User's web browser software. More sophisticated data transfer mechanisms, such as the automated querying of information based on Query Variable strings contained in a User data file (i.e., "uploading a file containing a URL string), require appropriate software (e.g., "fetch_http") running on the User's computer system to effect the data transfer.

002-4.2.4.2 Response Requirements

In response to a validly formatted Query for each Query/Response OASIS Template, the OASIS Node shall return the requested information in one of two forms based on the User specified OUTPUT_FORMAT Query Variable:

- a. **HTML:** If the User requests the response to have the format of "HTML" (OUTPUT_FORMAT=HTML) then the response from the OASIS Node shall be a web page using the HTML format. This shall be the default for all Query/Response Templates.
- b. **CSV Format:** Comma Separated Value (CSV) format (OUTPUT_FORMAT=DATA) returns the requested information in the body of the HTTP response message. The "**Content-length:**" HTTP header shall define the length in bytes of the response, and the "**Content-type: text/x-oasis-csv**" HTTP header shall be used to identify the data type included in the message body (see CSV File Format).

002-4.2.5 Input/Response Template Requirements

Input/Response Templates support the posting of information on an OASIS Node, including reservations for transmission/ancillary service and services for sale on the secondary market, etc. The "input" identifies the required data associated with an OASIS Template to be posted on the OASIS Node, and the "response" specifies the information returned to the User.

002-4.2.5.1 Input Requirements

Input information is transferred to an OASIS Node using the HTTP protocol as either a string of Query Variables in the form of name/value pairs, or as a Comma Separated Value (CSV) message. Query Variable name/value pairs are specified as a collection of encoded strings (e.g., blank characters replaced by plus (+) character, etc.) in the form of **name=value**, with each name/value pair separated by ampersands (&). CSV formatted messages are specified in the body of an HTTP message as a series of Data Records preceded by a fixed set of header records (see section 4.2.7). OASIS Nodes shall support the following methods for Users to transfer Input data:

- a. **HTML:** HTML FORM input shall be provided to allow Users to specify the necessary Input data associated with each Input/Response OASIS Template. This may be in the form of fill in blanks, buttons, pull-down selections, etc., and

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may use either the GET or POST methods. The exact nature and form of these HTML screens are not specified, and may differ between OASIS Nodes.

b. **GET Method:** The HTTP GET method for specifying Input information in the form of a query string appended to a standard OASIS URL shall be supported. Using this method, the **name=value** formatted Query Variables preceded by a question mark (?) are appended to the URL. Each "name" in a name/value pair corresponds to a Data Element name associated with that Template. OASIS Nodes shall support the specification of all Data Elements associated with a Template by both their full name and alias as defined in the Data Dictionary. The "value" in a name/value pair represents the value to be associated with the Data Element being specified in the appropriate format as defined in the Data Dictionary and encoded according to the HTTP protocol.

c. **POST Method:** The HTTP POST method for specifying Input information in the form of a query string in the message body shall be supported. Using this method, the **name=value** formatted Query Variables shall be transferred to an OASIS Node using the "**Content-length:**" HTTP header to define the length in bytes of the encoded query string and the "**Content-type: application/x-www-form-urlencoded**" HTTP header to identify the data type included in the message body. Each "name" in a name/value pair corresponds to a Data Element name associated with that Template. OASIS Nodes shall support the specification of all Data Elements associated with a Template by both their full name and alias as defined in the Data Dictionary. The "value" in a name/value pair represents the value to be associated with the Data Element being specified in the appropriate format as defined in the Data Dictionary and encoded according to the HTTP protocol.

d. **CSV Format:** Comma Separated Value (CSV) formatted Input information transferred in the body of a User's HTTP message shall be supported. The "**Content-length:**" HTTP header shall define the length in bytes of the Input, and the "**Content-type: text/x-oasis-csv**" HTTP header shall be used to identify the data type included in the message body.

002-4.2.5.2 Response to Input

In response to a validly formatted Input for each Input/Response OASIS Template, the OASIS Node shall return an indication as to the success/failure of the requested action. The OASIS Node shall respond to the Input in one of two forms, based on the OUTPUT_FORMAT, which was input by a User either as a Query Variable or in a CSV format Header Record:

a. **HTML:** If the User requests the response to have the format of "HTML" (OUTPUT_FORMAT=HTML) then the response from the OASIS Node shall be a web page using the HTML format. This shall be the default for all Input/Response Templates invoked using either the FORM, GET or POST methods of input.

b. **CSV Format:** Comma Separated Value (CSV) format (OUTPUT_FORMAT=DATA) returns the response information in the body of the HTTP response message. The "**Content-length:**" HTTP header shall

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define the length in bytes of the response, and the "**Content-type: text/xoasis-csv**" HTTP header shall be used to identify the data type included in the message body. This shall be the default for all Input/Response Templates invoked using the CSV Format methods of input.

002-4.2.6 Query Variables**002-4.2.6.1** General

Both Query/Response and Input/Response OASIS Templates shall support the specification of a query string consisting of Query Variables formatted as name/value pairs. OASIS Nodes shall support the specification of Data Element names ("name" portion of **name=value** pair) in both the full name and alias forms defined in the Data Dictionary. OASIS Nodes shall support the specification of Query Variables from the User using either the HTTP GET or POST methods. On input, Data Element names and associated values shall be accepted and processed without regard to case. On output, Data Element names and associated values may not necessarily retain the input case, and could be returned in either upper or lower case.

002-4.2.6.2 Standard Header Query Variables

The following standard Query Variable Data Elements shall be supported for all OASIS Templates and must be entered for each Query by a User:

VERSION
 TEMPLATE
 OUTPUT_FORMAT
 PRIMARY_PROVIDER_CODE
 PRIMARY_PROVIDER_DUNS
 RETURN_TZ

Since these header Query Variables must be supported for all Templates, they are not listed explicitly in the Template descriptions in Section 4.3 The User must enter all standard Header Query Variables with appropriate values.

002-4.2.6.3 Responses to Queries

Responses to Queries will include the following information as a minimum:

TIME_STAMP
 VERSION
 TEMPLATE
 OUTPUT_FORMAT
 PRIMARY_PROVIDER_CODE
 PRIMARY_PROVIDER_DUNS
 RETURN_TZ

The additional information shall include:

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- a. The requested information as defined by the Template indicated in the Query
- b. For CSV downloads, the additional header Data Elements required (see section 4.2.7.3)

002-4.2.6.4 Multiple Instances

Certain Query Variables may be repeated in a given Query/Response OASIS Template query string. Such multiple instances are documented in the Template definitions using an asterisk (*) after the Query Variable. When more than one instance of the Query Variable is specified in the query string, OASIS Nodes shall recognize such multiple instances by either the Data Element's full name or alias suffixed with sequential numeric qualifiers starting with the number 1, (e.g., PATH_NAME1=abc&PATH_NAME2=xyz, or PATH1=abc&PATH2=xyz). At least 4 multiple instances will be permitted for each Query Variable marked with an asterisk (*).

002-4.2.6.5 Logical Operations

OASIS Nodes shall use the following logical operations when processing Query Variables for Query/Response OASIS Templates.

- a. All Query Variables, with the exception of multiple instances of the same Query Variable Data Element, shall be operated on to return information based on the logical- AND of those Query Variables. For example, the query string "SELLER_CODE=abc &PATH=xyz" should return information associated with only those records that are on transmission path "xyz" AND associated with transmission provider "abc."
- b. Multiple instances of the same Query Variable shall be operated on as logical-OR. For example, "SELLER_CODE=abc &PATH1=xyz&PATH2=opq" should return information associated with transmission provider "abc" AND either transmission path "xyz" OR transmission path "opq". Some logical operations may exclude all possibilities, such that the responses may not contain any data.

002-4.2.6.6 Handling of Time Data Elements

- a. In cases where a single Query Variable is provided to select information associated with a single Template Data Element that represents a point in time (e.g., TIME_OF_LAST_UPDATE), OASIS Nodes shall return to the User all requested information whose associated Data Element time value (e.g. TIME_OF_LAST_UPDATE) is equal to or later than the value specified by the Query Variable. In this case the stop time is implicitly "now".
- b. A pair of Query Variables (e.g. START_TIME_QUEUED and STOP_TIME_QUEUED) that represents the start and stop of a time interval but is associated with one single Template Data Element (e.g. TIME_QUEUED) shall be handled by OASIS Nodes to return to the User all requested

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information whose associated Data Element time value falls within the specified time interval.

c. A pair of Query Variables (e.g. START_TIME and STOP_TIME Query Variables) that represents the start and stop of one time interval but is associated with another pair of Template Data Elements (e.g. START_TIME and STOP_TIME of a service offering) that represents a second time interval, shall be handled by OASIS Nodes to return to the User all requested information whose associated Data Element time interval overlaps any portion of the specified time interval. Specifically, the START_TIME Query Variable selects all information whose STOP_TIME Data Element value is later than the START_TIME Query Variable, and the STOP_TIME Query Variable selects all information whose START_TIME Data Element value is earlier than the STOP_TIME Query Variable. For example:

The transoffering Template query string "START_TIME 970101000000ES&STOP_TIME 970201000000ES" shall select from the OASIS database all associated offerings whose start/stop times overlap any portion of the time from 00:00 January 1, 1997, to 00:00 February 1, 1997. This would include offerings that (1) started prior to Jan. 1 and stopped any time on or after Jan. 1, and (2) started on or after Jan 1 but before Feb 1

d. For changes to and from daylight savings time, either Universal Time or the correct time and zone must be used, based on whether daylight savings time is in effect.

e. All time values shall be checked upon input to ensure their validity with respect to date, time, time zone, and daylight savings time.

002-4.2.6.7 Default Values

Query Variables that are not specified by the User may take on default values as appropriate for that Query Variable at the discretion of the OASIS TSIP.

002-4.2.6.8 Limitations on Queries

OASIS TSIP may establish validation procedures and/or default values for Query Variables to restrict the size and/or performance impact of overly broad queries.

002-4.2.7 CSV Format

002-4.2.7.1 General Record Format

OASIS Users shall be able to upload information associated with Input/Response OASIS Templates and download information associated with all OASIS Templates using a standardized Comma Separated Value (CSV) format. CSV formatted data is transferred to/from OASIS Nodes as part of the body of an HTTP message using the "**Content-length:**" HTTP header to define the length in bytes of the message body, and the "**Content-type:** text/x-oasis-

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csv" HTTP header to identify the data type associated with the message body. CSV formatted data consists of a fixed set of header records followed by a variable number of Data Records. Each record shall be separated by a carriage return plus line feed (denoted by the symbol `\r\n` in all examples). The fields within a record shall be delimited by commas (,). All data within a CSV formatted message shall use printable ASCII characters with no other special embedded codes, with the exception of the special encoding requirements associated with text fields.

002-4.2.7.2 Input Header Records

The following standard header records are required for the uploading of Input data for all Input/Response OASIS Templates:

```
VERSION=nn.n\r\n
TEMPLATE=aaaaaaaaa\r\n
OUTPUT_FORMAT=[DATA] \r\n
PRIMARY_PROVIDER_CODE=aaaa\r\n
PRIMARY_PROVIDER_DUNS=nnnnnnnnnn\r\n
RETURN_TZ=aa\r\n
DATA_ROWS=nnn\r\n
COLUMN_HEADERS=[Template Data Element names separated by
commas] \r\n
```

The format of the value associated with each of the Input header record Data Elements are dictated by the Data Dictionary. The value associated with the DATA_ROWS Data Element shall define the total number of Data Records that follow in the message after the COLUMN_HEADERS record. The COLUMN_HEADERS record defines, by Data Element name, the data associated with each comma separated column contained in each subsequent Data Record (row). On Input, either the Data Element's full name or alias listed in the Data Dictionary may be specified.

002-4.2.7.3 Response Header Records

When explicitly specified using the OUTPUT_FORMAT=DATA Query Variable or implied by the Input of a CSV format message, the OASIS Nodes shall respond with the following standard response header records for all OASIS Templates:

```
REQUEST_STATUS=nnn\r\n
ERROR_MESSAGE=aaa\r\n
TIME_STAMP=yyyymmddhhmssstz\r\n
VERSION=nn.n\r\n
TEMPLATE=aaaaaaaaa\r\n
OUTPUT_FORMAT=DATA\r\n
PRIMARY_PROVIDER_CODE=aaaa\r\n
PRIMARY_PROVIDER_DUNS=nnnnnnnnnn\r\n
RETURN_TZ=tz\r\n
DATA_ROWS=nnn\r\n
```

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COLUMN_HEADERS=[Template Data Element names separated by commas] ↵

The format of the value associated with each of the Response header record Data Elements are dictated by the Data Dictionary. The value associated with the DATA_ROWS Data Element shall define the total number of Data Records returned in the message following the COLUMN_HEADERS header record. The COLUMN_HEADERS record defines, by Data Element name, the data associated with each comma-separated column contained in each subsequent Data Record (row). In all OASIS Node responses, the Data Element's full name shall be listed in the COLUMN_HEADERS record. The order of the column headings shall be the same as shown in the Templates for URL uploads and downloads. For graphical displays, the Provider may define the order that the Data Element names are shown.

002-4.2.7.4 Data Records

Data Records immediately follow the standard Input or Response header records. With the exception of Data Records grouped together as a single "logical record" through the use of Continuation Records, each Data Record in a CSV formatted Input message represents a single, complete execution of the associated OASIS Template. That is, sending five CSV formatted Input messages for a given Template to the same PRIMARY_PROVIDER_CODE with a single Data Record per message shall be handled in exactly the same fashion as sending a single CSV formatted Input message for the same Template and PRIMARY_PROVIDER_CODE which contains five Data Records. Each field (column) within each Data Record defines the value to be associated with the corresponding Data Element defined in the COLUMN_HEADERS record. The number of Data Records in the message is defined by the DATA_ROWS header record. The data values associated with each column Data Element are interpreted based on the Data Element type as defined in the Data Dictionary:

a. **Numeric Data Elements:** All numeric Data Elements shall be represented by an ASCII string of numeric digits in base ten, plus the decimal point.

b. **Text Data Elements:** Alphabetic and alphanumeric Data Elements shall be represented as ASCII strings and encoded using the following rules:

- Text strings that do not contain commas (,) or double quotes (") shall be accepted both with and without being enclosed by double quotes.
- Text fields with commas (,) or double quotes (") must be enclosed with double quotes. In addition double quotes within a text field shall be indicated by two double quotes ("").
- The Data Element field length specified in Data Dictionary does not include the additional double quotes necessary to encode text data.

c. **Null Data Elements:** Null Data Elements shall be represented by two consecutive commas (,,) corresponding to the leading and trailing (if appropriate) Data Element comma separators. Null text strings may optionally

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be represented by two consecutive double quote characters within the leading and trailing comma separators (i.e., Y,"";Y).

002-4.2.7.5 Continuation Records

Continuation records shall be used to indicate that the information in multiple rows (records) is part of one logical record. Continuation records will be indicated through the use of a column header called CONTINUATION_FLAG. This column header is either the first column (if in a response to a query) or second column (if in a response to an input) in all Templates permitting continuation records. The first record shall contain an "N" in the CONTINUATION_FLAG column and each following record which is part of a continuation record shall contain a "Y" in this column, thus associating the information in that record with the information in the previous record. An "N" shall indicate that the record is not a continuation record. In addition to the CONTINUATION_FLAG Data Element identifying that a record is associated with a previous record, any unique record identifier associated with the first (CONTINUATION_FLAG = N) record shall be repeated in all subsequent continuation records returned in an OASIS response. Each Template that supports the use of continuation records and those particular Data Elements (COLUMN_HEADERS) that may be referenced in one or more continuation records are identified in Section 4.3. On upload or input of Template data, any values supplied via continuation records that correspond to COLUMN_HEADERS other than those explicitly allowed to appear in continuation records for a particular Template shall be ignored. However commas must be included to properly align the fields (columns). Note that the submission of continuation records is only supported by the CSV Format method of uploading data to an Input/Response Template

002-4.2.7.6 Error Handling in CSV-Formatted Responses

a. Validity of each record in the CSV-formatted Response to a Template Input shall be indicated through the use of RECORD_STATUS and ERROR_MESSAGE Data Elements which are included in each Data Record (row) of the Response.

- If no error was encountered in an Input Data Record, the RECORD_STATUS Data Element in the corresponding Response record shall be returned with a value of 200 (success), and the ERROR_MESSAGE shall be blank.
- If any error is detected in processing an Input Data Record, it shall be indicated by a RECORD_STATUS Data Element value other than 200. The ERROR_MESSAGE shall be set to an appropriate text message to indicate the source of the error in that Data Record.

b. The overall validity of each Template Query or Input shall be indicated in the CSV-formatted Response via the two REQUEST_STATUS and ERROR_MESSAGE header records (see section 4.2.7.3):

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- If no errors were encountered in processing the User's Input Data Records, the REQUEST_STATUS shall be returned with the value of 200 (success), and the ERROR_MESSAGE shall be blank.
- If any errors were detected in the Template Input Data Records, the REQUEST_STATUS value shall be any value other than 200, and the ERROR_MESSAGE shall be set to an appropriate text message to indicate the source of the error.

c. The OASIS Node shall validate all Input records before returning a Response to the User. The Node shall process all valid records, while invalid records shall be identified as erroneous through the use of RECORD_STATUS and ERROR_MESSAGE. The User must correct the invalid fields and resubmit only those records that were invalid. If an error is encountered in a record which is part of a set of Continuation records, then all records belonging to that set must be resubmitted.

002-4.2.8 Registration Information

002-4.2.8.1 General

As specified in the Information Access Requirements, OASIS Nodes shall provide a mechanism to register Users of the OASIS Node with a Provider. For all levels of access to OASIS information beyond simple read-only access, OASIS Nodes shall provide a mechanism to identify Users of the OASIS at least to the level of their respective Companies. The OASIS Node shall maintain both Company and User registration information.

002-4.2.8.2 Company Information

OASIS Templates require that certain Company registration information be maintained. As an extension of the Company registration information of the host, domain and port identifiers for dynamic notification of changes in the Customer's purchase requests, a field should be added to the Company's registration information that would define/identify how notification would be delivered to that Company should a transmission or ancillary purchase request be directed to that Company as a Seller of a transmission or ancillary service. The pertinent information would be either a full HTTP protocol URL defining the protocol, host name, port, path, resource, etc. information or a "mailto:" URL with the appropriate mailbox address string. On receipt of any purchase request directed to that Company as SELLER via either the "transrequest" or "ancrequest" Templates, or on submission of any change in request information submitted to that Company as SELLER via either the "transcust" or "anccust" Templates, a notification message formatted as documented for the delivery of notification to the Customer, shall be formatted and directed to the Seller. At a minimum, OASIS Nodes shall maintain the following information for each Company:

- a. **Company Code:** 4 character code for primary transmission providers; 6 character code for eligible customers in accordance with NERC Tagging

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Information System (TIS) requirements shall be maintained for each Company.

b. **Default Contact:** Unless specified for each individual user affiliated with the Company, default contact information consisting of a phone number, fax number, and e-mail address shall be maintained for each Company.

c. **Provider Affiliation:** Each eligible Customer shall be obligated to identify to the OASIS TSIP any affiliation with a Transmission Provider whose "home page" is on that OASIS Node.

d. **Notification URL:** For Companies using the URL notification mechanism for delivery of messages on each change of ancillary/transmission reservation STATUS, each Company shall provide the IP host name and port number to be used in delivering notification messages. OASIS Nodes shall have the right to refuse support for notification to any IP ports other than port 80.

002-4.2.8.3 User Information

With the exception of "read-only" (visitor) access, OASIS Nodes shall, at a minimum, provide a mechanism to identify Users of the Node with at least their Company. However, OASIS Nodes and Providers shall have the right to require full User identification even for visitor accounts. To support the required OASIS Template Data Elements, OASIS Nodes shall maintain the following information for each registered User:

- Company
- Name
- Phone
- Fax
- E-mail

In the event no additional User identification/registration information is maintained by the OASIS Nodes, all Template Data Elements referring to "company, name, phone, fax, e-mail" for either Customers or Sellers shall default to the Contact Information maintained for that User's Company.

002-4.2.9 Representation of Time

002-4.2.9.1 General

It is critical that all Users of OASIS Nodes have a clear and unambiguous representation of time associated with all information transferred to/from OASIS Nodes. For this reason, all Data Elements associated with time in OASIS Nodes shall represent "wall clock" times, which are NOT to be confused with other common industry conventions such as "hour ending." For the convenience of the User community, OASIS Nodes shall be allowed to accept the input and display of "time" in any acceptable form provided such non-standard representations are CLEARLY labeled on the associated HTML screens. Alternate representations of time in CSV formatted messages shall not be allowed. The following rules shall be implemented in OASIS Nodes for

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the representation of time on User entries (Query and Input) and output (Response) Templates.

002-4.2.9.2 Input Time

All time related Data Elements associated with either the Input or Query of Input/Response or Query/Response OASIS Templates shall be validated according the following rules. If the time zone associated with a time Data Element is associated with either Universal Time (UT) or a "standard" time zone (e.g., ES, CS, etc.), OASIS Nodes shall accept and apply a fixed hour offset from Universal Time year-round. If the time zone associated with a time Data Element is specified with a "daylight savings" time zone (e.g. ED, CD, etc.), OASIS Nodes shall verify that daylight savings time is in effect for the date/time specified. If daylight savings time (as specified by the time from 2:00am on the first Sunday of April through 2:00 am on the last Sunday of October) is not in effect, the Users input shall be rejected with an error response. If daylight savings time is in effect, the Users input shall be accepted and the appropriate hours offset from Universal Time shall be applied by OASIS Nodes for conversion to all other time zones. The input of start/stop times for transactions spanning the crossover day between standard and daylight (and vices versa) times must be made either entirely in standard time (valid year-round), or in two different time zones (xS/xD or xD/xS) for the start and stop times, depending on the time of year.

002-4.2.9.3 Output (Response) Time

The OASIS Node shall return all time Data Elements in the response to Input/Response or Query/Response OASIS Templates based on either the User specified RETURN_TZ header Query Variable or an appropriate OASIS specific default. OASIS Nodes shall interpret RETURN_TZ to specify:

- a. The base time zone for conversion of all time Data Elements (e.g. Eastern, Pacific, etc.)
- b. Whether daylight savings time is recognized. For example, a RETURN_TZ=ES would return all time Data Elements in Eastern Standard Time year-round. However, a RETURN_TZ=ED would direct OASIS Nodes to return all time Data Elements in Eastern Standard Time (ES) when daylight savings time is not in effect, and then return all time Data Elements in Eastern Daylight Time (ED) when daylight time is in effect.

002-4.2.10 Transaction Process

OASIS shall implement Templates that allow Customers and Sellers to enter, modify and consummate arrangements for transmission and ancillary services. The following subsections outline the basic steps for arranging for these services. Section 4.2.13 provides further detail on the use of OASIS Templates to modify the terms of a transaction in support of specific provisions of the Open Access ProForma Tariff.

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002-4.2.10.1 Purchase Transactions

Customers shall purchase services from the Seller using the following basic steps (see Exhibit 4-1):

a. The Templates (*transrequest* and *ancrequest*) shall be used by a Customer to enter a request for specific transmission or ancillary services from a specific Seller. Basic requests for transmission services from the Primary Transmission Provider shall be assigned a REQUEST_TYPE of "ORIGINAL"; requests for transmission services on the secondary market (where SELLER is not the Primary Transmission Provider) shall be assigned a REQUEST_TYPE of "RESALE" (Section 4.2.13 documents other values that may be assigned to REQUEST_TYPE). The Customer may enter a BID_PRICE which is different from the OFFER_PRICE in order to try to negotiate a lower price. The OASIS Node sets the initial STATUS of the request to QUEUED. The Customer may set the STATUS_NOTIFICATION to indicate that the OASIS Node must notify the Customer on any change in the request's STATUS or related Data Elements (see Dynamic Notification). The Customer may designate the request as PRECONFIRMED. Preconfirmed requests will be automatically set to the STATUS of CONFIRMED when ACCEPTED by the Seller without requiring an explicit confirmation from the Customer. Prior to or commensurate with a Seller's setting of a preconfirmed reservation request's STATUS to ACCEPTED (and by implication CONFIRMED), the Seller must set OFFER_PRICE equal to the value of BID_PRICE as established by the Customer on submission of the request.

b. The Templates (*transstatus* and *ancstatus*) shall be used by Customers and Sellers to monitor the status of their transactions in progress. These Templates shall also be used by any Users to review the status of any transactions. The NEGOTIATED_PRICE_FLAG Data Element is set when the Seller agrees to a BID_PRICE (by setting OFFER_PRICE equal to BID_PRICE) that is different from the previously posted price. It will show "higher" when OFFER_PRICE is higher than the posted price, and "lower" when the OFFER_PRICE is lower than the posted price.

c. The Templates (*transsell* and *ancsell*) shall be used by a Seller to set a new value into STATUS, to enter a MW value in CAPACITY_GRANTED, if offering partial service, and to negotiate a price by entering a new OFFER_PRICE which is different from the BID_PRICE entered by the Customer in the *transrequest* Template. During these negotiations, a Reseller shall formally indicate the approval or disapproval of a transaction and indicate which rights from prior confirmed reservations are to be reassigned. A Primary Provider may, but is not required, to enter transaction approval or disapproval using this Template. In the event the Seller is only able to grant a portion of the transmission capacity requested by the Customer and the Seller is obligated or elects to extend an offer for partial service, the Seller shall indicate to the Customer the amount of capacity available using CAPACITY_GRANTED and set the reservation request's status to COUNTEROFFER. Preconfirmed requests that are set to COUNTEROFFER due to an offer of service at a level lower than requested by the Customer shall require explicit confirmation by the Customer. The valid STATUS values which may be set by a Seller are:

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RECEIVED, INVALID, STUDY, COUNTEROFFER, ACCEPTED, REFUSED, SUPERSEDED, DECLINED, DISPLACED, ANNULLED, or RETRACTED.

d. The Customer shall use the *transstatus* and *ancstatus* Templates to view the Seller's new offer price, partial service offer and/or approval/disapproval decision.

e. After receiving notification of the transaction's STATUS being set to COUNTEROFFER by the Seller, the Templates (*transcust* and *anccust*) shall be used by the Customer to modify the BID_PRICE and set the STATUS to REBID or CONFIRMED. *Transcust* shall also be used to confirm an offer for partial service (where CAPACITY_GRANTED is less than CAPACITY_REQUESTED) by setting the STATUS to CONFIRMED. After negotiations are complete (STATUS set to ACCEPTED by the Seller), the Customer shall formally enter the confirmation or withdrawal of the offer to purchase services for the OFFER_PRICE shown in the *transstatus* Template. The valid STATUS values which a Customer may set are: REBID, CONFIRMED, or WITHDRAWN.

f. The Seller shall use the *transstatus* (*ancstatus*) Template to view the Customer's new bid price and/or confirmation/withdrawal decision, again responding through *transsell* or *ancsell* if necessary. If the Seller offers to sell a service at an OFFER_PRICE less than that posted in the *transoffering* (*ancoffering*) Template, the *transoffering* (*ancoffering*) Template must be updated to reflect the new OFFER_PRICE.

g. For deals consummated off the OASIS Nodes by a Seller, after the Customer has accepted the offering, the Templates (*transassign* and *anccassign*) may be used by the Seller to notify the Primary Provider of the transfer of rights to the Customer. Continuation records may be used to indicate the reassigning of rights for a "profile" of different assignments and different capacities over different time periods.

h. The source of all User and Seller contact information shall be the User registration process. Therefore, it shall not be input as part of uploads, but shall be provided as part of all transaction downloads.

i. OASIS Nodes shall accept a Seller initiated change in STATUS to ACCEPTED only when OFFER_PRICE matches BID_PRICE (i.e., Seller must set OFFER_PRICE equal to BID_PRICE prior to or coincident with setting STATUS to ACCEPTED).

j. OASIS Nodes shall accept a Customer initiated change in STATUS to CONFIRMED only when BID_PRICE matches OFFER_PRICE (i.e., Customer must set BID_PRICE equal to OFFER_PRICE prior to or coincident with setting STATUS to CONFIRMED).

k. If CAPACITY_GRANTED is null when STATUS is being changed to ACCEPTED or CONFIRMED, the OASIS Node shall set it equal to CAPACITY_REQUESTED.

002-4.2.10.2 Status Values

The possible STATUS values are:

QUEUED = initial status assigned by TSIP on receipt of "customer services purchase request."

INVALID = assigned by TSIP or Provider indicating an invalid field in the request, such as improper POR, POD, source, sink, etc. (Final state).

RECEIVED = assigned by Provider or Seller to acknowledge QUEUED requests and indicate the service request is being evaluated, including for completing the required ancillary services.

STUDY= assigned by Provider or Seller to indicate some level of study is required or being performed to evaluate service request.

REFUSED = assigned by Provider or Seller to indicate service request has been denied due to lack of availability of transmission capability. (Final state).

COUNTEROFFER = assigned by Provider or Seller to indicate that a new OFFER_PRICE is being proposed or that CAPACITY_GRANTED is less than CAPACITY_REQUESTED.

REBID = assigned by Customer to indicate that a new BID_PRICE is being proposed.

SUPERSEDED = assigned by Provider or Seller when a request which has not yet been confirmed is preempted by another reservation request. (Final state).

ACCEPTED = assigned by Provider or Seller to indicate the service request at the designated OFFER_PRICE and CAPACITY_GRANTED has been approved/accepted. If the reservation request was submitted PRECONFIRMED and CAPACITY_GRANTED is equal to CAPACITY_REQUESTED, the OASIS Node shall immediately set the reservation status to CONFIRMED. Depending upon the type of ancillary services required, the Seller may or may not require all ancillary service reservations to be completed before accepting a request.

DECLINED = assigned by Provider or Seller to indicate that the terms and conditions, such as the BID_PRICE, are unacceptable and that negotiations are terminated or that contractual terms and conditions have not been met. (Final state).

CONFIRMED = assigned by Customer in response to Provider or Seller posting "ACCEPTED" status, to confirm service. Once a request has been "CONFIRMED," a transmission service reservation exists. (Final state, unless overridden by DISPLACED or ANNULLED state).

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WITHDRAWN = assigned by Customer at any point in request evaluation to withdraw the request from any further action. (Final state).

DISPLACED = assigned by Provider or Seller when a "CONFIRMED" reservation from a Customer is displaced by a higher priority reservation and the Customer is not offered or has not exercised right of first refusal (i.e. refused to match terms of new request). (Final state).

ANNULLED = assigned by Provider or Seller when, by mutual agreement with the Customer, a confirmed reservation is to be voided. (Final state).

RETRACTED = assigned by Provider or Seller when the Customer fails to confirm or withdraw the request within the required time period. (Final state).

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The following diagram can be used as a business process guideline; however, individual tariffs will dictate specific allowed actions between states.

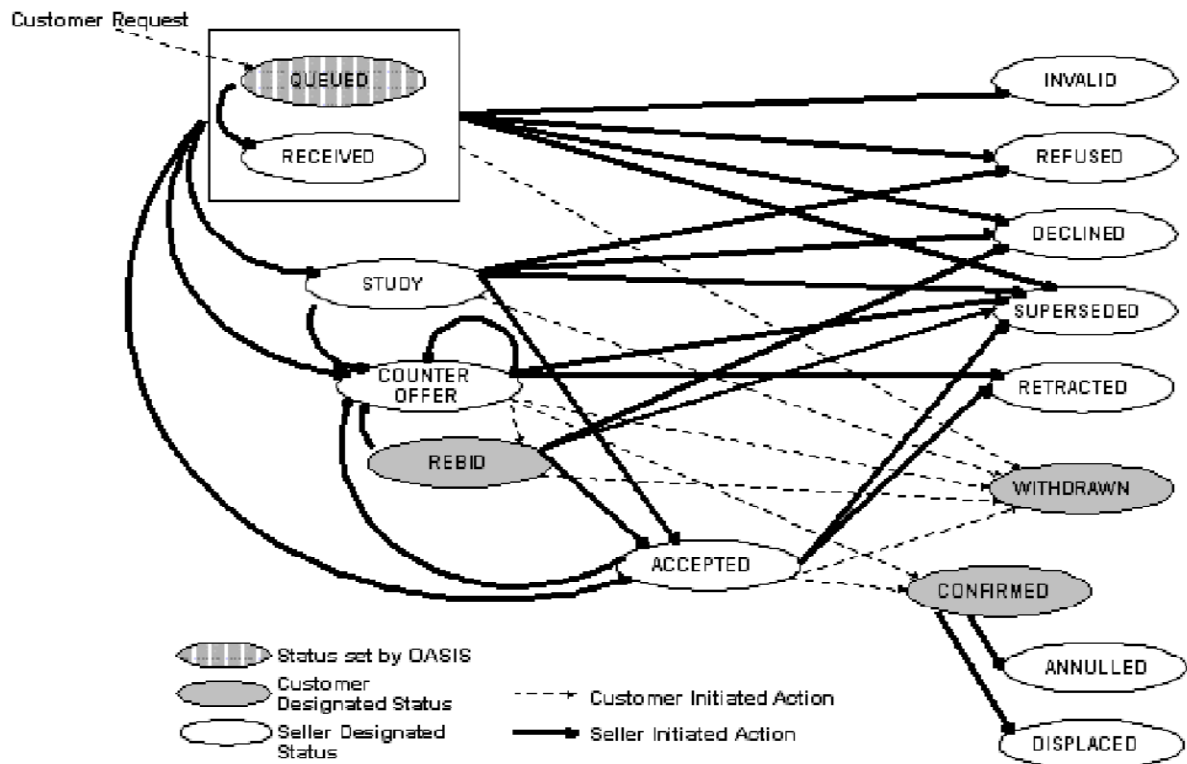


Exhibit 4-1 - State Diagram of Purchase Transactions

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002-4.2.10.3 Dynamic Notification

Customers may specify the delivery of dynamic notification messages on each change in STATUS or any other Data Element(s) associated with an ancillary or transmission service reservation. OASIS Nodes shall support the delivery of dynamic notification messages through either the HTTP protocol or by electronic mail. The selection of which mechanism is used and the contents of the messages delivered to the client program or e-mail address is defined by the content of the STATUS_NOTIFICATION Data Element as described in the next subsections. Regardless of whether this dynamic notification method is used or not, it shall still remain the User's responsibility to get the desired information, possibly through the use of a periodic "integrity request". OASIS Nodes shall not be obligated or liable to guarantee delivery/receipt of messages via the STATUS_NOTIFICATION mechanism other than on a "best effort" basis. As an extension of the Company registration information of the host, domain and port identifiers for dynamic notification of changes in the Customer's purchase requests, a field should be added to the Company's registration information that would define/identify how notification would be delivered to that Company should a transmission or ancillary purchase request be directed to that Company as a Seller of a transmission or ancillary service. The pertinent information would be either a full HTTP protocol URL defining the protocol, host name, port, path, resource, etc. information or a "mailto:" URL with the appropriate mailbox address string. On receipt of any purchase request directed to that Company as SELLER via either the "transrequest" or "ancrequest" Templates, or on submission of any change in request STATUS (or any other Data Elements associated with the request) to that Company as SELLER via either the "transcust" or "anccust" Templates, a notification message formatted as documented for the delivery of notification to the Customer, shall be formatted and directed to the Seller. This extension of dynamic notification is required only where the Transmission Provider has programmed its computer system for its own notification.

002-4.2.10.3.1 HTTP Notification

OASIS Nodes shall deliver dynamic notification to a client system based on HTTP URL information supplied in part by the STATUS_NOTIFICATION Data Element and by information supplied as part of the Customer's Company registration information. HTTP URL's are formed by the concatenation of a protocol field (i.e., http:), a domain name (e.g., //www.tsin.com), a port designation (e.g., :80), and resource location information.

The STATUS_NOTIFICATION Data Element shall contain the protocol field "http:", which designates the notification method/protocol to be used, followed by all resource location information required; the target domain name and port designations shall be inserted into the notification URL based on the Customer's Company registration information. The resource location information may include directory information, cgi script identifiers and URL encoded query string name/value pairs as required by the Customer's application. An OASIS Node performs no processing on the resource location information other than to include it verbatim along with the protocol, domain

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name and port information when forming the URL that will be used to deliver the HTTP protocol notification message. For example,

Company XYZ has established the domain name and port designations of "oasistc.xyz.com:80" as part of their registration information. When a transmission reservation is submitted by one of Company XYZ's users (the Customer), and includes a STATUS_NOTIFICATION Data Element with the value of

"http://cgi-bin/status?DEAL_REF=8&REQUEST_REF=173", an OASIS Node shall deliver an HTTP notification message using the URL:
http://oasistc.xyz.com:80/cgi-bin/status?DEAL_REF=8&REQUEST_REF=173

If the STATUS_NOTIFICATION field contained only the "http:" protocol designation, the notification message would be delivered using the URL:
http://oasistc.xyz.com:80

The contents of the HTTP protocol notification message delivered by an OASIS Node shall consist of the complete URL created by combining fields from the STATUS_NOTIFICATION Data Element and Company registration information as part of an HTTP POST method request. In addition to the POST method HTTP header record, OASIS Nodes shall also append the CSV formatted output of the transstatus Template information for that particular reservation using the standard Content-type: text/x-oasis-csv and appropriate Content-length: HTTP header records. OASIS Nodes shall use a Primary Provider specific default value for RETURN_TZ in formulating the transstatus response information. Continuing with the previous example, the important records in the HTTP notification message that would be delivered to Company XYZ for the transmission reservation request submitted to Primary Provider ABC and given an ASSIGNMENT_REF of 245 would be,

```
POST http://oasistc.xyz.com:80/cgi-
bin/status?DEAL_REF=8&REQUEST_REF=173
HTTP/1.0
.
.
Content-type: text/x-oasis-csv
Content-length: <byte count of remainder of message>
REQUEST_STATUS=200
TIME_STAMP=<appropriate value>
VERSION=1.4
TEMPLATE=transstatus
OUTPUT_FORMAT=DATA
PRIMARY_PROVIDER_CODE=ABC
PRIMARY_PROVIDER_DUNS=123456789
RETURN_TZ=<appropriate value for ABC>
DATA_ROWS=1
COLUMN_HEADERS=CONTINUATION_FLAG, ASSIGNMENT_REF, . . .
N, 245, . . .
```

In the event an error is encountered delivering the HTTP notification message to the target URL as indicated by a failure of the target system to respond, or

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return of HTTP response status of 408, 500, 503, or 504, OASIS Nodes shall retry up to two more times, once every 5 minutes.

002-4.2.10.3.2 E-mail Notification

OASIS Nodes shall deliver dynamic notification to an e-mail address based on Mailto: URL information specified in the STATUS_NOTIFICATION Data Element. Mailto: URL's consist of the "mailto:" protocol identifier and an Internet mail address to which the notification message should be sent. The STATUS_NOTIFICATION Data Element shall contain the protocol field "mailto:", which designates the notification method/protocol to be used, followed by an Internet mail address in conformance with RFC 822. OASIS Nodes shall send an e-mail message to the Internet mail address containing the following information: "To:" set to the mail address from the STATUS_NOTIFICATION Data Element, "From:" set to an appropriate mail address of the OASIS Node, "Subject:" shall be the transstatus Template name followed by the value of the ASSIGNMENT_REF Data Element and the current value for the STATUS Data Element associated with the reservation (e.g., "Subject: transstatus 245 ACCEPTED"), and the body of the message shall contain the CSV formatted output of the transstatus Template information for that particular reservation. OASIS Nodes shall use a Primary Provider specific default value for RETURN_TZ in formulating the transstatus response information.

002-4.2.10.4 Use of Comments

Transmission and ancillary service reservation templates support the following text data elements to be used to communicate information between parties (i.e., transmission provider, seller, and customer) to a transaction:

- PRIMARY_PROVIDER_COMMENTS - for information to be communicated by the primary transmission provider to all other parties
- SELLER_COMMENTS - for information to be communicated by the seller (either primary provider or reseller) to the customer
- CUSTOMER_COMMENTS - for information to be communicated by the customer to the seller
- STATUS_COMMENTS - for information to be communicated by any party to all other parties

Use of these comments fields is at the discretion of the parties to the transaction with the exception that sellers of services must indicate via SELLER_COMMENTS the reason for denial of any request for service (STATUS values of INVALID, REFUSED, or DENIED). Transactions which are subject to displacement, either before or after confirmation (STATUS values of SUPERSEDED or DISPLACED), shall also include a reference to the competing reservation request that initiated the displacement in the SELLER_COMMENTS.

002-4.2.11 Reference Identifiers

Draft Recommendation for Modifications to S&CPs to address business practices adopted for WEQ 2007 Annual Plan Item 3(a)(2)

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- a. The TSIP shall assign a unique reference identifier, `ASSIGNMENT_REF`, for each Customer request to purchase capacity or services. The value of `ASSIGNMENT_REF` may be used to imply the order in which the request was received by the TSIP. This identifier will be used to track the request through various stages, and will be kept with the service through out its life. Whenever a transaction is modified by a subsequent transaction, a new `ASSIGNMENT_REF` number is assigned to that subsequent transaction along with a reference to the previous transaction such that a chain of all transactions related to the service can be maintained. These changes create a parent/child relationship between related requests. The TSIP shall use `REASSIGNED_REF` or `RELATED_REF` as specified in section 4.2.13 to identify the parent request's `ASSIGNMENT_REF` and shall increment the `IMPACTED` counter of the parent request by 1. Reductions to a request posted by the Transmission Provider shall also reference the requests `ASSIGNMENT_REF` and the TSIP shall increment the `IMPACTED` counter of the request by 1.
- b. The TSIP shall assign a unique reference identifier, `POSTING_REF`, to each Seller's offerings of service for sale or other information (messages) posted on an OASIS Node. The Seller in any/all subsequent Template submissions, that would result in a modification to or deletion of that specific offering or message, shall reference this identifier. Optionally, Customers may also refer to this `POSTING_REF` in their subsequent purchase requests to aid in identifying the specific offering associated with the purchase request.
- c. Sellers may aggregate portions of several previous transmission service reservations to create a new offering to be posted on an OASIS Node. When all or a portion of such offerings are sold, the Seller (original Customer) is obligated to notify the Primary Provider of the sale/assignment by inserting appropriate reassignment information on the OASIS Node (via the *transsell* or *transassign* Templates) or by some other approved method. This reassignment information consists of the `ASSIGNMENT_REF` value assigned to the original reservation(s) and the time interval and capacity amount(s) being reassigned to the new reservation. These values are retained in the `REASSIGNED_REF`, `REASSIGNED_START_TIME`, `REASSIGNED_STOP_TIME`, and `REASSIGNED_CAPACITY` Data Elements.
- d. Sellers may identify their service offerings received from Customers through the Seller supplied value specified for the `SALE_REF` Data Element.
- e. Customers may track their purchase requests through the Customer supplied values specified for the `DEAL_REF` and `REQUEST_REF` Data Elements. Customers may also use `POSTING_REF` and `SALE_REF` in their purchase requests to refer back to posted offerings.

002-4.2.12 Linking of Ancillary Services to Transmission Services

The requirements related to ancillary services are shown in *transoffering* (and updated using *transupdate*) using the `ANC_SVC_REQ` Data Element containing the following permitted values:

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SC:x; RV:x; RF:x; EI:x; SP:x; SU:x;

where SC, RV, RF, EI, SP and SU are the ancillary services 1 through 6 described in the Proforma Tariff,

- SC - Scheduling, system Control and dispatch
- RV - Reactive supply and Voltage control
- RF - Regulation and Frequency response
- EI - Energy Imbalance
- SP - SPinning reserve
- SU - Supplemental reserve

and where x={M,R,O,U} means one of the following:

- Mandatory, which implies that the Primary Provider must provide the ancillary service
- Required, which implies that the ancillary service is required, but not necessarily from the Primary Provider
- Optional, which implies that the ancillary service is not necessarily required, but could be provided
- Unknown, which implies that the requirements for the ancillary service are not known at this time

Ancillary services may be requested by a User from the Provider at the same time as transmission services are requested via the transrequest Template, by entering the special codes into ANC_SVC_LINK to represent the Proforma ancillary services 1 through 6 (or more) as follows:

SC:(AA[:xxx[:yyy[:nnn]]]); RV: (AA[:xxx[:yyy[:nnn]]]); RF:
(AA[:xxx[:yyy[:nnn]]]);
EI: (AA[:xxx[:yyy[:nnn]]]); SP: (AA[:xxx[:yyy[:nnn]]]); SU:
(AA[:xxx[:yyy[:nnn]]]); {Registered}:(AA[:xxx[:yyy[:nnn]]])

where AA is the appropriate PRIMARY_PROVIDER_CODE, SELLER_CODE, or CUSTOMER_CODE, and represents the company providing the ancillary services. "AA" may be unspecified for "xxx" type identical to "FT", in which case the ":" character must be present and precede the "FT" type. If multiple "AA" terms are necessary, then each "AA" grouping will be enclosed within parenthesis, with the overall group subordinate to the AS_TYPE specified within parenthesis and where xxx represents either:

- "FT" to indicate that the Customer will determine ancillary services at a future time, or
- "SP" to indicate that the Customer will self-provide the ancillary services, or
- "RQ" to indicate that the Customer is asking the OASIS Node to initiate the process for making an ancillary services reservation with the indicated Provider or Seller on behalf of the Customer. The Customer must then continue the reservation process with the Provider or Seller. If the transmission services request is for preconfirmed service, then the ancillary services shall also be preconfirmed, or
- "AR" to indicate an assignment reference number sequence follows.

The terms "yyy" and "nnn" are subordinate to the xxx type of "AR". yyy represents the ancillary services reservation number (ASSIGNMENT_REF) and nnn represents the capacity of the reserved ancillary services. Square brackets are used to indicated optional elements and are not used in the actual

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linkage itself. Specifically, the :yyy is applicable to only the "AR" term and the :nnn may optionally be left off if the capacity of ancillary services is the same as for the transmission services, and optionally multiple ancillary reservations may be indicated by additional (xxx[:yyy[:nnn]]) enclosed within parenthesis. If no capacity amount is indicated, the required capacity is assumed to come from the ancillary reservations in the order indicated in the codes, on an "as-needed" basis.

Examples:

Example 1:

Assume ancillary services SC and RV are mandatory from the TP, whose code is "TPEL", and ancillary services RF, EI, SP and SU are required, but will be defined at a future time.

"SC: (TPEL:RQ); RV: (TPEL:RQ); RF:(:FT); EI:(:FT); SP:(:FT); SU:(:FT)";

Example 2:

Assume ancillary services SC and RV are mandatory from the TP, whose code is "TPEL", and RF, EI, SP and SU are self-supplied. The customer code is "CPSE"

"SC: (TPEL:RQ); RV: (TPEL:RQ); RF:(CPSE:SP); EI:(CPSE:SP); SP:(CPSE:SP); SU:(CPSE:SP)"

Example 3:

Assume ancillary services SC and RV are mandatory from the TP, whose code is "TPEL", and ancillary services RF, EI, SP and SU were purchased via a prior OASIS reservation from seller "SANC" whose reservation number was "39843". There is sufficient capacity within the Ancillary reservation to handle this Transmission reservation.

"SC:(TPEL:RQ); RV:(TPEL:RQ); RF:(SANC:AR:39843); EI:(SANC:AR:39843) SP:(SANC:AR:39843); SU:(SANC:AR:39843)"

Example 4:

Assume ancillary services SC and RV are mandatory from the TP, whose code is "TPEL", and ancillary services RF, EI, SP and SU were purchased via prior OASIS reservations from sellers "SANC" and "TANC", whose reservation numbers were "8763" and "9824" respectively. There is not sufficient capacity within the Ancillary reservation from seller "SANC" to handle this Transmission reservation. In this case the OASIS reservation number 8763 will be depleted for the time frame specified within the transmission reservation and the remaining required amount will come from reservation number "9824".

"SC:(TPEL:RQ); RV:(TPEL:RQ); RF:((SANC:AR:8763)(TANC:AR:9824)); EI:((SANC:AR:8763)(TANC:AR:9824));

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SP:((SANC:AR:8763)(TANC:AR:9824));
 SU:((SANC:AR:8763)(TANC:AR:9824))"

Example 5:

Assume a transmission reservation in the amount of 100 mw/hour for a period of one day is made. Ancillary services SC and RV are mandatory from the TP, whose code is "TPEL", and ancillary services RF, EI, SP and SU were purchased via prior OASIS reservations from sellers "SANC" and "TANC", whose reservation numbers were "8763" and "9824" respectively. There is sufficient capacity within the Ancillary reservation from seller "SANC" to handle this Transmission reservation, however the purchaser wishes to use only "40 mw's" from this seller. In this case the OASIS reservation number 8763 will be depleted in the amount of "40 mw's" for the time frame specified within the transmission reservation and the remaining required amount will come from reservation number "9824".

"SC:(TPEL:RQ); RV:(TPEL:RQ); RF:((SANC:AR:8763:40)(TANC:AR:9824));
 EI:((SANC:AR:8763:40)(TANC:AR:9824));
 SP:((SANC:AR:8763:40)(TANC:AR:9824));
 SU:((SANC:AR:8763:40)(TANC:AR:9824))"

002-4.2.13

Modifications to Transactions

Transactions processed by OASIS as outlined in Section 4.2.10 may be subject to modification by subsequent transactions or events as permitted under the Transmission Provider's Tariff. The following subsections describe the actions to be taken on OASIS to implement specific provisions of the Open Access Pro Forma Tariff related to transmission service. Depending on the exact form of the Provider's Tariff, some of these provisions may not be applicable, and implementation of other provisions may be Provider specific. In general, modification to any OASIS transaction initiated by the Customer shall involve the submission of a new transaction. The new transaction shall identify the specific type of modification being requested using the REQUEST_TYPE Data Element, and reference the transaction to be modified using the RELATED_REF Data Element. In the specific case of secondary market transactions, related transactions are identified with the use of the REASSIGNED_REF Data Element. The following are the specific restricted values for the REQUEST_TYPE Data Element and a brief description of their use:

- ORIGINAL – typical reservation requests submitted to the Primary Provider
- RESALE – secondary market requests submitted to a Transmission Customer as Secondary Transmission Provider
- RENEWAL – request to renew an expiring transmission reservation
- MATCHING – request to meet or exceed a competing request to retain transmission service (right of first refusal)
- DEFERRAL – request to defer or apply for extension on start of transmission service

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- REDIRECT – request to redirect all or portion of a transmission reservation to an alternate POR/POD and/or make other changes to the terms of service as permitted
- {registered} – Primary Transmission Provider's may register values for REQUEST_TYPE to implement specific provisions of their Tariffs.

The Primary Transmission Provider may also modify a Customer's transmission reservation to the extent that the original reservation's MW capacity available for scheduling may be reduced over all or a portion of the term of the original reservation subject to the terms of the Provider's Tariff. Any time a subsequent transaction initiated by the Customer modifies all or a portion of a prior transaction, or a reduction in reserved MWs is initiated by the Primary Provider, the IMPACTED counter will be incremented in the prior transaction shall be set. OASIS User's may view the list of all subsequent transactions or events impacting a given transaction using the **reduction** Template. The following subsections describe the application of REQUEST_TYPE to actions taken on OASIS, and how various modifications to existing reservations are to be affected.

002-4.2.13.1 Original Transactions

Transactions submitted to the Primary Transmission Provider using the **transrequest** Template for the typical reservation of transmission service shall be identified by the REQUEST_TYPE of "ORIGINAL", and be processed as described in Section 4.2.10. The RELATED_REF Data Element must be null, the Primary Provider specified as SELLER, and, if the REQUEST_TYPE is null, the OASIS node shall default its value to "ORIGINAL". The value returned in the ASSIGNMENT_REF Data Element shall be used to refer to this specific, original transmission reservation request in any subsequent actions taken.

002-4.2.13.2 Partial Service

If in the evaluation of a transmission request, the Primary Provider determines that only a portion of the Customer's requested capacity reservation (CAPACITY_REQUESTED Data Element) can be accommodated and that the Provider is obligated or elects to offer the Customer only a portion of the requested capacity, the Primary Provider shall set the CAPACITY_GRANTED Data Element(s) associated with that transmission reservation to the amount available, and set the STATUS to COUNTEROFFER. If the CAPACITY_REQUESTED and/or CAPACITY_GRANTED are not constant over time, continuation records shall be used to convey the time varying profile of MW capacity associated with the transmission request (CAPACITY_REQUESTED, CAPACITY_GRANTED, START_TIME and STOP_TIME). The Customer shall recognize the offer of partial service by CAPACITY_REQUESTED not being equal to CAPACITY_GRANTED and the request STATUS of COUNTEROFFER. The Customer may elect to CONFIRM, WITHDRAW, or REBID the reservation using the **transcust** Template. If the transmission reservation request was marked PRECONFIRMED by the Customer and an offer of partial service is extended, the reservation request must be explicitly CONFIRMED by the Customer. The OASIS node shall not automatically CONFIRM a request

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where CAPACITY_REQUESTED does not equal CAPACITY_GRANTED when/if the request STATUS is set to ACCEPTED.

002-4.2.13.3 Secondary Sales – On OASIS

The sale or assignment of rights from one Transmission Customer to another may be conducted on OASIS using the same transaction process as described for purchases made from the Primary Transmission Provider. The request for purchase of transmission service from another Transmission Customer (Secondary Transmission Provider) is submitted by the Customer purchasing the capacity using the **transrequest** Template. Secondary transmission sales shall be identified by the REQUEST_TYPE of "RESALE", and be processed as described in Section 4.2.10. The RELATED_REF Data Element must be null, the Transmission Customer owning capacity offered for resale (the Secondary Transmission Provider) specified as SELLER, and, if the REQUEST_TYPE is null, the OASIS node shall default its value to "RESALE". The Secondary Transmission Provider (original Customer) selling their transmission rights over OASIS shall use the **transsell** Template to approve/deny the request. If the request is to be approved (STATUS=ACCEPTED), the transmission reservation(s) currently held by the Customer selling their capacity and the amount of capacity over time from each such reservation to be transferred to the secondary market Customer must be identified. This information is supplied via the REASSIGNED_REF, REASSIGNED_CAPACITY, REASSIGNED_START_TIME and REASSIGNED_STOP_TIME Data Elements. The aggregation of all REASSIGNED_xxx Data Elements must match the capacity and time frame of the secondary transmission request as specified in the CAPACITY_GRANTED (and/or CAPACITY_REQUESTED), START_TIME and STOP_TIME Data Elements of the "RESALE" transaction. The Customer purchasing transmission service on the secondary market over OASIS shall use the **transcust** to monitor the transaction and CONFIRM the sale if necessary. Upon confirmation of the secondary sale the IMPACTED attribute will be incremented for each reservations referenced by the REASSIGNED_REF Data Elements.

002-4.2.13.4 Secondary Sales – Off OASIS

The sale or assignment of rights from one Transmission Customer to another does not have to be conducted on OASIS. However, the Transmission Customer acting as a Secondary Transmission Provider is obligated to notify the Primary Transmission Provider of all sales or assignments of transmission rights to a third party. The **transassign** Template shall be used by the Secondary Transmission Provider to convey this sale/assignment information to the Primary Provider. The **transassign** Template allows the Secondary Transmission Provider to submit all information related to the secondary market sale. The REQUEST_TYPE of "RESALE" is directly implied by use of the **transassign** Template. The REASSIGNED_REF, REASSIGNED_CAPACITY, REASSIGNED_START_TIME and REASSIGNED_STOP_TIME Data Elements identify the transmission reservation(s) currently held by the Secondary Transmission Provider, and the amount of capacity over time from each such reservation to be transferred to the secondary market Customer. The aggregation of all REASSIGNED_xxx Data Elements must match the capacity

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and time frame of the secondary transmission request as specified in the CAPACITY_GRANTED, START_TIME and STOP_TIME Data Elements of the "RESALE" transaction. The IMPACTED attributed will be incremented for each reservations referenced by the REASSIGNED_REF Data Elements.

002-4.2.13.5 Renewal

Requests by the Transmission Customer to renew their transmission reservation, subject to the terms of the Provider's Tariff, should be submitted using the REQUEST_TYPE of "RENEWAL" and specify the ASSIGNMENT_REF of the request to be renewed in the new request's RELATED_REF Data Element. This unique REQUEST_TYPE and association with the original request more clearly communicates, over OASIS, the intent of the Transmission Customer, and distinguishes requests for renewal of service from new requests by the same TC for additional service.

002-4.2.13.6 Displacement – No Right of First Refusal

Confirmed transmission reservations may be subject to displacement in the event competing, higher priority requests are received by the Primary Transmission Provider. If the original Customer does not have the right of first refusal and all capacity from the original, confirmed reservation is required to accommodate the higher priority request, the Primary Transmission Provider shall set the original reservation's STATUS to DISPLACED. The STATUS of DISPLACED indicates that the original reservation has been displaced in its entirety. A reference to the competing request that forced the displacement should be entered in the SELLER_COMMENTS field of the original reservation. If only a portion of the original, confirmed reservation's capacity is required to accommodate the higher priority request, the Primary Transmission Provider shall document the "recall" of reserved capacity from the lower priority, confirmed reservation by incrementing the IMPACTED counter on that reservation and posting on OASIS the amount and time frames over which the original reservation's capacity was reduced. The Transmission Customer may view all impacts to existing transmission reservations (e.g., partial displacements, secondary sales, etc.) using the **reduction** Template. A reference to the competing request that forced the displacement should be entered in the SELLER_COMMENTS field of the original reservation.

002-4.2.13.7 Displacement – With Right of First Refusal

Confirmed transmission reservations may be subject to displacement in the event competing, higher priority requests are received by the Primary Transmission Provider. If the Primary Provider's Tariff obligates, or the Primary Provider elects to grant the original Customer the right of first refusal, the original Customer shall be notified of the competing request. The Primary Provider shall set the original request's COMPETING_REQUEST_FLAG to Y and update the SELLER_COMMENTS with a reference to the competing requests ASSIGNMENT_REF. These changes will initiate electronic notification, provided the Customer has elected to receive such notification. If the original Customer elects to meet or exceed the terms and conditions of the

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competing request, that Customer shall submit a new reservation request using the **transrequest** Template specifying 1) the terms of the new request, 2) "MATCHING" for REQUEST_TYPE, and 3) the ASSIGNMENT_REF of their original reservation in RELATED_REF. If the Primary Provider accepts the MATCHING request, the Primary Provider shall set the STATUS of the competing request to "REFUSED" and set the STATUS of the original, confirmed reservation to "DISPLACED". The STATUS of DISPLACED indicates that the original reservation has been displaced in its entirety. If the original Customer does not elect to meet the terms of the competing request, the Primary Transmission Provider shall displace the original reservation, in whole or in part, in the same manner described for reservations that are not extended a right of first refusal. Once the disposition of the original reservation and the competing request is finalized, the COMPETING_REQUEST_FLAG shall be reset to "N" in the original reservation.

002-4.2.13.8 Deferral of Start of Service

The commencement of service for certain transmission reservations may be deferred by the Customer as provided by the Primary Provider's Tariff. Such deferrals of the start of service are to be treated as new requests. The Customer shall submit a new transmission reservation specifying 1) the new term of service being requested, 2) "DEFERRAL" for REQUEST_TYPE and 3) the ASSIGNMENT_REF of their original reservation in RELATED_REF. On approval of the request to defer the start of service, the original reserved capacity may be subject to "recall" by the Primary Provider. If the Primary Provider recalls all or a portion of the reserved MWs associated with the original request, the Primary Provider shall increment the IMPACTED counter in the original reservation and document the reduction in service via an appropriate OASIS posting viewable to the Customer with the **reduction** Template.

002-4.2.13.9 Alternate POR/POD

Transmission Customers may have the right to move to alternate points of receipt and/or delivery under the terms of the Primary Provider's tariff. Customers holding confirmed transmission reservations may request the use of alternate points of receipt and/or delivery by a new transmission reservation using the **transrequest** Template. The new request shall specify 1) the terms of the new service requested, 2) "REDIRECT" for the REQUEST_TYPE and 3) the ASSIGNMENT_REF of their original reservation in RELATED_REF. On approval and confirmation of this new reservation, the Customer's rights to schedule transmission service under their original reservation may be reduced. If transmission rights under the original reservation are reduced, the Primary Provider shall increment the IMPACTED counter in the original reservation and document the reduction in service via an appropriate OASIS posting viewable to the Customer with the **reduction** Template.

002-4.2.13.10 Provider Recall

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There are cases in implementing provisions of the Primary Provider's Tariff that the capacity reserved by a Transmission Customer may be reduced in whole or in part. The particular reasons for these reductions are Tariff specific. The Primary Provider shall provide a mechanism to post on OASIS any such reductions or "recalls" in reserved capacity. The Customer shall be notified of any and all such reductions in reserved capacity by the incrementing of the IMPACTED counter in association with those reservations that are reduced; the IMPACTED flag is viewable with the **transstatus** Template. Specific information regarding the exact nature of each reduction in the reserved capacity under a given transmission reservation shall be posted and viewable with the **reduction** Template. A specific example of a Primary Provider initiated recall of reserved capacity is the implementation of a partial displacement of a transmission reservation. In this instance, the Customer has not elected (or was not required to be offered) to match the terms of a higher priority, competing request. The Primary Provider "recalls" that capacity necessary to accommodate the higher priority request from the original, lower priority request. The IMPACTED counter of the original request is incremented, and a query using the **reduction** Template for that original reservation would show the Customer the amount and time-frame that the Customer's reserved capacity was recalled by the Primary Provider. (See sections 4.2.13.6 and 4.2.13.7.) Interruption of transmission service, where that interruption directly impacts the rights of the Customer to schedule any service under that reservation, is another example of an impact to reserved capacity that would be posted as a Primary Provider initiated recall of reserved capacity. Secondary market sales of transmission rights are not examples of a Provider initiated recall of reserved capacity, but the impact of any such sales shall also be returned in response to execution of the **reduction** Template.

002-4.3 TEMPLATE DESCRIPTIONS

The following OASIS Templates define the Data Elements in fixed number and sequence which must be provided for all data transfers to and from the OASIS Nodes. The definitions of the Data Elements are listed in the Data Element Dictionary in Appendix A. TSIPs must provide a more detailed supplemental definition of the list of Sellers, Paths, Point of Receipt (POR), Point of Delivery (POD), Capacity Types, Ancillary Service Types and Templates online, clarifying how the terms are being used (see LIST Template). If POR and POD are not used, then Path Name must include directionality. Many of the Templates represent query-response interactions between the User and the OASIS Node. These interactions are indicated by the "Query" and "Response" section respectively of each Template. Some, as noted in their descriptions, are Input information, sent from the User to the OASIS Node. The Response is generally a mirror of the Input, although in some Templates, the TSIP must add some information.

002-4.3.1 Template Summary

The following table provides a summary of the process areas, and Templates to be used by Users to query information that will be downloaded or to upload

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information to the Primary Providers. These processes define the functions that must be supported by an OASIS Node.

Process Area	Process Name	Template(s)
4.3.2 Query/Response of Posted Services Being Offered	Query/Response Transmission Capacity Offerings	transoffering
	Query/Response Ancillary Service Offerings	ancoffering
4.3.3 Query/Response of Services Information	Query/Response Transmission Services	transserv
	Query/Response Ancillary Services	ancserv
4.3.4 Query/Response of Schedule details and Curtailments, Security Events, Reductions, and System Data	Query/Response Transmission Schedules and Curtailments	scheduledetail
	Query/Response Security Events	security
	Query/Response Reductions to Reserved Capacity	reduction
	Query/Response Transmission System Data	systemdata
4.3.5 Query/Response of Lists of Information	Query/Response List of Sellers, Paths, PORs, PODs, Capacity Types, Ancillary Service Types, Templates	list
4.3.6 Purchase Transmission Services	Request Purchase of Transmission Services (Input)	transrequest
	Query/Response Status of Transmission Service Request	transstatus
	Seller Approves Purchase (Input)	transsell
	Customer Confirm/Withdraw Purchase of Transmission Service (Input)	transcust
	Seller Reassign Rights (Input)	transassign

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Process Area	Process Name	Template(s)
4.3.7 Seller Posting of Transmission Service	Seller Post Transmission Service for Sale (Input)	transpost
	Seller Modify (Remove) Transmission Service for Sale (Input)	transupdate
4.3.8 Purchase of Ancillary Service	Request Purchase of Ancillary Service (Input)	ancrequest
	Query/Response Status of Ancillary Service Request	ancstatus
	Seller Approves Purchase of Ancillary Service (Input)	ancsell
	Customer Accept/Withdraw Purchase of Ancillary Service (Input)	anccust
	Seller Reassign Rights (Input)	ancassign
4.3.9 Seller Post Ancillary Service	Seller Post Ancillary Service (Input)	ancpost
	Seller Modify (Remove) Ancillary Service for Sale (Input)	ancupdate
4.3.10 Informal Messages	Post Want Ads (Input)	messagepost
	Query/Response Want Ads	message
	Delete Want Ad (Input)	messagedelete
	Personnel Transfers	personnel
	Discretion	discretion
	Standards of Conduct	stdconduct
4.3.11 Audit Log	Query/Response Audit Log	(various)

002-4.3.2 Query/Response of Posted Services Being Offered

The following Templates define the information to be posted on services offered for sale. All discounts for service negotiated by a Customer and Primary Provider (as Seller) at a price less than the currently posted offering price shall be posted on OASIS Nodes in such a manner as to be viewed using

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these Templates. All secondary market and/or third-party posting and Primary Provider offerings for like services shall also be viewed using these Templates. The Query must start with the standard header Query Variable Data Elements, listed in Section 4.2.6.2, and may include any valid combination of the remaining Query Variables, shown below in the Templates. START_TIME and STOP_TIME is the requested time interval for the Response to show all offerings which intersect that interval (see Section 4.2.6.6). TIME_OF_LAST_UPDATE can be used to specify all services updated since a specific point in time. Query variable listed with an asterisk (*) can have at least 4 multiple instances defined by the user in making the query. In the Response, OFFER_START_TIME and OFFER_STOP_TIME indicate the "request time window" within which a customer must request a service in order to get the posted OFFER_PRICE. START_TIME and STOP_TIME indicate the time frame that the service is being offered for. The SERVICE_DESCRIPTION Data Element shall define any attributes and/or special terms and conditions applicable to the offering that are not listed under the standard SERVICE_DESCRIPTION associated with the product definition supplied in the *transserv* or *ancserv* Templates. SERVICE_DESCRIPTION shall be null if there are no unique attributes or terms associated with the offering.

002-4.3.2.1 Transmission Capacity Offerings Available for Purchase (transoffering)

Transmission Services Offerings Available for Purchase (*transoffering*) is used to view transmission services posted for sale by the Primary Provider or Resellers. At a minimum this Template must be used to view each increment and type of service required to be offered under applicable regulations and the Primary Provider's tariffs. The POSTING_REF is set by the TSIP when an offering is posted and can be used in *transrequest* to refer to a particular offering. A User may query information about services available from all sellers for the time frame specified by the SERVICE_INCREMENT Data Element, namely, hourly, daily, weekly, monthly, or yearly.

Template: **transoffering**

1. **Query**
 - PATH_NAME*
 - SELLER_CODE*
 - SELLER_DUNS*
 - POINT_OF_RECEIPT*
 - POINT_OF_DELIVERY*
 - SERVICE_INCREMENT*
 - TS_CLASS*
 - TS_TYPE*
 - TS_PERIOD*
 - TS_WINDOW*
 - TS_SUBCLASS*
 - START_TIME (of transmission services)
 - STOP_TIME (of transmission services)
 - POSTING_REF
 - TIME_OF_LAST_UPDATE

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2. Response

The response is one or more records showing the requested service information. Note that the Customer will receive as a series of records spanning all the SELLER_CODES, PATH_NAMES, PORs, PODs, TS_xxx, and the START_TIME/STOP_TIME specified in the query. The SALE_REF is a value provided by the SELLER to identify the transmission service product being sold. The ANC_SVC_REQ indicates all ancillary services required for the specified transmission services. All Template elements are defined in the Data Element Dictionary.

TIME_OF_LAST_UPDATE
 SELLER_CODE
 SELLER_DUNS
 PATH_NAME
 POINT_OF_RECEIPT
 POINT_OF_DELIVERY
 INTERFACE_TYPE
 OFFER_START_TIME
 OFFER_STOP_TIME
 START_TIME
 STOP_TIME
 CAPACITY (If null, then look in seller comments for information .)
 SERVICE_INCREMENT
 TS_CLASS
 TS_TYPE
 TS_PERIOD
 TS_WINDOW
 TS_SUBCLASS
 ANC_SVC_REQ
 SALE_REF
 POSTING_REF
 CEILING_PRICE
 OFFER_PRICE
 PRICE_UNITS
 SERVICE_DESCRIPTION (if null, then look at *transserv*)
 NERC_CURTAILMENT_PRIORITY
 OTHER_CURTAILMENT_PRIORITY
 SELLER_NAME
 SELLER_PHONE
 SELLER_FAX
 SELLER_EMAIL
 SELLER_COMMENTS

002-4.3.2.2 Ancillary Services Available for Purchase (ancoffering)

Ancillary Services Available for Purchase (***ancoffering***) is used to provide information regarding the ancillary services that are available for sale by all sellers (both Primary Provider and Third Party Sellers).

Template: **ancoffering**

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1. **Query**

SELLER_CODE*
 SELLER_DUNS*
 CONTROL_AREA*
 SERVICE_INCREMENT*
 AS_TYPE*
 START_TIME
 STOP_TIME
 POSTING_REF
 TIME_OF_LAST_UPDATE

2. **Response**

TIME_OF_LAST_UPDATE
 SELLER_CODE
 SELLER_DUNS
 CONTROL_AREA
 OFFER_START_TIME
 OFFER_STOP_TIME
 START_TIME
 STOP_TIME
 CAPACITY
 SERVICE_INCREMENT
 AS_TYPE
 SALE_REF
 POSTING_REF
 CEILING_PRICE
 OFFER_PRICE
 PRICE_UNITS
 SERVICE_DESCRIPTION (if blank, then look at *ancserv*)
 SELLER_NAME
 SELLER_PHONE
 SELLER_FAX
 SELLER_EMAIL
 SELLER_COMMENTS

002-4.3.3 Query/Response of Services Information**002-4.3.3.1** Transmission Services (transserv)

Transmission Services (***transserv***) is used to provide additional information regarding the transmission services SERVICE_INCREMENT, TS_CLASS, TS_TYPE, TS_PERIOD, TS_SUBCLASS, TS_WINDOW, NERC_CURTAILMENT_PRIORITY, and OTHER_CURTAILMENT_PRIORITY that are available for sale by a Provider in the Templates in Section 4.3.2. This Template is used to summarize Provider tariff information for the convenience of the User. The Provider also sets PRICE_UNITS with this Template.

Template: **transserv**

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1. **Query**

TIME_OF_LAST_UPDATE

2. **Response**

TIME_OF_LAST_UPDATE
 SERVICE_INCREMENT
 TS_CLASS
 TS_TYPE
 TS_PERIOD
 TS_WINDOW
 TS_SUBCLASS
 CEILING_PRICE
 PRICE_UNITS
 SERVICE_DESCRIPTION
 NERC_CURTAILMENT_PRIORITY
 OTHER_CURTAILMENT_PRIORITY
 TARIFF_REFERENCE

002-4.3.3.2 Ancillary Services (ancserv)

Ancillary Services (**ancserv**) is used to provide additional information regarding the ancillary services that are available for sale by a Provider in the Templates in Section 4.3.2. This Template is used to summarize Provider tariff information for the convenience of the User. The Provider also sets PRICE_UNITS with this Template.

Template: **ancserv**

1. **Query**

TIME_OF_LAST_UPDATE

2. **Response**

TIME_OF_LAST_UPDATE
 SERVICE_INCREMENT
 AS_TYPE
 CEILING_PRICE
 PRICE_UNITS
 SERVICE_DESCRIPTION
 TARIFF_REFERENCE

002-4.3.4 Query/Response of Schedules and Curtailments, Security Events, Reductions, and System Data

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002-4.3.4.1 Transaction Schedule (*scheduledetail*)

Transaction Schedule (*scheduledetail*) provides information on the scheduled uses of the Provider's transmission system and any curtailments or interruption thereof. Posting of transmission service schedule information shall be in accordance with regulatory requirements, and reflect scheduled uses of reserved capacity to a level of detail that such schedules are subject to a Provider's application of transmission security procedures and policies regarding curtailment and interruptions. There is no restriction on the number of transaction schedule records that may refer to a given transmission reservation at a given point in time.

The Query Variables ASSIGNMENT_REF, SELLER_CODE, SELLER_DUNS, CUSTOMER_CODE, CUSTOMER_DUNS, SERVICE_INCREMENT, TS_CLASS, TS_TYPE, and TS_PERIOD act to select those transmission reservations for which all applicable transaction schedule information is to be returned. The PATH_NAME, POINT_OF_RECEIPT, POINT_OF_DELIVERY Query Variables select all applicable interchange transaction schedule records that use the specified path, point of receipt, and/or point of delivery. The TIME_OF_LAST_UPDATE, START_TIME, and STOP_TIME Query Variables select those particular interchange transaction schedule records updated and/or effective: 1) on or after a particular point in time (START_TIME alone), 2) before a particular point in time (STOP_TIME alone), or 3) between particular points in time (START_TIME and STOP_TIME). The TRANSACTION_ID Query Variable selects all applicable schedule information records associated with that particular schedule. Note that the format of TRANSACTION_ID may be Transmission Provider specific.

Each *scheduledetail* Template record returned in response to a query shall include information associated with:

1. information specifically related to the scheduled transaction,
2. information from all applicable OASIS transmission reservations used to support the scheduled interchange transaction, and
3. information related to any curtailment or interruption of service (if applicable), including a Transmission Provider's refusal to accept or begin a Customer's proposed interchange transaction for reliability or economic reasons (as allowed by the Provider's Tariff).

Information to be supplied in each *scheduledetail* Template's response records related to the scheduled interchange are, SCHEDULE_REF, TRANSACTION_ID, PATH_NAME, POINT_OF_RECEIPT, POINT_OF_DELIVERY, GCA_CODE, LCA_CODE, SOURCE, SINK, SCHEDULE_PRIORITY, START_TIME, STOP_TIME, SCHEDULE_REQUESTED, and SCHEDULE_GRANTED.

The posting and availability of schedule and curtailment information on OASIS shall be in accordance with FERC Policy.

SCHEDULE_REF uniquely identifies a particular posting of schedule information. SCHEDULE_REF would vary with each record of data returned in response to a *schedule* query. TRANSACTION_ID, if applicable/available, contains a unique identifier associated with an interchange transaction that

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may span multiple SCHEDULE_REF records. When available or applicable, the TRANSACTION_ID Data Element should reflect any industry-recognized transaction identifier rather than a Provider specific internal identifier (e.g., the NERC electronic tagging “tag-id”). PATH_NAME, POINT_OF_RECEIPT, and POINT_OF_DELIVERY identify the Transmission Provider’s specific transmission resources used by the scheduled transaction, and would typically be identical to the corresponding Data Elements associated with the OASIS transmission reservation used to support the schedule. When known, the GCA_CODE and LCA_CODE identify the NERC registered Control Area acronyms associated with the ultimate generation and load control areas respectively. When known or required to more specifically identify the ultimate points of generation and load, the SOURCE and SINK elements identify service points within the generation and load Control Areas respectively. SCHEDULE_PRIORITY identifies the relative priority of this particular interchange transaction as compared to all other scheduled transactions with respect to the application of curtailments or interruptions. SCHEDULE_PRIORITY would typically reflect the curtailment priority Data Elements associated with the OASIS transmission reservation used to support the schedule (i.e., NERC_CURTAILMENT_PRIORITY or OTHER_CURTAILMENT_PRIORITY). START_TIME and STOP_TIME designate the particular time interval represented by this record associated with the scheduled transaction. Note that multiple response records may be returned for a given scheduled transaction when information associated with the schedule vary over time (e.g., SCHEDULE_REQUESTED, SCHEDULE_GRANTED, SCHEDULE_LIMIT, etc.), but that ***scheduledetail*** Template response records for a given scheduled transaction should never overlap in time. SCHEDULE_REQUESTED reflects the MW value requested to be scheduled by the Customer during the hour, and SCHEDULE_GRANTED reflects the MW value actually scheduled by the Transmission Provider at either the point of receipt or delivery, whichever is larger, over the START_TIME/STOP_TIME time interval. When SCHEDULE_REQUESTED exceeds SCHEDULE_GRANTED, a curtailment or interruption is in effect and additional information shall be returned in the record.

Information in each ***scheduledetail*** Template’s response record related to the OASIS transmission reservation(s) supporting the scheduled transaction includes ASSIGNMENT_REF, SELLER_CODE, SELLER_DUNS, CUSTOMER_CODE, CUSTOMER_DUNS, AFFILIATE_FLAG, SERVICE_INCREMENT, TS_CLASS, TS_TYPE, TS_PERIOD, TS_WINDOW, TS_SUBCLASS, NERC_CURTAILMENT_PRIORITY, OTHER_CURTAILMENT_PRIORITY, and CAPACITY_USED. Transaction schedules that are supported by the use of multiple OASIS transmission reservations return the information attributable to each individual transmission reservation using continuation records (i.e., records beginning with CONTINUATION_FLAG = ‘Y’). Each continuation record shall also include the SCHEDULE_REF identifier from the first (CONTINUATION_FLAG = ‘N’) record. CAPACITY_USED reflects the peak MW amount of the reservation used to support the scheduled transaction; the sum of CAPACITY_USED over all continuation records (if applicable) should equal the SCHEDULE_GRANTED.

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Transaction schedules that were either “denied or interrupted” (ref. 18 CFR 37.6(a)(4)) shall include information in the ***scheduledetail*** Template’s response related to the reason the transaction could not be started or continued at the requested MW amount. The information returned shall include: PROVIDER_ACTION, SCHEDULE_LIMIT, CURTAILMENT_OPTIONS, SECURITY_REF, INITIATING_PARTY, RESPONSIBLE_PARTY, PROCEDURE_NAME, PROCEDURE_LEVEL, FACILITY_LOCATION, FACILITY_NAME, FACILITY_CLASS, and FACILITY_LIMIT_TYPE. If there are no restrictions to the scheduled transaction, these Data Elements shall all be returned as null.

PROVIDER_ACTION indicates the particular action taken by the Transmission Provider with respect to the scheduled transaction; specific values to be returned are, DENIED if the schedule was not started as requested, CURTAILED if the scheduled MW was limited for reliability reasons, or INTERRUPTED if the scheduled MW was limited for economic reasons. SCHEDULE_LIMIT reflects the **maximum** MW value over the START_TIME/STOP_TIME interval that the Provider has determined can be scheduled. CURTAILMENT_OPTIONS defines any options the Customer may exercise to reinstate all or part of the proposed schedule. SECURITY_REF, INITIATING_PARTY, RESPONSIBLE_PARTY, PROCEDURE_NAME, PROCEDURE_LEVEL, FACILITY_NAME, FACILITY_CLASS, and FACILITY_LIMIT_TYPE provide information related to the specific transmission security event that prompted the Transmission Provider’s denial, curtailment or interruption of the proposed scheduled transaction (see ***security*** Template).

Template: ***scheduledetail***

1. Query

PATH_NAME*
 SELLER_CODE*
 SELLER_DUNS*
 CUSTOMER_CODE*
 CUSTOMER_DUNS*
 POINT_OF_RECEIPT*
 POINT_OF_DELIVERY*
 SERVICE_INCREMENT*
 TS_CLASS*
 TS_TYPE*
 TS_PERIOD*
 TS_WINDOW*
 TS_SUBCLASS*
 START_TIME
 STOP_TIME
 TIME_OF_LAST_UPDATE
 ASSIGNMENT_REF
 TRANSACTION_ID

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2. Response

CONTINUATION_FLAG
 TIME_OF_LAST_UPDATE
 SCHEDULE_REF
 TRANSACTION_ID
 PATH_NAME
 POINT_OF_RECEIPT
 POINT_OF_DELIVERY
 GCA_CODE
 LCA_CODE
 SOURCE
 SINK
 SCHEDULE_PRIORITY
 START_TIME
 STOP_TIME
 SCHEDULE_REQUESTED
 SCHEDULE_GRANTED
 ASSIGNMENT_REF
 SELLER_CODE
 SELLER_DUNS
 CUSTOMER_CODE
 CUSTOMER_DUNS
 AFFILIATE_FLAG
 SERVICE_INCREMENT
 TS_CLASS
 TS_TYPE
 TS_PERIOD
 TS_WINDOW
 TS_SUBCLASS
 NERC_CURTAILMENT_PRIORITY
 OTHER_CURTAILMENT_PRIORITY
 CAPACITY_USED
 (if the transaction is subject to curtailment:)
 PROVIDER_ACTION
 SCHEDULE_LIMIT
 CURTAILMENT_OPTIONS
 SECURITY_REF
 INITIATING_PARTY (e.g, CA/TP code)
 RESPONSIBLE_PARTY (e.g., SC code)
 PROCEDURE_NAME (e.g., "NERC TLR", or registered)
 PROCEDURE_LEVEL (e.g., "2a", "3")
 FACILITY_LOCATION (e.g, "INTERNAL" or
 "EXTERNAL")
 FACILITY_NAME
 FACILITY_CLASS (e.g., transformer, etc.)
 FACILITY_LIMIT_TYPE (e.g, thermal, stability, etc.)

002-4.3.4.2 Security Event (security)

Draft Recommendation for Modifications to S&CPs to address business practices adopted for WEQ 2007 Annual Plan Item 3(a)(2)

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Security Event (**security**) provides information on transmission security/reliability events that may impact the Provider's ability to schedule transactions. The TIME_OF_LAST_UPDATE, START_TIME, and STOP_TIME Query Variables select those particular security event postings updated and/or effective: 1) on or after a particular point in time (START_TIME alone), 2) before a particular point in time (STOP_TIME alone), or 3) between particular points in time (START_TIME and STOP_TIME).

The SECURITY_REF Data Element is a unique identifier assigned to each posting of security related information; SECURITY_REF would vary with each record of data returned in response to a **security** query. The EVENT_ID Data Element, when available, should reflect any regional or interconnection-wide recognized security event identifier for events that are of greater scope than those administered locally by the Provider (e.g., a NERC Security Coordinator assigned identifier corresponding to a particular implementation of the NERC TLR procedure). SECURITY_TYPE identifies the type of information posted for the event; restricted values are OUTAGE for postings reflecting the state of critical transmission facilities, and LIMIT for postings reflecting the implementation of security procedures to limit or reduce scheduled transactions. The INITIATING_PARTY identifies by Control Area, Security Coordinator or Transmission Provider code the entity calling for the "outage" or "limit", and RESPONSIBLE_PARTY identifies the entity (Control Area, Transmission Provider, or Security Coordinator) responsible for administering any resulting security procedure that may be instituted.

PROCEDURE_NAME and PROCEDURE_LEVEL reflect the specific security procedure and, if applicable, the step, stage, or level within that procedure being implemented by RESPONSIBLE_PARTY (e.g., NERC TLR is a recognized security procedure, and level "2a" is a step within that procedure). FACILITY_NAME, FACILITY_CLASS, and FACILITY_LIMIT_TYPE provide specific information related to the impacted transmission facility. FACILITY_LOCATION identifies if the impacted facility is "INTERNAL" or "EXTERNAL" relative to the Transmission Provider's scope of authority over the named facility.

START_TIME and STOP_TIME reflect the period of time encompassed by the particular security event posted. In cases where a security procedure is invoked and then progresses through various levels or stages, there shall be separate postings for each of those stages declared by RESPONSIBLE_PARTY with START_TIME and STOP_TIME reflecting the period of time each specific level of the procedure was in effect.

The use of the **security** Template to convey information related to major transmission facility outages (SECURITY_TYPE = OUTAGE) is at the discretion of the Provider. Its definition in this Template is intended to formalize the posting of facility outage information in an OASIS Template structure where such information prior to implementation of this Template had been posted in a free-form manner.

Template: **security**

1. Query

Draft Recommendation for Modifications to S&CPs to address business practices adopted for WEQ 2007 Annual Plan Item 3(a)(2)

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START_TIME
 STOP_TIME
 TIME_OF_LAST_UPDATE
 SECURITY_REF
 EVENT_ID
 SECURITY_TYPE
 INITIATING_PARTY
 RESPONSIBLE_PARTY
 PROCEDURE_NAME
 FACILITY_CLASS
 FACILITY_LIMIT_TYPE
 FACILITY_LOCATION

2. Response

TIME_OF_LAST_UPDATE
 SECURITY_REF
 EVENT_ID
 SECURITY_TYPE ("LIMIT" or "OUTAGE")
 INITIATING_PARTY (e.g., CA/TP code)
 RESPONSIBLE_PARTY (e.g., SC code)
 PROCEDURE_NAME (e.g., "NERC TLR", or registered)
 PROCEDURE_LEVEL (dependent on PROCEDURE_NAME)
 FACILITY_CLASS (e.g., "FLOWGATE", "LINE", etc.)
 FACILITY_LIMIT_TYPE (e.g., "THERMAL", "STABILITY", etc.)
 FACILITY_LOCATION ("INTERNAL" or "EXTERNAL")
 FACILITY_NAME (e.g., path or flowgate name)
 START_TIME
 STOP_TIME

002-4.3.4.3 Transmission Reservation Reduction (reduction)

The Transmission Reservation Reduction (**reduction**) Template provides information related to the reduction in the Transmission Customer's rights to schedule use of all or a portion of capacity reserved for a given transmission reservation. Specific cases where such a reduction in reserved capacity would be returned in response to this query Template include: secondary market sales (as posted using the **transassign** or **transsell** Templates via the REASSIGNED_REF, etc., Data Elements), a Transmission Provider's interruption of the reservation to accommodate higher priority reservations over the interruption interval (partial displacement), etc.

The ASSIGNMENT_REF Query Variable is required and specifies the transmission reservation whose reductions in reserved capacity (if any) are to be returned. The START_TIME and STOP_TIME Query Variables allow the user to select the specific time interval over which the reductions in reserved capacity are to be returned (e.g., return all reductions in June for a year long reservation); by default all reductions over the life of the reservation are returned.

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In response to a **reduction** Template query, each primary record returned (CONTINUATION_FLAG = N) shall include the ASSIGNMENT_REF, CAPACITY_GRANTED and CAPACITY_AVAILABLE in MWs over the interval from START_TIME to STOP_TIME. CAPACITY_AVAILABLE is derived from the transmission reservation's CAPACITY_GRANTED less all reductions (if any) in reserved capacity over the interval from START_TIME to STOP_TIME as specified in the CAPACITY_REDUCED (as negative valued MWs) Data Element. The REDUCTION_TYPE, and REDUCTION_REASON Data Elements describe the circumstances and IMPACTING_REF references the associated transmission reservation (if applicable) that caused the reduction in capacity.

If no reductions in reserved capacity have been posted against the reservation, CAPACITY_AVAILABLE will equal CAPACITY_GRANTED and the REDUCTION_TYPE, REDUCTION_REASON, IMPACTING_REF and CAPACITY_REDUCED Data Elements will be null. This response information is equivalent to the CAPACITY_GRANTED, START_TIME, and STOP_TIME information that would be returned on execution of the **transstatus** Template.

If the CAPACITY_AVAILABLE over the interval from START_TIME to STOP_TIME is the result of more than one action reducing reserved capacity (e.g., multiple secondary market sales for the same time period), each action reducing capacity will be returned in continuation records (CONTINUATION_FLAG = Y) containing the ASSIGNMENT_REF, REDUCTION_TYPE, REDUCTION_REASON, IMPACTING_REF and CAPACITY_REDUCED Data Elements. If the action is another reservation (e.g. secondary market sale) the REASSIGNED_CAPACITY from that reservation will be shown as a negative value in CAPACITY_REDUCED.

Template: **reduction**

1. **Query**

START_TIME
STOP_TIME
ASSIGNMENT_REF* (must be specified)

2. **Response**

CONTINUATION_FLAG
ASSIGNMENT_REF
CAPACITY_GRANTED
CAPACITY_AVAILABLE
START_TIME
STOP_TIME
REDUCTION_TYPE (e.g., REDIRECT, INTERRUPTION, RESALE, DISPLACEMENT, etc.)
REDUCTION_REASON
IMPACTING_REF (if applicable)
CAPACITY_REDUCED

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002-4.3.4.4 System Data (systemdata)

The System Data (**systemdata**) Template is used to query specific, time varying data that is posted on a PATH, POINT_OF_RECEIPT, and/or POINT_OF_DELIVERY basis. The SYSTEM_ATTRIBUTE Data Element defines the type of information returned in the Template response. The restricted values for SYSTEM_ATTRIBUTE are,

- CBM – Capacity Benefit Margin
- TRM – Transmission Reliability Margin
- TTC – Total Transmission Capability
- NATC – Non-recallable (Firm) Available Transmission Capability
- RATC – Recallable (Non-firm) Available Transmission Capability
- A {registered} – Provider specific registered name for the data posted

Transmission Providers obligated to post values for one or more of the defined SYSTEM_ATTRIBUTES on specific transmission paths over time (e.g., hourly, then daily, etc.) as called forth in FERC regulations shall return these posted values via the **systemdata** Template. If SYSTEM_ATTRIBUTE is omitted in the query, then all attributes defined by the transmission provider are returned, subject to the other query attributes constraints.. A given SYSTEM_ATTRIBUTE may take on only one value at any given point in time. Note that TTC and ATC information may also be viewed using the **transoffering** Template at the Transmission Provider's discretion. Offers of service posted by Primary Providers as viewed with the **transoffering** Template should reflect the applicable ATC(s) posted via **systemdata** in the CAPACITY Data Element.

Template: **systemdata**

1. **Query**

PATH_NAME*
 POINT_OF_RECEIPT*
 POINT_OF_DELIVERY*
 SYSTEM_ATTRIBUTE*
 START_TIME
 STOP_TIME
 TIME_OF_LAST_UPDATE

2. **Response (acknowledgment)**

POSTING_REF
 PATH_NAME
 POINT_OF_RECEIPT
 POINT_OF_DELIVERY
 SYSTEM_ATTRIBUTE
 START_TIME
 STOP_TIME
 ATTRIBUTE_VALUE

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ATTRIBUTE_UNITS
TIME_OF_LAST_UPDATE

002-4.3.5 Query/Response of Lists of Information**002-4.3.5.1** List (list)

List (*list*) is used to provide lists of valid names. The minimum set of lists is LIST, SELLER_CODE, PATH_NAME, POINT_OF_RECEIPT, POINT_OF_DELIVERY, SERVICE_INCREMENT, TS_CLASS, TS_TYPE, TS_PERIOD, TS_SUBCLASS, TS_WINDOW, NERC_CURTAILMENT_PRIORITY, REQUEST_TYPE, ANC_SERVICE_POINT, FACILITY_CLASS, FACILITY_LIMIT_TYPE, PROCEDURE_NAME, SYSTEM_ATTRIBUTE, SECURITY_TYPE, FACILITY_LOCATION, OTHER_CURTAILMENT_PRIORITY, AS_TYPE, CATEGORY, and TEMPLATE. The information returned by the *list* Template may be used as values for the associated OASIS Data Elements to query information, post or request services.

Template: **list**

1. Query

LIST_NAME
TIME_OF_LAST_UPDATE

2. Response

TIME_OF_LAST_UPDATE
LIST_NAME
LIST_ITEM
LIST_ITEM_DESCRIPTION

002-4.3.6 Purchase Transmission Services

The following Templates shall be used by Customers and Sellers to transact purchases of services.

002-4.3.6.1 Customer Capacity Purchase Request (transrequest)

The **Customer Capacity Purchase Request** (Input) (*transrequest*) is used by the Customer to request the purchase of transmission services or request changes to previously submitted reservations for transmission services. The response simply acknowledges that the Customer's request was received by the OASIS Node. It does not imply that the Seller has received the request. Inputting values into the reference Data Elements is optional.

CUSTOMER_CODE and CUSTOMER_DUNS shall be determined from the registered connection used to input the request.

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Supporting "profiles" of service, which request different capacities (and optionally price) for different time periods within a single request, is at the discretion of the Primary Provider. Continuation records may be used to indicate requests for these service profiles; use of continuation records is only supported when using the CSV Format upload of Template data. Each segment of a profile is represented by the Data Elements CAPACITY_REQUESTED, START_TIME, and STOP_TIME, which define the intervals in time over which a non-zero MW demand is being requested. The initial segment of a profile is defined by the CAPACITY_REQUESTED, START_TIME and STOP_TIME Data Elements specified in the first/only record submitted; subsequent segments are specified in continuation records each containing the appropriate CAPACITY_REQUESTED, START_TIME and STOP_TIME values defining the segment. Provider's may optionally support price negotiation on segments of a profiled reservation request. In this case, the BID_PRICE Data Element is also included in each continuation record. If the BID_PRICE Data Element is not specified in the continuation records, the BID_PRICE specified in the first/only record submitted will be applied to the entire reservation request.

For requesting transmission services which include multiple paths, the following fields may be specified using continuation records: PATH_NAME, POINT_OF_RECEIPT, and POINT_OF_DELIVERY. Supporting multiple paths or multiple POINT_OF_RECEIPT and POINT_OF_DELIVERY is at the discretion of the Provider.

The START_TIME and STOP_TIME indicate the requested period of service.

When the request is received at the OASIS Node, the TSIP assigns a unique ASSIGNMENT_REF value and queues the request with a time stamp. The STATUS for the request is QUEUED. The IMPACTED counter is initially set to 0. If the new request is not modifying an existing reservation (as indicated by a null value for the RELATED_REF Data Element) and the SELLER is the Primary Provider, REQUEST_TYPE must either be specified as "ORIGINAL" or be left null and OASIS will substitute the default value of "ORIGINAL". If the new request is not modifying an existing reservation and the SELLER is not the Primary Provider, REQUEST_TYPE must either be specified as "RESALE" or be left null and OASIS will substitute the default value of "RESALE".

If the new request is modifying an existing transmission reservation, the Data Elements REQUEST_TYPE and RELATED_REF must be entered. RELATED_REF contains the ASSIGNMENT_REF for the transmission reservation being modified, and REQUEST_TYPE must be one of MATCHING, REDIRECT, DEFERRAL, RENEWAL, or a Primary Provider registered value.

Specification of a value YES in the PRECONFIRMED field authorizes the TSIP to automatically change the STATUS field in the *transstatus* Template to CONFIRMED when that request is ACCEPTED by the Seller.

Template: **transrequest**

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1. Input

CONTINUATION_FLAG
 SELLER_CODE (Primary or Reseller)
 SELLER_DUNS
 PATH_NAME
 POINT_OF_RECEIPT
 POINT_OF_DELIVERY
 SOURCE
 SINK
 CAPACITY_REQUESTED
 SERVICE_INCREMENT
 TS_CLASS
 TS_TYPE
 TS_PERIOD
 TS_WINDOW
 TS_SUBCLASS
 STATUS_NOTIFICATION
 START_TIME
 STOP_TIME
 BID_PRICE
 PRECONFIRMED
 ANC_SVC_LINK
 POSTING_REF (Optionally set by Customer)
 SALE_REF (Optionally set by Customer)
 REQUEST_REF (Optionally set by Customer)
 DEAL_REF (Optionally set by Customer)
 CUSTOMER_COMMENTS
 REQUEST_TYPE (Required for request changes)
 RELATED_REF (Required for request changes)

2. Response (acknowledgment)

RECORD_STATUS
 CONTINUATION_FLAG
 ASSIGNMENT_REF (assigned by TSIP)
 SELLER_CODE
 SELLER_DUNS
 PATH_NAME
 POINT_OF_RECEIPT
 POINT_OF_DELIVERY
 SOURCE
 SINK
 CAPACITY_REQUESTED
 SERVICE_INCREMENT
 TS_CLASS
 TS_TYPE
 TS_PERIOD
 TS_WINDOW
 TS_SUBCLASS
 STATUS_NOTIFICATION

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START_TIME
 STOP_TIME
 BID_PRICE
 PRECONFIRMED
 ANC_SVC_LINK
 POSTING_REF
 SALE_REF
 REQUEST_REF
 DEAL_REF
 CUSTOMER_COMMENTS
 REQUEST_TYPE
 RELATED_REF
 ERROR_MESSAGE

002-4.3.6.2 Status of Customer Purchase Request (transstatus)

The **Status of Customer Purchase Request** (*transstatus*) is provided upon the request of any Customer or Provider to indicate the current status of one or more reservation records. Users may also view any transaction's status. However, the SOURCE and SINK may be masked for User requests until Transmission Providers must make source and sink information available at the time the request status posting is updated to show that a transmission request is confirmed.

Continuation records may be returned in association with a transmission reservation to convey information regarding: 1) sale or assignment of transmission rights on the secondary market (reassignments), 2) profiled requests, or 3) service over multiple paths. Each continuation record associated with a transmission reservation shall be identified by the CONTINUATION_FLAG Data Element set to 'Y' and include the ASSIGNMENT_REF Data Element.

When a transmission reservation request acquires its rights to transmission service as the result of a sale or assignment of transmission rights on the secondary market, the identity of the original reservation, capacity, and time interval over which rights are assigned to the new reservation are defined by the Data Elements REASSIGNED_REF, REASSIGNED_CAPACITY, REASSIGNED_START_TIME, and REASSIGNED_STOP_TIME. These Data Elements will be returned in continuation records when more than one set of reassignment information is associated with a reservation.

If the transmission reservation has an associated profile, either as a result of the submission of CAPACITY_REQUESTED varying over time (support for Customer reservation profiles is at the discretion of the Provider) or due to the Provider offering partial service specifying a CAPACITY_GRANTED varying over time, then CAPACITY_GRANTED, CAPACITY_REQUESTED, START_TIME and STOP_TIME for the segments of the profile will be returned in continuation records. If the Provider supports negotiation of price on each segment of a Customer profiled request, BID_PRICE and OFFER_PRICE will also be returned with CAPACITY_REQUESTED, CAPACITY_GRANTED, START_TIME and STOP_TIME.

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If the Provider supports reservations submitted on multiple paths, continuation records specifying PATH_NAME, POINT_OF_RECEIPT, and POINT_OF_DELIVERY associated with the reservation would be returned in continuation records.

The AFFILIATE_FLAG will be set by the TSIP to indicate whether or not the Customer is an affiliate of the Primary Provider. The NEGOTIATED_PRICE_FLAG will be set by the TSIP to indicate whether the OFFER_PRICE is higher, lower, or the same as the BID_PRICE. Any time that a confirmed transmission reservation's rights to schedule up to the amount of CAPACITY_GRANTED is reduced, either due to secondary market sales, partial displacements, Provider initiated "recalls" of capacity, etc., the IMPACTED Data Element shall be incremented. Specific information regarding the MW level and reason for reduction in reserved capacity is viewable using the *reduction* Template.

Template: **transstatus**

1. Query

SELLER_CODE*
 SELLER_DUNS*
 CUSTOMER_CODE*
 CUSTOMER_DUNS*
 PATH_NAME*
 POINT_OF_RECEIPT*
 POINT_OF_DELIVERY*
 SERVICE_INCREMENT*
 TS_CLASS*
 TS_TYPE*
 TS_PERIOD*
 TS_WINDOW*
 TS_SUBCLASS*
 STATUS*
 START_TIME (Beginning time of service)
 STOP_TIME
 START_TIME_QUEUED (Beginning time queue)
 STOP_TIME_QUEUED
 NEGOTIATED_PRICE_FLAG
 ASSIGNMENT_REF
 REASSIGNED_REF
 RELATED_REF
 SALE_REF
 REQUEST_REF
 DEAL_REF
 COMPETING_REQUEST_FLAG
 TIME_OF_LAST_UPDATE

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2. Response

CONTINUATION_FLAG
 ASSIGNMENT_REF
 SELLER_CODE
 SELLER_DUNS
 CUSTOMER_CODE
 CUSTOMER_DUNS
 AFFILIATE_FLAG (Set by TSIP)
 PATH_NAME
 POINT_OF_RECEIPT
 POINT_OF_DELIVERY
 SOURCE
 SINK
 CAPACITY_REQUESTED
 CAPACITY_GRANTED
 SERVICE_INCREMENT
 TS_CLASS
 TS_TYPE
 TS_PERIOD
 TS_WINDOW
 TS_SUBCLASS
 NERC_CURTAILMENT_PRIORITY
 OTHER_CURTAILMENT_PRIORITY
 START_TIME
 STOP_TIME
 CEILING_PRICE
 OFFER_PRICE
 BID_PRICE
 PRICE_UNITS
 PRECONFIRMED
 ANC_SVC_LINK
 ANC_SVC_REQ
 POSTING_REF
 SALE_REF
 REQUEST_REF
 DEAL_REF
 IMPACTED (Greater than 0, if another reservation impacts this reservation)
 COMPETING_REQUEST_FLAG
 REQUEST_TYPE
 ORIGINAL, RESALE, REDIRECT, MATCHING, DEFERRAL, RENEWAL, {registered}
 RELATED_REF
 NEGOTIATED_PRICE_FLAG ("L" if Seller accepted Price is lower than OFFER_PRICE in *transoffering* Template; "H" if higher; otherwise blank)
 STATUS =
 RECEIVED, QUEUED, INVALID, STUDY, REBID, COUNTEROFFER, ACCEPTED, DECLINED, SUPERSEDED,

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**REFUSED, CONFIRMED, WITHDRAWN, DISPLACED,
ANNULLED, RETRACTED**

STATUS_NOTIFICATION
 STATUS_COMMENTS
 TIME_QUEUED
 RESPONSE_TIME_LIMIT
 TIME_OF_LAST_UPDATE
 PRIMARY_PROVIDER_COMMENTS
 SELLER_REF
 SELLER_COMMENTS
 CUSTOMER_COMMENTS
 SELLER_NAME
 SELLER_PHONE
 SELLER_FAX
 SELLER_EMAIL
 CUSTOMER_NAME
 CUSTOMER_PHONE
 CUSTOMER_FAX
 CUSTOMER_EMAIL
 REASSIGNED_REF
 REASSIGNED_CAPACITY (Capacity from each previous transaction)
 REASSIGNED_START_TIME
 REASSIGNED_STOP_TIME

002-4.3.6.3 Seller Approval of Purchase (transsell)

Seller Approval of Purchase (Input) (**transsell**) is input by a Seller to modify the status and queue of a request by a Customer.

The following fields may be submitted in continuation records for the transsell Template to convey transmission rights from multiple original transmission reservations to this new reservation: REASSIGNED_REF, REASSIGNED_CAPACITY, REASSIGNED_START_TIME, and REASSIGNED_STOP_TIME. Use of continuation records is only supported when using the CSV format upload of Template data.

If the Provider/Seller cannot accommodate the Customer's CAPACITY_REQUESTED and is obligated or elects to offer the Customer partial service that varies over the total period of the reservation, CAPACITY_GRANTED, START_TIME and STOP_TIME Data Elements may be repeated in continuation records.

If the Provider/Seller supports the negotiation of price on individual segments of a profiled reservation request (support for reservation profiles is at the discretion of the Provider), OFFER_PRICE, START_TIME and STOP_TIME Data Elements may be submitted in continuation records to modify the Seller's offer price associated with the profile segment(s) corresponding to START_TIME and STOP_TIME. OFFER_PRICE associated with each segment of a profiled request must match the corresponding BID_PRICE for the reservation request's STATUS to be set to ACCEPTED.

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SELLER_CODE and SELLER_DUNS shall be determined from the registered connection used to input the request. The SELLER_REF Data Element may be set by the SELLER to a seller specific internal tracking number.

If the reservation is subject to the right of first refusal pending a status change to Displaced, the COMPETING_REQUEST_FLAG shall be set to Y, and SELLER_COMMENTS shall be updated with a reference to the competing request's ASSIGNMENT_REF. If the reservation is subject to the right of first refusal pending a status change to Superseded, the COMPETING_REQUEST_FLAG shall be set to Y, the OFFER_PRICE shall be updated, the SELLER_COMMENTS shall be updated with a reference to the competing requests ASSIGNMENT_REF, and the STATUS shall be set to COUNTEROFFER. Once the disposition of the request is finalized, the COMPETING_REQUEST_FLAG shall be reset to N and any appropriate status change shall be made.

The Seller may accept a reservation only when the BID_PRICE and the OFFER_PRICE are the same.

Template: **transsell****1. Input**

CONTINUATION_FLAG
 ASSIGNMENT_REF (Required)
 START_TIME
 STOP_TIME
 OFFER_PRICE
 CAPACITY_GRANTED
 STATUS =
 RECEIVED, INVALID, STUDY, COUNTEROFFER, ACCEPTED,
 REFUSED, SUPERSEDED, DECLINED, ANNULLED,
 RETRACTED, DISPLACED
 STATUS_COMMENTS
 ANC_SVC_LINK
 ANC_SVC_REQ
 COMPETING_REQUEST_FLAG
 NEGOTIATED_PRICE_FLAG
 SELLER_REF
 SELLER_COMMENTS
 RESPONSE_TIME_LIMIT
 REASSIGNED_REF
 REASSIGNED_CAPACITY (Previous capacity to be reassigned)
 REASSIGNED_START_TIME
 REASSIGNED_STOP_TIME

2. Response

RECORD_STATUS
 CONTINUATION_FLAG

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ASSIGNMENT_REF
 START_TIME
 STOP_TIME
 OFFER_PRICE
 CAPACITY_GRANTED
 STATUS =
 RECEIVED, INVALID, STUDY, COUNTEROFFER, ACCEPTED,
 REFUSED, SUPERSEDED, DECLINED, ANNULLED,
 RETRACTED, DISPLACED
 STATUS_COMMENTS
 ANC_SVC_LINK
 ANC_SVC_REQ
 COMPETING_REQUEST_FLAG
 NEGOTIATED_PRICE_FLAG
 SELLER_REF
 SELLER_COMMENTS
 RESPONSE_TIME_LIMIT
 REASSIGNED_REF
 REASSIGNED_CAPACITY (Previous capacity to be reassigned)
 REASSIGNED_START_TIME
 REASSIGNED_STOP_TIME
 ERROR_MESSAGE

002-4.3.6.4 Customer Confirmation of Purchase (Input) (transcust)

Customer Confirmation of Purchase (Input) (**transcust**) is input by the Customer to state his agreement or withdrawal of a purchase after the Seller has indicated that the purchase request is approved. Only the BID_PRICE, STATUS, STATUS_COMMENTS, ANC_SVC_LINK, and CUSTOMER_COMMENTS Data Elements can be modified in this Template.

The PRECONFIRMED Data Element may only be set to a value of 'Y' using this Template. Once the Customer has set PRECONFIRMED to 'Y', either on the original submission of the **transrequest** Template or via this Template, its value cannot be reset to 'N'.

CUSTOMER_CODE and CUSTOMER_DUNS shall be determined from the registered connection used to input the request.

The Customer must change the BID_PRICE to be equal to the OFFER_PRICE before the reservation request's STATUS can be set to CONFIRMED.

If the Provider/Seller supports the negotiation of price on individual segments of a profiled reservation request (support for reservation profiles is at the discretion of the Provider), BID_PRICE, START_TIME and STOP_TIME Data Elements may be submitted in continuation records to modify the Customer's bid price associated with the profile segment(s) corresponding to START_TIME and STOP_TIME. BID_PRICE associated with each segment of a profiled request must match the corresponding OFFER_PRICE for the reservation request's STATUS to be set to CONFIRMED.

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Template: **transcust**1. **Input**

CONTINUATION_FLAG
 ASSIGNMENT_REF (Required)
 START_TIME
 STOP_TIME
 REQUEST_REF
 DEAL_REF
 BID_PRICE
 PRECONFIRMED
 STATUS=
 REBID, CONFIRMED, WITHDRAWN
 STATUS_COMMENTS
 ANC_SVC_LINK
 STATUS_NOTIFICATION If left blank, then original URL from the
 transrequest will be used
 CUSTOMER_COMMENTS

2. **Response**

RECORD_STATUS
 CONTINUATION_FLAG
 ASSIGNMENT_REF
 START_TIME
 STOP_TIME
 REQUEST_REF
 DEAL_REF
 BID_PRICE
 PRECONFIRMED
 STATUS=
 REBID, CONFIRMED, WITHDRAWN
 STATUS_COMMENTS
 ANC_SVC_LINK
 STATUS_NOTIFICATION
 CUSTOMER_COMMENTS
 ERROR_MESSAGE

002-4.3.6.5 Seller to Reassign Service Rights to Another Customer (*transassign*)

Seller to Reassign Service Rights to Another Customer (Input) (***transassign***) is used by the seller to ask the Transmission Services Information Provider to reassign some or all of the seller's rights to Services to another Customer, for seller confirmed transactions that have occurred off the OASIS Node. The TSIP shall assign a unique ASSIGNMENT_REF in the response (acknowledgment) and enter the status CONFIRMED as viewed in the ***transstatus*** Template. SELLER_CODE and SELLER_DUNS shall be determined from the registered connection used to input the request.

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Only the following fields may be redefined in a continuation record for the **transassign** input Template: CAPACITY_REQUESTED, CAPACITY_GRANTED, START_TIME, STOP_TIME, REASSIGNED_REF, REASSIGNED_CAPACITY, REASSIGNED_START_TIME, and REASSIGNED_STOP_TIME. The REQUEST_TYPE of "RESALE" is implied through execution of this Template.

Template: **transassign**

1. Input

CONTINUATION_FLAG
 CUSTOMER_CODE
 CUSTOMER_DUNS
 PATH_NAME
 POINT_OF_RECEIPT
 POINT_OF_DELIVERY
 SOURCE
 SINK
 CAPACITY_REQUESTED
 CAPACITY_GRANTED
 SERVICE_INCREMENT
 TS_CLASS
 TS_TYPE
 TS_PERIOD
 TS_WINDOW
 TS_SUBCLASS
 START_TIME
 STOP_TIME
 OFFER_PRICE
 ANC_SVC_LINK (optional: filled in if assignment is different than original transmission reservation)
 POSTING_NAME
 REASSIGNED_REF
 REASSIGNED_CAPACITY (Capacity being sold from each previous assignment)
 REASSIGNED_START_TIME
 REASSIGNED_STOP_TIME
 SELLER_COMMENTS
 SELLER_REF

2. Response (acknowledgment)

RECORD_STATUS
 CONTINUATION_FLAG
 ASSIGNMENT_REF (assigned by TSIP)
 CUSTOMER_CODE
 CUSTOMER_DUNS
 PATH_NAME
 POINT_OF_RECEIPT
 POINT_OF_DELIVERY

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SOURCE
 SINK
 CAPACITY_REQUESTED
 CAPACITY_GRANTED (Total capacity being reassigned)
 SERVICE_INCREMENT
 TS_CLASS
 TS_TYPE
 TS_PERIOD
 TS_WINDOW
 TS_SUBCLASS
 START_TIME
 STOP_TIME
 OFFER_PRICE
 ANC_SVC_LINK
 POSTING_NAME
 REASSIGNED_REF
 REASSIGNED_CAPACITY (Capacity being sold from each previous assignment)
 REASSIGNED_START_TIME
 REASSIGNED_STOP_TIME
 SELLER_COMMENTS
 SELLER_REF
 ERROR_MESSAGE

002-4.3.7 Seller Posting of Transmission Services

Sellers shall use the following Templates for providing sell information. They may aggregate portions of several previous purchases to create a new service, if this capability is provided by the Transmission Services Information Provider:

002-4.3.7.1 Seller Capacity Posting (transpost)

Seller Capacity Posting (Input) (**transpost**) shall be used by the Seller to post the transmission capacity for resale on to the OASIS Node. SELLER_CODE and SELLER_DUNS shall be determined from the registered connection used to input the request.

Template: **transpost**

1. Input

PATH_NAME
 POINT_OF_RECEIPT
 POINT_OF_DELIVERY
 INTERFACE_TYPE
 CAPACITY
 SERVICE_INCREMENT
 TS_CLASS
 TS_TYPE
 TS_PERIOD
 TS_WINDOW

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TS_SUBCLASS
 ANC_SVC_REQ
 START_TIME
 STOP_TIME
 OFFER_START_TIME
 OFFER_STOP_TIME
 SALE_REF
 OFFER_PRICE
 SERVICE_DESCRIPTION
 SELLER_COMMENTS

2. **Response** (Acknowledgment)

RECORD_STATUS
 POSTING_REF (Assigned by TSIP)
 PATH_NAME
 POINT_OF_RECEIPT
 POINT_OF_DELIVERY
 INTERFACE_TYPE
 CAPACITY
 SERVICE_INCREMENT
 TS_CLASS
 TS_TYPE
 TS_PERIOD
 TS_WINDOW
 TS_SUBCLASS
 ANC_SVC_REQ
 START_TIME
 STOP_TIME
 OFFER_START_TIME
 OFFER_STOP_TIME
 SALE_REF
 OFFER_PRICE
 SERVICE_DESCRIPTION
 SELLER_COMMENTS
 ERROR_MESSAGE

002-4.3.7.2 Seller Capacity Modify (transupdate)

Seller Capacity Modify (Input) (**transupdate**) shall be used by a Seller to modify a posting of transmission capacity.

SELLER_CODE and SELLER_DUNS shall be determined from the registered connection used to input the request.

Template: **transupdate**

1. **Input**

POSTING_REF (Must be provided)
 CAPACITY (only if modified)

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START_TIME (only if modified)
 STOP_TIME (only if modified)
 OFFER_START_TIME (only if modified)
 OFFER_STOP_TIME (only if modified)
 ANC_SVC_REQ (only if modified)
 SALE_REF (only if modified)
 OFFER_PRICE (only if modified)
 SERVICE_DESCRIPTION (only if modified)
 SELLER_COMMENTS (only if modified)

2. Response (acknowledgment)

RECORD_STATUS
 POSTING_REF
 CAPACITY
 START_TIME
 STOP_TIME
 OFFER_START_TIME
 OFFER_STOP_TIME
 ANC_SVC_REQ

 SALE_REF
 OFFER_PRICE
 SERVICE_DESCRIPTION
 SELLER_COMMENTS
 ERROR_MESSAGE

002-4.3.8 Purchase of Ancillary Services

002-4.3.8.1 Customer Requests to Purchase Ancillary Services (ancrequest)

Customer Requests to Purchase Ancillary Services (***ancrequest***) (Input, Template Upload) is used by the customer to request ancillary services that have been posted by a seller of those services. The response simply acknowledges that the Customer's request was received by the OASIS Node. It does not imply that the Seller has received the request. The same requirements exist for the use of STATUS_NOTIFICATION as for ***transrequest***. Submitting values into the reference Data Elements is optional.

CUSTOMER_CODE and CUSTOMER_DUNS shall be determined from the registered connection used to input the request.

Supporting "profiles" of ancillary service, which request different capacities (and optionally price) for different time periods within a single request, is at the discretion of the Primary Provider. Continuation records may be used to indicate requests for these service profiles. Each segment of a profile is represented by the Data Elements CAPACITY, START_TIME, and STOP_TIME, which define the intervals in time over which a non-zero MW demand is being requested. The initial segment of a profile is defined by the CAPACITY, START_TIME and STOP_TIME Data Elements specified in the first/only record submitted; subsequent segments are specified in continuation

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records each containing the appropriate CAPACITY, START_TIME and STOP_TIME values defining the segment. Provider's may optionally support price negotiation on segments of a profiled reservation request. In this case, the BID_PRICE Data Element is also included in each continuation record. If the BID_PRICE Data Element is not specified in the continuation records, the BID_PRICE specified in the first/only record submitted will be applied to the entire reservation request.

The START_TIME and STOP_TIME indicate the requested period of service.

When the request is received at the OASIS Node, the TSIP assigns a unique ASSIGNMENT_REF value and queues the request with a time stamp. The STATUS for the request is QUEUED.

Specification of a value YES in the PRECONFIRMED field authorizes the TSIP to automatically change the STATUS field in the **ancstatus** Template to CONFIRMED when that request is ACCEPTED by the Seller.

Template: **ancrequest**

1. Input

CONTINUATION_FLAG
 SELLER_CODE
 SELLER_DUNS
 CONTROL_AREA
 ANC_SERVICE_POINT
 CAPACITY
 SERVICE_INCREMENT
 AS_TYPE
 STATUS_NOTIFICATION
 START_TIME
 STOP_TIME
 BID_PRICE
 PRECONFIRMED
 POSTING_REF (Optionally set by Customer)
 SALE_REF (Optionally set by Customer)
 REQUEST_REF (Optionally set by Customer)
 DEAL_REF (Optionally set by Customer)
 CUSTOMER_COMMENTS

2. Response (acknowledgment)

RECORD_STATUS
 CONTINUATION_FLAG
 ASSIGNMENT_REF (assigned by TSIP)
 SELLER_CODE
 SELLER_DUNS
 CONTROL_AREA
 ANC_SERVICE_POINT
 CAPACITY

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SERVICE_INCREMENT
 AS_TYPE
 STATUS_NOTIFICATION
 START_TIME
 STOP_TIME
 BID_PRICE
 PRECONFIRMED
 POSTING_REF
 SALE_REF
 REQUEST_REF
 DEAL_REF
 CUSTOMER_COMMENTS
 ERROR_MESSAGE

002-4.3.8.2 Ancillary Services Status (ancstatus)

Ancillary Services Status (***ancstatus***) is used to provide the status of purchase requests regarding the ancillary services that are available for sale by all Service Providers. Continuation records may be returned in association with a ancillary services reservation to convey information regarding: 1) sale or assignment of ancillary rights on the secondary market (reassignments), or 2) profiled requests. When an ancillary reservation request is the result of a sale or assignment of transmission or ancillary rights on the secondary market, the identity of the original reservation, capacity, and time interval over which rights are assigned to the new reservation are defined by the Data Elements REASSIGNED_REF, REASSIGNED_CAPACITY, REASSIGNED_START_TIME, and REASSIGNED_STOP_TIME. These Data Elements will be returned in continuation records when more than one set of reassignment information is associated with a reservation. If the reservation has an associated profile (support for reservation profiles is at the discretion of the Provider), CAPACITY, START_TIME and STOP_TIME for the segments of the profile will be returned in continuation records. If the Provider supports negotiation of price on each segment of a profiled request, BID_PRICE and OFFER_PRICE will also be returned with CAPACITY, START_TIME and STOP_TIME.

The AFFILIATE_FLAG will be set by the TSIP to indicate whether or not the Customer is an affiliate of the Seller.

The values of STATUS and processes for setting STATUS are the same as for ***transstatus***.

Template: **ancstatus**

1. Query

SELLER_CODE*
 SELLER_DUNS*
 CUSTOMER_CODE*
 CUSTOMER_DUNS*
 CONTROL_AREA

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ANC_SERVICE_POINT
 SERVICE_INCREMENT
 AS_TYPE
 STATUS
 START_TIME
 STOP_TIME
 START_TIME_QUEUED
 STOP_TIME_QUEUED
 NEGOTIATED_PRICE_FLAG
 ASSIGNMENT_REF
 REASSIGNED_REF
 SALE_REF
 REQUEST_REF
 DEAL_REF
 TIME_OF_LAST_UPDATE (only if TIME_OF_LAST_UPDATE is posted
 by record)

2. Response

CONTINUATION_FLAG
 ASSIGNMENT_REF
 SELLER_CODE
 SELLER_DUNS
 CUSTOMER_CODE
 CUSTOMER_DUNS
 AFFILIATE_FLAG (Set by TSIP)
 CONTROL_AREA
 ANC_SERVICE_POINT
 CAPACITY
 SERVICE_INCREMENT
 AS_TYPE
 START_TIME
 STOP_TIME
 CEILING_PRICE
 OFFER_PRICE
 BID_PRICE
 PRICE_UNITS
 PRECONFIRMED
 POSTING_REF
 SALE_REF
 REQUEST_REF
 DEAL_REF
 NEGOTIATED_PRICE_FLAG ("L" if Seller accepted Price is lower than
 OFFER_PRICE in *ancoffering* Template; "H" if higher; otherwise blank)
 STATUS=
 QUEUED, INVALID, RECEIVED, STUDY, REBID,
 COUNTEROFFER, ACCEPTED, REFUSED, CONFIRMED,
 WITHDRAWN, SUPERSEDED, DECLINED, ANNULLED,
 RETRACTED, DISPLACED
 STATUS_NOTIFICATION
 STATUS_COMMENTS

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TIME_QUEUED
 RESPONSE_TIME_LIMIT
 TIME_OF_LAST_UPDATE
 PRIMARY_PROVIDER_COMMENTS
 SELLER_COMMENTS
 CUSTOMER_COMMENTS
 SELLER_NAME
 SELLER_PHONE
 SELLER_FAX
 SELLER_EMAIL
 CUSTOMER_NAME
 CUSTOMER_PHONE
 CUSTOMER_FAX
 CUSTOMER_EMAIL
 REASSIGNED_REF
 REASSIGNED_CAPACITY
 REASSIGNED_START_TIME
 REASSIGNED_STOP_TIME

002-4.3.8.3 Seller Approves Ancillary Service (ancsell)

Seller Approves Ancillary Service (**ancsell**) is used by the Seller to confirm acceptance after the Seller has approved the purchase of ancillary service.

The following fields may be submitted in continuation records for the ancshell Template to convey ancillary rights from multiple original ancillary service reservations to this new reservation: REASSIGNED_REF, REASSIGNED_CAPACITY, REASSIGNED_START_TIME, and REASSIGNED_STOP_TIME. If the Provider/Seller supports the negotiation of price on individual segments of a profiled reservation request (support for reservation profiles is at the discretion of the Provider), OFFER_PRICE, START_TIME and STOP_TIME Data Elements may be submitted in continuation records to modify the Seller's offer price associated with the profile segment(s) corresponding to START_TIME and STOP_TIME. OFFER_PRICE associated with each segment of a profiled request must match the corresponding BID_PRICE for the reservation request's STATUS to be set to ACCEPTED.

SELLER_CODE and SELLER_DUNS shall be determined from the registered connection used to input the request.

Template: **ancsell**

1. Input

CONTINUATION_FLAG
 ASSIGNMENT_REF (Required)
 START_TIME
 STOP_TIME
 OFFER_PRICE
 STATUS =

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**INVALID, RECEIVED, STUDY, COUNTEROFFER, SUPERSEDED,
ACCEPTED, REFUSED, DECLINED, ANNULLED, RETRACTED,
DISPLACED**

STATUS_COMMENTS
NEGOTIATED_PRICE_FLAG
RESPONSE_TIME_LIMIT
SELLER_COMMENTS
REASSIGNED_REF
REASSIGNED_CAPACITY
REASSIGNED_START_TIME
REASSIGNED_STOP_TIME

2. **Response** (acknowledgment)

RECORD_STATUS
CONTINUATION_FLAG
ASSIGNMENT_REF
START_TIME
STOP_TIME
OFFER_PRICE
STATUS =

**INVALID, RECEIVED, STUDY, COUNTEROFFER, SUPERSEDED,
ACCEPTED, REFUSED, DECLINED, ANNULLED, RETRACTED,
DISPLACED**

STATUS_COMMENTS
NEGOTIATED_PRICE_FLAG
RESPONSE_TIME_LIMIT
SELLER_COMMENTS
REASSIGNED_REF
REASSIGNED_CAPACITY
REASSIGNED_START_TIME
REASSIGNED_STOP_TIME
ERROR_MESSAGE

002-4.3.8.4 Customer accepts Ancillary Service (anccust)

Customer accepts Ancillary Service (**anccust**) is used by the customer to confirm acceptance after the seller has approved the purchase of ancillary service.

The Customer must change the BID_PRICE to be equal to the OFFER_PRICE before the reservation request's STATUS can be set to CONFIRMED. If the Provider/Seller supports the negotiation of price on individual segments of a profiled reservation request (support for reservation profiles is at the discretion of the Provider), BID_PRICE, START_TIME and STOP_TIME Data Elements may be submitted in continuation records to modify the Customer's bid price associated with the profile segment(s) corresponding to START_TIME and STOP_TIME. BID_PRICE associated with each segment of a profiled request must match the corresponding OFFER_PRICE for the reservation request's STATUS to be set to CONFIRMED.

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CUSTOMER_CODE and CUSTOMER_DUNS shall be determined from the registered connection used to input the request.

Template: **anccust**

1. **Input**

CONTINUATION_FLAG
 ASSIGNMENT_REF (Required)
 START_TIME
 STOP_TIME
 REQUEST_REF
 DEAL_REF
 BID_PRICE
 PRECONFIRMED
 STATUS=
 REBID, CONFIRMED, WITHDRAWN
 STATUS_COMMENTS
 STATUS_NOTIFICATION (If left blank, then the original URL from the
 ancrequest will be used
 CUSTOMER_COMMENTS

2. **Response** (Acknowledgment)

RECORD_STATUS
 CONTINUATION_FLAG
 ASSIGNMENT_REF
 START_TIME
 STOP_TIME
 REQUEST_REF
 DEAL_REF
 BID_PRICE
 PRECONFIRMED
 STATUS =
 REBID, CONFIRMED, WITHDRAWN
 STATUS_COMMENTS
 STATUS_NOTIFICATION
 CUSTOMER_COMMENTS
 ERROR_MESSAGE

002-4.3.8.5 Seller to Reassign Service Rights to Another Customer (ancassign)

Seller to Reassign Service Rights to Another Customer (Input) (**ancassign**) is used by the seller to ask the Transmission Services Information Provider to reassign some or all of the seller's rights to Services to another Customer, for seller confirmed transactions that have occurred off the OASIS Node.

Implementation of this Template is optional until such time that a business case requiring the use of such a facility to selectively reassign ancillary services is clearly demonstrated.

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The TSIP shall assign a unique ASSIGNMENT_REF in the response (acknowledgment) and enter the status CONFIRMED as viewed in the **ancstatus** Template.

SELLER_CODE and SELLER_DUNS shall be determined from the registered connection used to input the request.

Only the following fields may be redefined in a continuation record for the **ancassign** input Template: CAPACITY, START_TIME, STOP_TIME, REASSIGNED_REF, REASSIGNED_CAPACITY, REASSIGNED_START_TIME, and REASSIGNED_STOP_TIME.

SELLER_CODE and SELLER_DUNS shall be determined from the registered connection used to input the request.

Template: **ancassign**

1. Input

CONTINUATION_FLAG
 CUSTOMER_CODE
 CUSTOMER_DUNS
 CONTROL_AREA
 ANC_SERVICE_POINT
 CAPACITY
 SERVICE_INCREMENT
 AS_TYPE
 START_TIME
 STOP_TIME
 OFFER_PRICE
 POSTING_NAME
 REASSIGNED_REF
 REASSIGNED_CAPACITY (Capacity being sold from each previous assignment)
 REASSIGNED_START_TIME
 REASSIGNED_STOP_TIME
 SELLER_COMMENTS

2. Response (acknowledgment)

RECORD_STATUS
 CONTINUATION_FLAG
 ASSIGNMENT_REF (assigned by TSIP)
 CUSTOMER_CODE
 CUSTOMER_DUNS
 CONTROL_AREA
 ANC_SERVICE_POINT
 CAPACITY (Total capacity being reassigned)
 SERVICE_INCREMENT
 AS_TYPE
 START_TIME

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STOP_TIME
 OFFER_PRICE
 POSTING_NAME
 REASSIGNED_REF
 REASSIGNED_CAPACITY (Capacity being sold from each previous assignment)
 REASSIGNED_START_TIME
 REASSIGNED_STOP_TIME
 SELLER_COMMENTS
 ERROR_MESSAGE

002-4.3.9 Seller Posting of Ancillary Services**002-4.3.9.1** Seller Ancillary Services Posting (ancpost)

Seller Ancillary Services Posting (**ancpost**) is used by the Seller to post information regarding the different services that are available for sale by third party Sellers of ancillary services.

SELLER_CODE and SELLER_DUNS shall be determined from the registered connection used to input the request.

Template: **ancpost**

1. Input

CONTROL_AREA
 SERVICE_DESCRIPTION
 CAPACITY
 SERVICE_INCREMENT
 AS_TYPE
 START_TIME
 STOP_TIME
 OFFER_START_TIME
 OFFER_STOP_TIME
 SALE_REF
 OFFER_PRICE
 SELLER_COMMENTS

2. Response (acknowledgment)

RECORD_STATUS
 POSTING_REF (Assigned by TSIP)
 CONTROL_AREA
 SERVICE_DESCRIPTION
 CAPACITY
 SERVICE_INCREMENT
 AS_TYPE
 START_TIME
 STOP_TIME
 OFFER_START_TIME

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OFFER_STOP_TIME
 SALE_REF
 OFFER_PRICE
 SELLER_COMMENTS
 ERROR_MESSAGE

002-4.3.9.2 Seller Modify Ancillary Services Posting (ancupdate)

Seller Modify Ancillary Services Posting (**ancupdate**) is used by the Seller to modify posted information regarding ancillary services that are available for sale by a third party Seller.

SELLER_CODE and SELLER_DUNS shall be determined from the registered connection used to input the request.

Template: **ancupdate**

1. Input

POSTING_REF (Required)
 CAPACITY (only if modified)
 SERVICE_DESCRIPTION (only if modified)
 START_TIME (only if modified)
 STOP_TIME (only if modified)
 OFFER_START_TIME (only if modified)
 OFFER_STOP_TIME (only if modified)
 SALE_REF (only if modified)
 OFFER_PRICE (only if modified)
 SELLER_COMMENTS (only if modified)

2. Response (acknowledgment)

RECORD_STATUS
 POSTING_REF
 CAPACITY
 SERVICE_DESCRIPTION
 START_TIME
 STOP_TIME
 OFFER_START_TIME
 OFFER_STOP_TIME
 SALE_REF
 OFFER_PRICE
 SELLER_COMMENTS
 ERROR_MESSAGE

002-4.3.10 Informal Messages**002-4.3.10.1** Provider/Customer Want Ads and Informal Message Posting Request (messagepost)

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Provider/Customer Want Ads and Informal Message Posting Request (**messagepost**) is used by Providers and Customers who wish to post a message. The valid entries for CATEGORY shall be defined by providers and shall be listed in the List of CATEGORY Template.

CUSTOMER_CODE and CUSTOMER_DUNS shall be determined from the registered connection used to input the request.

When the OASIS node is out of service and transmission requests are received by the TP by phone or fax then the CATEGORY=OASIS_MAINTENANCE_OUTAGE will be used to document the outage. The VALID_FROM_TIME will be the time the outage started and VALID_TO_TIME will be the time the outage ended. A list of all transactions that occurred during the outage and entered afterwards will be available through a query of the **transstatus** Template using START_TIME_QUEUED=<VALID_FROM_TIME> and STOP_TIME_QUEUED=<VALID_TO_TIME>.

Template: **messagepost**

1. **Input**

SUBJECT
CATEGORY
VALID_FROM_TIME
VALID_TO_TIME
MESSAGE (must be specified)

2. **Response** (acknowledgment)

RECORD_STATUS
POSTING_REF (assigned by information provider)
SUBJECT
CATEGORY
VALID_FROM_TIME
VALID_TO_TIME
MESSAGE
ERROR_MESSAGE

002-4.3.10.2 Message (message)

Message (**message**) is used to view a posted Want Ad or Informal Message. The CATEGORY Data Element can be queried.

Template: **message**

1. **Query**

CUSTOMER_CODE
CUSTOMER_DUNS
POSTING_REF

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CATEGORY
 VALID_FROM_TIME
 VALID_TO_TIME
 TIME_POSTED

2. **Response**

CUSTOMER_CODE
 CUSTOMER_DUNS
 POSTING_REF
 SUBJECT
 CATEGORY
 VALID_FROM_TIME
 VALID_TO_TIME
 TIME_POSTED
 CUSTOMER_NAME
 CUSTOMER_PHONE
 CUSTOMER_FAX
 CUSTOMER_EMAIL
 MESSAGE

002-4.3.10.3 Provider/Sellers Message Delete Request (messagedelete)

Provider/Sellers Message Delete Request (***messagedelete***) is used by Providers and Sellers who wish to delete their message. The POSTING_REF number is used to determine which message.

CUSTOMER_CODE and CUSTOMER_DUNS shall be determined from the registered connection used to input the request.

Template: **messagedelete**

1. **Input**

POSTING_REF

2. **Response** (Acknowledgment)

RECORD_STATUS
 POSTING_REF
 ERROR_MESSAGE

002-4.3.10.4 Personnel Transfers (personnel)

The ***personnel*** Template is used to indicate when personnel are transferred between the merchant function and the Transmission Provider function as required by FERC Statutes and Regulations (18 CFR 37.4(b)(2)) .

Template: **personnel**

1. **Query**

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TIME_OF_LAST_UPDATE
 START_TIME_POSTED
 STOP_TIME_POSTED

2. Response

POSTING_NAME
 EMPLOYEE_NAME
 FORMER_POSITION
 FORMER_COMPANY
 FORMER_DEPARTMENT
 NEW_POSITION
 NEW_COMPANY
 NEW_DEPARTMENT
 DATE_TIME_EFFECTIVE
 TIME_POSTED
 TIME_OF_LAST_UPDATE

002-4.3.10.5 Discretion (discretion)

The **discretion** Template is used to describe the circumstances when discretion was exercised in applying terms of the tariff, as described in the FERC Statutes and Regulations (18 CFR 37.4(b)(5)(iii)).

Template: **discretion**

1. Query

START_TIME_POSTED
 STOP_TIME_POSTED
 START_TIME
 STOP_TIME
 SERVICE_TYPE
 SERVICE_NAME
 TIME_OF_LAST_UPDATE

2. Response

POSTING_NAME
 RESPONSIBLE_PARTY_NAME (name of person granting discretion)
 SERVICE_TYPE (ancillary or transmission)
 SERVICE_NAME (make consistent with offering Templates)
 TARIFF_REFERENCE
 START_TIME
 STOP_TIME
 DISCRETION_DESCRIPTION
 TIME_POSTED
 TIME_OF_LAST_UPDATE

002-4.3.10.6 Standards of Conduct (stdconduct)

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The **stdconduct** Template indicates when information is disclosed in a manner contrary to the standards of conduct, as described in the FERC Statutes and Regulations (18 CFR 37.4(b)(4)(ii)).

Template: **stdconduct**

1. **Query**

START_TIME_POSTED
STOP_TIME_POSTED
TIME_OF_LAST_UPDATE

2. **Response**

POSTING_NAME
RESPONSIBLE_PARTY_NAME
STANDARDS_OF_CONDUCT_ISSUES
TIME_POSTED
TIME_OF_LAST_UPDATE

002-4.3.11 Audit Log

The OASIS audit log report facility shall be implemented by the definition of the following Templates:

transofferingaudit	- audit counterpart to transoffering
ancofferingaudit	- audit counterpart to ancoffering
scheduledetailaudit	- audit counterpart to scheduledetail
securityaudit	- audit counterpart to security
systemdataaudit	- audit counterpart to systemdata
transstatusaudit	- audit counterpart to transstatus
ancstatusaudit	- audit counterpart to ancstatus
personnelaudit	- audit counterpart to personnel
discretionaudit	- audit counterpart to discretion
dtdconductaudit	- audit counterpart to stdconduct

Each of these audit Templates is an extension to the OASIS Template definitions of their non-audit counterparts. The requirements for implementation of the audit Templates is defined in the following sections.

002-4.3.11.1 Query Variables

Each of the audit Templates defined shall support exactly the same set of Query Variables as defined for their non-audit Template counterpart. As with the standard Template definitions, audit reports may be downloaded in Comma Separated Value (CSV) format by the specification of the OUTPUT_FORMAT=DATA Query Variable, or may be viewed using a web browser when OUTPUT_FORMAT=HTML is specified.

002-4.3.11.2 Audit Report Response Format

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Audit report information shall be returned in response to a valid query request made to any of the audit Templates defined. Query variables may be specified as allowed by each individual Template and shall have the effect of limiting the scope of audit data returned to that set of information selected by that combination of additional Query Variables.

The response to an audit query shall consist of ordered sets of information reflecting both the current information as posted on OASIS and the full history of changes made to that information. These ordered sets of information are organized around the individual postings or "records" returned in response to the applicable non-audit Template. For example, execution of the ***transstatus*** (or ***ancstatus***) Template returns a set of individual records identified by unique ASSIGNMENT_REF. The ***transstatusaudit*** Template response is then organized by ASSIGNMENT_REF and would show all changes made to those Data Elements associated with each individual ASSIGNMENT_REF record.

Execution of the ***transoffering*** (or ***ancoffering*** or ***systemdata***) Template returns a set of individual records identified by unique POSTING_REF. The ***transofferingaudit*** Template response is then organized by POSTING_REF and would show all changes made to those Data Elements associated with each individual POSTING_REF record.

The specific audit report response format is detailed in the following sections.

002-4.3.11.3 Comma Separated Value (CSV) Format

A CSV formatted audit Template response shall comply with all the general provisions and specifications defined previously for a CSV formatted response. The CSV response records shall be organized in sets of records containing both the latest information posted on OASIS and all changes made to that information over time.

002-4.3.11.3.1 CSV Response Header Records

The following additional Data Element names shall be included as the first set of Data Elements in the COLUMN_HEADERS record and the corresponding Data Element values shall be included in each subsequent Data Record (row) returned in the audit response:

RECORD_TYPE
TIME_OF_LAST_UPDATE
MODIFYING_COMPANY_CODE
MODIFYING_NAME

These Data Elements shall precede the standard Data Elements associated with the specific Template being invoked.

The RECORD_TYPE Data Element shall take on one of the following restricted values:

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- I** - denotes a record of information as it appeared on its initial Insertion (posting) on OASIS
- U** - denotes a record of information as it appeared immediately following an Update to the posted information
- D** - denotes a record of any Deleted information as it last appeared on OASIS.

The TIME_OF_LAST_UPDATE Data Element shall contain the time that the Template Data Elements were inserted, updated or deleted to the values reported in that record (row) of the response. This Data Element is identical to the standard Template TIME_OF_LAST_UPDATE Data Element, and is included as part of the fixed audit specific Data Element columns to aid users in sorting the audit response records.

The MODIFYING_COMPANY_CODE and MODIFYING_NAME Data Elements shall contain the identity of the entity (by the appropriate 4-6 character customer/provider code) and the person that inserted, updated or deleted the Data Elements to the values reported in that record (row) of the response. In the event the modification of posted information cannot be associated with a specific OASIS user (e.g., as a result of an automated back-end process), the MODIFYING_NAME Data Element may be null.

Immediately following the MODIFYING_NAME column header, each of the standard non-audit counterpart Template's Data Elements shall be listed in the exact sequence defined for that non-audit Template.

Finally, OASIS implementations may include additional Data Elements identified by unique column headers appended after the fixed audit and standard Template Data Elements. These additional Data Elements may be used to convey implementation specific information maintained in the OASIS database in association with the data being audited.

002-4.3.11.3.2 CSV Data Records

In formatting an audit response, OASIS shall collect and order information into sets of Data Records (rows). Each set of records returned shall include a record corresponding to the information as original inserted into the OASIS database denoted by a RECORD_TYPE of "I", and as many additional records with RECORD_TYPE of "U" corresponding to each update made to that information over time. If applicable, a record may also be returned in the set with a RECORD_TYPE of "D" if the corresponding information was effectively deleted from the database. The number of sets of audit report records returned in response to an audit query shall be determined by the number and type of additional Template Query Variables specified by the user.

002-4.3.11.3.3 CSV Continuation Records

Continuation records are used in certain standard Phase 1-A Templates to report repeating Data Elements associated with a single OASIS transaction such as demand profiles or the reassignment of rights on the secondary market. The first (CONTINUATION_FLAG=N) record and all associated

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continuation (CONTINUATION_FLAG=Y) records shall be treated as a group when generating the response to an audit query. To minimize the volume of information reported in an audit response, implementations may elect to suppress repeating the contents of information contained in continuation records if none of the Data Elements associated with those continuation records were modified. If, however, the Data Element(s) to be reported by an audit record are contained in one or more of the continuation records (e.g., a change was made to a transmission reservation's demand profile), the first (CONTINUATION_FLAG=N) record followed by the entire group of continuation (CONTINUATION_FLAG=Y) records shall be reported.

002-4.3.11.3.4 CSV Response Header Records

Finally, OASIS implementations may include additional Data Elements identified by unique column headers appended after the fixed audit and standard Template Data Elements. These additional Data Elements may be used to convey implementation specific information maintained in the OASIS database in association with the data being audited.

002-4.3.11.4 HTML Output

Specification of the Query Variable OUTPUT_FORMAT=HTML shall minimally result in an audit report formatted identically to the CSV Format (OUTPUT_FORMAT=DATA) with the exception that the response shall be returned using the HTTP header "**Content-type: text/plain**" specification. This will result in the CSV Data Records being rendered in simple text within the user's web-browser. More sophisticated HTML formatted responses to audit queries may be provided by the TSIPs at their discretion.

002-4.3.11.5 Special Audit Template Considerations**Transoffering**

The **transoffering** Template is used to convey information on transmission services offered for sale as well as the availability of transmission capability (TTC/ATC). The proposed audit reporting scheme may prove inadequate to generate audits of both the commercial aspects of offers posted on OASIS (i.e., price, etc.) and the reliability aspects associated with those offers (i.e., ATC) depending on how these two different types of information are represented internally by each OASIS node.

For those OASIS implementations that handle TTC/ATC information separately from the posting of commercial offers of service, audit reports generated by the **transofferingaudit** Template may be limited to only reporting changes to the Data Elements associated with the commercial aspects of the offer (e.g., OFFER_PRICE, OFFER_START_TIME, etc.), and may return a null value for the CAPACITY Data Element. These nodes shall use the **systemdataaudit** Template audit reporting facility to allow for the full auditing of changes made to TTC and ATC postings as required under Federal Regulations.

Scheduledetail

The ***scheduledetail*** Template combines information from one or more transmission reservations and transmission security event postings (e.g., TLRs) with information posted on actual scheduled use of the transmission system. Audit information related to changes made to a given transmission reservation shall be auditable using the ***transstatusaudit*** Template. Audit information related to the posting of transmission security events that led to a curtailment or interruption of service, or the denial of a request to schedule service shall be auditable using the ***securityaudit*** Template. Therefore, the ***scheduledetailaudit*** Template shall only be required to report changes to the following Data Elements associated with the ***scheduledetail*** Template:

TRANSACTION_ID
 START_TIME
 STOP_TIME
 SCHEDULE_REQUESTED
 SCHEDULE_GRANTED
 ASSIGNMENT_REF
 PROVIDER_ACTION
 SCHEDULE_LIMIT
 CURTAILMENT_OPTIONS
 SECURITY_REF

002-4.4 FILE REQUEST AND FILE DOWNLOAD EXAMPLES

In the examples, the end-of-line (eol) character is represented by the character, "␣". This symbol may appear different on displays or printouts.

002-4.4.1 File Example for Hourly Offering

Example of the request to Primary Provider, aaa, and response for Seller, wxyz, for PATH_NAME "W/AAAA/PATH-ABC/" for April 10, 1996 from 8 a.m. to 3 p.m. (Note that the PATH_NAME consists of a REGION_CODE, PRIMARY_PROVIDER_CODE, PATH_CODE, and an OPTIONAL_CODE, separated with a slash, "/".)

The VERSION for this release is 1.4. The request is in the form of a URL query string and the response is an ASCII delimited file.

1. Query

```
http://(OASIS Node name)/OASIS/aaa/data/transoffering?
ver=1.2&templ=transoffering&fmt=data&pprov=AAAA
&pprovduns=123456789&path=W/AAA/ABC//&seller=WXYZAA
&sellerduns=987654321&POR=aaa&POD=bbb&servinre=hourly&
TSCLASS1=firm&TSCLASS2=non-
firm&tz=PD&stime=19960410080000PD&sptime=19960410150000PD
```

2. Response Data

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REQUEST-STATUS=200. (Successful)
 TIME_STAMP=19960409113526PD
 VERSION=1.4
 TEMPLATE=transoffering
 OUTPUT_FORMAT=DATA

PRIMARY_PROVIDER_CODE=AAAA
 PRIMARY_PROVIDER_DUNS=123456789
 DATA_ROWS=14
 COLUMN_HEADERS=TIME_OF_LAST_UPDATE,SELLER_CODE,SELLER_DUNS,PATH_NAME,POINT_OF_RECEIPT,POINT_OF_DELIVERY,INTERFACE_TYPE,OFFER_START_TIME,OFFER_STOP_TIME,START_TIME,STOP_TIME,CAPACITY,SERVICE_INCREMENT,TS_CLASS,TS_TYPE,TS_PERIOD,TS_SUBCLASS,SALE_REF,POSTING_REF,CEILING_PRICE,OFFER_PRICE,PRICE_UNITS,SERVICE_DESCRIPTION,SELLER_NAME,SELLER_PHONE,SELLER_FAX,SELLEREMAIL,SELLER_COMMENTS
 19960409030000PD,WXYZ,987654321,W/AAA/ABC//,N/A,N/A,E,19960402080000PD,19960410080000PD,19960410080000PD,19960410090000PD,300, HOURLY, FIRM, POINT_TO_POINT, OFF_PEAK, N/A, N/A, A001, 1.50, 1.35, MW, N/A, N/A, N/A, N/A, N/A, 10% DISCOUNT
 19960409030000PD,WXYZ,987654321,W/AAA/ABC//,N/A,N/A,E,19960402080000PD,19960410080000PD,19960410080000PD,19960410090000PD,300, HOURLY, NON-FIRM, POINT_TO_POINT, OFF_PEAK, N/A, N/A, A001, 1.50, 1.35, MW, N/A, N/A, N/A, N/A, N/A, 10% DISCOUNT
 19960409030000PD,WXYZ,987654321,W/AAA/ABC//,N/A,N/A,E,19960402080000PD,19960410080000PD,19960410090000PD,1996041010000PD,300, HOURLY, FIRM, POINT_TO_POINT, OFF_PEAK, N/A, N/A, A001, 1.50, 1.35, MW, N/A, N/A, N/A, N/A, N/A, 10% DISCOUNT
 19960409030000PD,WXYZ,987654321,W/AAA/ABC//,N/A,N/A,E,19960402080000PD,19960410080000PD,19960410090000PD,1996041010000PD,300, HOURLY, NON-FIRM, POINT_TO_POINT, OFF_PEAK, N/A, N/A, A001, 1.50, 1.35, MW, N/A, N/A, N/A, N/A, N/A, 10% DISCOUNT
 19960409030000PD,WXYZ,987654321,W/AAA/ABC//,N/A,N/A,E,19960402080000PD,19960410080000PD,1996041010000PD,19960410110000PD,300, HOURLY, FIRM, POINT_TO_POINT, OFF_PEAK, N/A, N/A, A001, 1.50, 1.35, MW, N/A, N/A, N/A, N/A, N/A, 10% DISCOUNT
 19960409030000PD,WXYZ,987654321,W/AAA/ABC//,N/A,N/A,E,19960402080000PD,19960410080000PD,1996041010000PD,19960410110000PD,300, HOURLY, NON-FIRM, POINT_TO_POINT, OFF_PEAK, N/A, N/A, A001, 1.50, 1.35, MW, N/A, N/A, N/A, N/A, N/A, 10% DISCOUNT

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```

19960409030000PD,WXYZ,987654321,W/AAA/ABC//,N/A,N/A,E,19960
402080000PD,19960410080000PD,19960410
110000PD,19960410120000PD,300, HOURLY, FIRM,
POINT_TO_POINT, OFF_PEAK, N/A,
N/A,A001,1.50,1.35,MW,N/A,N/A,N/A,N/A,N/A,10% DISCOUNT ↵
19960409030000PD,WXYZ,987654321,W/AAA/ABC//,N/A,N/A,E,19960
402080000PD,19960410080000PD,19960410
110000PD,19960410120000PD,300, HOURLY, NON-FIRM,
POINT_TO_POINT, OFF_PEAK, N/A, N/A,A001,1.50,
1.35,MW,N/A,N/A,N/A,N/A,N/A, 10% DISCOUNT ↵
...
...
...
19960409030000PD,WXYZ,987654321,W/AAA/ABC//,N/A,N/A,E,19960
402080000PD,19960410080000PD,19960410
140000PD,19960410150000PD,300, HOURLY, FIRM,
POINT_TO_POINT, OFF_PEAK, N/A,
N/A,A001,1.50,1.35,MW,N/A,N/A,N/A,N/A,N/A,10% DISCOUNT ↵
19960409030000PD,WXYZ,987654321,W/AAA/ABC//,N/A,N/A,E,19960
402080000PD,19960410080000PD,19960410
140000PD,19960410150000PD,300, HOURLY, NON-FIRM,
POINT_TO_POINT, OFF_PEAK, N/A, N/A,A001,1.50,
1.35,MW,N/A,N/A,N/A,N/A,N/A, 10% DISCOUNT ↵

```

002-4.4.2 File Example for Hourly Schedule Data

This example shows a request for the hourly schedule data from Primary Provider, AAAA, related to the seller, WXYZ, for the period 10 a.m. to 3 p.m. on April 10, 2000.

There are two identical requests examples using two slightly different methods. The first request is using a HTTP URL request string through an HTML GET method. The second request is a similar example using `fetch_http` from a file using a POST method.

1. Query

```

URL Request (HTTP method=GET)
http://(OASIS Node name)/OASIS/aaaa/data/scheduledetail? ver=1.4&
pprov=AAAA& templ=scheduledetail& fmt=data
&pprovduns=123456789 &path=W/AAA/ABC//& seller=WXYZ
&por=BBB &pod=CCC& tz=PD& stime=20000410100000PD&
sptime=20000410150000PD

```

```

URL Request (HTTP method=POST)
$ fetch_http http://(OASIS Node name)/OASIS/aaaa/data/OASISdata -f
c:/OASIS/wxyz/upload/infile.txt Where in-file.txt contains the following:
ver=1.4& pprov=AAAA& templ=scheduledetail& fmt=data
&pprovduns=123456789 &path=W/AAA/ABC//& seller=WXYZ
&por=BBB &pod=CCC& tz=PD& stime=20000410100000PD&
sptime=20000410150000PD

```

2. Response Data

```

REQUEST_STATUS=200.␣
ERROR_MESSAGE=No error. ␣
TIME_STAMP=20000410160523ES.␣
VERSION=1.4.␣
TEMPLATE=scheduledetail.␣
OUTPUT_FORMAT=DATA.␣
PRIMARY_PROVIDER_CODE=AAAA.␣
PRIMARY_PROVIDER_DUNS=123456789.␣
RETURN_TZ=PD.␣
DATA_ROWS=3.␣
COLUMN_HEADERS=CONTINUATION_FLAG,
TIME_OF_LAST_UPDATE, SCHEDULE_REF, TRANSACTION_ID,
PATH_NAME, POINT_OF_RECEIPT, POINT_OF_DELIVERY,
GCA_CODE, LCA_CODE, SOURCE, SINK, SCHEDULE_PRIORITY,
START_TIME, STOP_TIME, SCHEDULE_REQUESTED,
SCHEDULE_GRANTED, ASSIGNMENT_REF, SELLER_CODE,
SELLER_DUNS, CUSTOMER_CODE, CUSTOMER_DUNS,
AFFILIATE_FLAG, SERVICE_INCREMENT, TS_CLASS, TS_TYPE,
TS_PERIOD, TS_WINDOW, TS_SUBCLASS,
NERC_CURTAILMENT_PRIORITY,
OTHER_CURTAILMENT_PRIORITY, CAPACITY_USED,
PROVIDER_ACTION, SCHEDULE_LIMIT, CURTAILMENT_OPTIONS,
SECURITY_REF, INITIATING_PARTY, RESPONSIBLE_PARTY,
PROCEDURE_NAME, PROCEDURE_LEVEL, FACILITY_LOCATION,
FACILITY_NAME, FACILITY_CLASS, FACILITY_LIMIT_TYPE.␣
N, 20000409030000PD,12345,2233, W/AAA/ABC//, BBB, CCC,,,,,1,
20000410100000PD, 20000410110000PD,300,300,856743,
wxyz,987654321, WXYZAA,987654322, Y, HOURLY, NON_FIRM,
POINT_TO_POINT, OFF_PEAK, FIXED,,1,1,300,,,,,,,,,␣
N, 20000409030000PD,12346,2233, W/AAA/ABC//, BBB, CCC,,,,,1,
20000410130000PD,
20000410140000PD,300,300,856743,wxyz,987654321,
WXYZAA,987654322, Y, HOURLY, NON_FIRM, POINT_TO_POINT,
OFF_PEAK, FIXED,,1,1,300,,,,,,,,,␣
N, 20000409030000PD,12347,2233, W/AAA/ABC//, BBB, CCC,,,,,1,
20000410140000PD,
20000410150000PD,300,300,856743,wxyz,987654321,
WXYZAA,987654322, Y, HOURLY, NON_FIRM, POINT_TO_POINT,
OFF_PEAK, FIXED,,1,1,300,,,,,,,,,␣

```

002-4.4.3 Customer Posting a Transmission Service Offering

This example shows how a Customer would post for sale the transmission service that was purchased previously. The Seller would create a file and upload the file using the FETCH_HTTP program to send a file to the OASIS Node of the Primary Provider.

1. Input:

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```

VERSION=1.4.
TEMPLATE=transpost.
OUTPUT_FORMAT=DATA.
PRIMARY_PROVIDER_CODE=AAAA.
PRIMARY_PROVIDER_DUNS=123456789.
DATA_ROWS=1.
COLUMN_HEADERS=PATH_NAME, POINT_OF_RECEIPT,
POINT_OF_DELIVERY, INTERFACE_TYPE, CAPACITY,
SERVICE_INCREMENT, TS_CLASS, TS_TYPE, TS_PERIOD,
TS_SUBCLASS, START_TIME, STOP_TIME, OFFER_START_TIME,
OFFER_STOP_TIME, SALE_REF, OFFER_PRICE,
SERVICE_DESCRIPTION, SELLER_COMMENTPF.
WXYZ,987654321,W/AAA/ABC//,N/A,N/A,E,150, HOURLY, FIRM,
POINT_TO_POINT, OFF_PEAK, N/A,,
19960402080000PD,19960410080000PD,
19960410080000PD,19960410150000PD, A123,.90,N/A,"As Joe said,
""It is a good buy""
FETCH_HTTP Command to send posting $ fetch_http http://(OASIS
Node name)/OASIS/abcd/data/transrequest -f
c:/OASIS/abcd/upload/post.txt

```

2. Response Data

```

REQUEST-STATUS=200. (Successful)
TIME_STAMP=19960409113526PD.
VERSION=1.4.
TEMPLATE=transpost.
OUTPUT_FORMAT=DATA.
PRIMARY_PROVIDER_CODE=AAAA.
PRIMARY_PROVIDER_DUNS=123456789.
DATA_ROWS=1.
COLUMN_HEADERS=RECORD_STATUS, PATH_NAME,
POINT_OF_RECEIPT, POINT_OF_DELIVERY, INTERFACE_TYPE,
CAPACITY, SERVICE_INCREMENT, TS_CLASS, TS_TYPE,
TS_PERIOD, TS_SUBCLASS, START_TIME, STOP_TIME,
OFFER_START_TIME, OFFER_STOP_TIME, SALE_REF,
OFFER_PRICE, SERVICE_DESCRIPTION, SELLER_COMMENTS,
ERROR_MESSAGE.
200,WXYZ,987654321,W/AAA/ABC//,N/A,N/A,E,150, HOURLY, FIRM,
POINT_TO_POINT, OFF_PEAK, N/A,
19960402080000PD,19960410080000PD,
19960410080000PD,19960410150000PD, A123,.90,N/A, "As Joe said,
""It is a good buy"", No Error.

```

002-4.4.4 Example of Re-aggregating Purchasing Services using Reassignment

The following examples do not show the complete Template information, but only show those elements of the Template of interest to the example.

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- a. Customer #1, "BestE" requests the purchase of 150 MW Firm ATC for 8 a.m. to 5 p.m. for \$1.00 from a Primary Provider (*transrequest*).

TEMPLATE=transrequest.┘

CUSTOMER_CODE=BestE.┘

CAPACITY=150.┘

TS_CLASS="FIRM".┘

START_TIME="1996050708000000PD".┘

STOP_TIME="1996050717000000PD".┘

BID_PRICE="\$1.00".┘

The Information Provider assigns ASSIGNMENT_REF = 5000 on acknowledgment.

- b. Customer #1 purchases 120 MW ATC Non-firm for 3 p.m. to 9 p.m. for \$.90 (*transrequest*). The Information Provider assigns the ASSIGNMENT_REF=5001 when the request for purchase is made and is shown in the acknowledgment.

TEMPLATE="transrequest".┘

CUSTOMER_CODE="BestE".┘

CAPACITY=120.┘

TS_CLASS="NON-FIRM".┘

START_TIME="1996050715000000PD".┘

STOP_TIME="1996050721000000PD".┘

BID_PRICE="\$1.05".┘

- c. Customer #1 becomes Seller #1 and post the Transmission service of 100 MW ATC Non-firm capacity from 8 a.m. to 9 p.m. for resale at \$.90/MW-hour.

TEMPLATE="transpost".┘

SELLER_CODE="BestE".┘

CAPACITY=100.┘

TS_CLASS="NON-FIRM".┘

START_TIME="1996050708000000PD".┘

STOP_TIME="1996050721000000PD".┘

SALE_REF="BEST100".┘

OFFER_PRICE=.90.┘

SELLER_COMMENTS="aggregating two previous purchases".┘

- d. Customer #2 then requests purchase of 100 MW Non-firm from Reseller #1 from 8 a.m. to 6 p.m. for \$0.90/MW-hour (*transrequest*).

TEMPLATE="transrequest".┘

CUSTOMER_CODE="Whlsle".┘

SELLER_CODE="BestE".┘

CAPACITY=100.┘

TS_CLASS="NON-FIRM".┘

START_TIME="1996050708000000PD".┘

STOP_TIME="1996050721000000PD".┘

SALE_REF="BEST100".┘

DEAL_REF="WPC100".┘

BID_PRICE=.90.┘

CUSTOMER_COMMENTS="Only need service until 6 p.m." .┘

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The Information Provider provides the ASSIGNMENT_REF=5002 for this transaction.

e. Seller informs the Information Provider of the reassignment of the previous transmission rights when the seller accepts the customer purchase request (*transsell*).

```

TEMPLATE="transsell"␣
CUSTOMER_CODE="Whlsle"␣
SELLER_CODE="BestE"␣
ASSIGNMENT_REF=5002␣
STATUS="Accepted"␣
REASSIGNED_REF1=5000␣
REASSIGNED_CAPACITY1=100␣
REASSIGNED_START_TIME1="199605070800PD"␣
REASSIGNED_STOP_TIME1="199605071700PD"␣
REASSIGNED_REF2=5001␣
REASSIGNED_CAPACITY2=100␣
REASSIGNED_START_TIME2="199605071700PD"␣
REASSIGNED_STOP_TIME2="199605071800PD"␣

```

002-4.4.5 File Examples of the Use of Continuation Records

a. Basic Continuation Records

The first example of the use of Continuation Records is for the *transrequest* Template submitted by a Seller for purchase of a transmission reservation spanning 16 hours from 06:00 to 22:00 with "ramped" demand at beginning and end of time period. Two additional reservations appear prior to and following the profile to demonstrate the handling of ASSIGNMENT_REF by the OASIS Node.

Only the following fields may be redefined in a continuation record for the *transrequest* Template: CAPACITY_GRANTED, START_TIME, STOP_TIME. Specification of any values corresponding to COLUMN_HEADERS other than CAPACITY-GRANTED, START_TIME, and STOP_TIME will be ignored, however commas must be included to properly align the CAPACITY_GRANTED, START_TIME and STOP_TIME fields.

Input:

```

VERSION=1.4␣
TEMPLATE=transrequest␣
OUTPUT_FORMAT=DATA␣
PRIMARY_PROVIDER_CODE=AEP␣
PRIMARY_PROVIDER_DUNS=123456789␣
RETURN_TZ=ES␣
DATA_ROWS=7␣
COLUMN_HEADERS=CONTINUATION_FLAG,
SELLER_CODE,SELLER_DUNS,PATH_NAME,POINT_OF_RECEIPT,
POINT_OF_DELIVERY,SOURCE,SINK,CAPACITY_REQUESTED,

```

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SERVICE_INCREMENT, TS_CLASS, TS_TYPE, TS_PERIOD,
 TS_WINDOW, TS_SUBCLASS,
 STATUS_NOTIFICATION, START_TIME, STOP_TIME, BID_PRICE,
 PRECONFIRMED, ANC_SVC_LNK, POSTING_REF, SALE_REF,
 REQUEST_REF, DEAL_REF, CUSTOMER_COMMENTS,
 REQUEST_TYPE, REASSIGNED_REF.␣
 N, AEP, 123456789, ABC/XY, CE, MECS,,, 35, DAILY, FIRM,
 POINT_TO_POINT, FULL_PERIOD, FIXED,,
 pub/AEP/incoming, 20000423000000ES, 20000424000000ES, 24.5, Y,
 SC:(AEP:RQ);RV:(AEP:RQ);RF:(FT);EI:(FT);SP:(FT);SU:(FT);, P0123 ,
 S123, R765, D123, Standard daily reservation, ORIGINAL, ␣
 N, AEP, 123456789, ABC/XY, CE, AMPO,,, 5, HOURLY, NON-FIRM,
 POINT_TO_POINT, FULL_PERIOD, FIXED,,
 pub/AEP/incoming, 20000423060000ES, 20000423070000ES, 2.5, Y,
 SC:(AEP:RQ);RV:(AEP:RQ);RF:(FT);EI:(FT);SP:(FT);SU:(FT);, P0123 ,
 S123, R765, D123, First piece of profile spanning 5 records, ORIGINAL, ␣
 Y,,,,,, 10,,,,,, , 20000423070000ES, 20000423080000ES,,,,,, Second
 piece,, ␣
 Y,,,,,, 15,,,,,, , 20000423080000ES, 20000423200000ES,,,,,, Third piece,,
 ␣
 Y,,,,,, 10,,,,,, , 20000423200000ES, 20000423210000ES,,,,,, Fourth
 piece,, ␣
 Y,,,,,, 5,,,,,, , 20000423210000ES, 20000423220000ES,,,,,, Fifth piece,, ␣
 N, AEP, 123456789, ABC/XY, CE, MECS, , , 20, HOURLY, NON-FIRM,
 POINT_TO_POINT, FULL_PERIOD, FIXED,,
 pub/AEP/incoming, 20000423040000ES, 20000423160000ES, 2, Y,
 SC:(AEP:RQ);RV:(AEP:RQ);RF:(FT);EI:(FT);SP:(FT);SU:(FT);, P0123 ,
 S123, R765, D123, Standard hourly reservation after profiled reservation,
 ORIGINAL, ␣

Response:

REQUEST_STATUS=200.␣
 ERROR_MESSAGE=Successfully updated. ␣
 TIME_STAMP=20000422160523ES.␣
 VERSION=1.4.␣
 TEMPLATE=transrequest.␣
 OUTPUT_FORMAT=DATA.␣
 PRIMARY_PROVIDER_CODE=AEP.␣
 PRIMARY_PROVIDER_DUNS=123456789.␣
 RETURN_TZ=ES.␣
 DATA_ROWS=7.␣
 COLUMN_HEADERS=RECORD_STATUS, CONTINUATION_FLAG,
 ASSIGNMENT_REF, SELLER_CODE, SELLER_DUNS, PATH_NAME,
 POINT_OF_RECEIPT, POINT_OF_DELIVERY, SOURCE,
 SINK, CAPACITY_REQUESTED, SERVICE_INCREMENT, TS_CLASS,
 TS_TYPE, TS_PERIOD, TS_WINDOW, TS_SUBCLASS,
 STATUS_NOTIFICATION, START_TIME, STOP_TIME, BID_PRICE,
 PRECONFIRMED, ANC_SVC_LNK, POSTING_REF, SALE_REF,
 REQUEST_REF, DEAL_REF, CUSTOMER_COMMENTS,
 REQUEST_TYPE, REASSIGNED_REF, ERROR_MESSAGE.␣

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200,N,8234, AEP,123456789, ABC/XY, CE, MECS,,,35, DAILY, FIRM,
 POINT_TO_POINT, FULL_PERIOD, FIXED,,
 pub/AEP/incoming,20000423000000ES,20000424000000ES,24.5, Y,
 SC:(AEP:RQ);RV:(AEP:RQ);RF:(FT);EI:(FT);SP:(FT);SU:(FT);, P0123 ,
 S123, R765, D123, Standard daily reservation, ORIGINAL,, No error.␣

200,N,8235, AEP,123456789, ABC/XY, CE, AMPO,,,5, HOURLY, NON-
 FIRM, POINT_TO_POINT, FULL_PERIOD, FIXED,,
 pub/AEP/incoming,20000423060000ES,20000423070000ES,2.5, Y,
 SC:(AEP:RQ);RV:(AEP:RQ);RF:(FT);EI:(FT);SP:(FT);SU:(FT);, P0123 ,
 S123, R765, D123, First piece of profile spanning 5 records, ORIGINAL,,
 No error.␣

200,Y,8235,,,,,,10,,,,,,20000423070000ES,20000423080000ES,,,,,,
 Second piece,,, No error.␣

200,Y,8235,,,,,,15,,,,,,20000423080000ES,20000423200000ES,,,,,,
 Third piece,,, No error.␣

200,Y,8235,,,,,,10,,,,,,20000423200000ES,20000423210000ES,,,,,,
 Fourth piece,,, No error.␣

200,Y,8235,,,,,,5,,,,,,20000423210000ES,20000423220000ES,,,,,, Fifth
 piece,,, No error.␣

200,N,8236, AEP,123456789, ABC/XY, CE, MECS,,,20, HOURLY, NON-
 FIRM, POINT_TO_POINT, FULL_PERIOD, FIXED,,
 pub/AEP/incoming,20000423040000ES,20000423160000ES,2, Y,
 SC:(AEP:RQ);RV:(AEP:RQ);RF:(FT);EI:(FT);SP:(FT);SU:(FT);, P0123 ,
 S123, R765, D123, Standard hourly reservation after profiled reservation,
 ORIGINAL,, No error.␣

b. Submission of Reassignment Information - Case 1:

In the prior example, a reservation request was submitted to "Rseler" for 20MW of Hourly Non-firm service from 04:00 to 16:00. Assume that Rseler has previously reserved service for the CE-VP path for Daily Firm in amount of 50 MW on 4/23 under ASSIGNMENT_REF=7019, and Hourly Non-Firm in amount of 10 MW from 08:00 to 20:00 on 4/23 under ASSIGNMENT_REF=7880. Rseler must designate which transmission service rights are to be reassigned to Cust to satisfy the 20MW from 04:00 to 16:00. This reassignment information is conveyed by Rseler using the *transsell* Template when the reservation request is ACCEPTED. At the SELLER's discretion, rights are assigned from the Non-firm reservation first (ASSIGNMENT_REF=7880) with the balance taken up by the Firm reservation (ASSIGNMENT_REF=7019).

The only fields allowed in "continuation" records for *transsell* Template are REASSIGNED_REF, REASSIGNED_CAPACITY, REASSIGNED_START_TIME, and REASSIGNED_STOP_TIME. Price may not be negotiated for each "segment" in a capacity profile.

Input:

VERSION=1.4.␣
 TEMPLATE=transsell.␣
 OUTPUT_FORMAT=DATA.␣
 PRIMARY_PROVIDER_CODE=AEP.␣

Response:

c. Submission of Reassignment Information - Case 2:

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reservation are for 10MW on 4/23 for "off-peak" hours (00:00- 06:00 and 22:00-24:00) on POR/POD CE-VP. Rseler is assigning rights to 10MW from a prior reservation for the CE-VP path for Daily Firm in amount of 50 MW on 4/23 under ASSIGNMENT_REF=7019 to Cust. AEP would submit the following information using the *transassign* Template to post this (re)sale. The only fields allowed in "continuation" records for the *transassign* Template are CAPACITY, START_TIME, STOP_TIME, REASSIGNED_REF, REASSIGNED_CAPACITY, REASSIGNED_START_TIME, and REASSIGNED_STOP_TIME. Even though there is a one-to-one correspondence between the segments of the new reservations and the reassignment of service from a prior reservation, it is entirely possible that a reservation spanning a single contiguous period would require multiple continuation records to convey reassignment information, and vice versa.

Fields for CUSTOMER_NAME and SELLER_NAME were used to convey user names for subsequent resolution of contact information from user registration.

Input:

```

VERSION=1.4.
TEMPLATE=transassign.
OUTPUT_FORMAT=DATA.
PRIMARY_PROVIDER_CODE=AEP.
PRIMARY_PROVIDER_DUNS=123456789.
RETURN_TZ=ES.
DATA_ROWS=2.
COLUMN_HEADERS=CONTINUATION_FLAG, CUSTOMER_CODE,
CUSTOMER_DUNS, PATH_NAME, POINT_OF_RECEIPT,
POINT_OF_DELIVERY, SOURCE, SINK, CAPACITY_REQUESTED,
CAPACITY_GRANTED, SERVICE_INCREMENT, TS_CLASS, TS_TYPE,
TS_PERIOD, TS_WINDOW, TS_SUBCLASS, START_TIME, STOP_TIME,
OFFER_PRICE, ANC_SVC_LNK, POSTING_NAME, REASSIGNED_REF,
REASSIGNED_CAPACITY, REASSIGNED_START_TIME,
REASSIGNED_STOP_TIME, SELLER_COMMENTS, SELLER_REF.
N, ACSTMR,987654321, , CE, VP,,,10,10, HOURLY, NON-FIRM,
POINT_TO_POINT, OFF_PEAK, FIXED,, 200004230000000ES,
200004230600000ES,2,
SC:(AEP:RQ);RV:(AEP:RQ);RF:(FT);EI:(FT);SP:(FT);SU:(FT);, Jane Doe
,7019,10, 200004230000000ES, 200004230600000ES, Seller comments go
here, S123.
Y,,,,,,10,10,,,,,, 200004232200000ES, 200004240000000ES,,,,7019,10,
200004232200000ES, 200004240000000ES,,

```

Response:

```

REQUEST_STATUS=200.
ERROR_MESSAGE=Successfully updated.
TIME_STAMP=20000422160523ES.
VERSION=1.4.

```

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```

TEMPLATE=transassign.␣
OUTPUT_FORMAT=DATA.␣
PRIMARY_PROVIDER_CODE=AEP.␣
PRIMARY_PROVIDER_DUNS=123456789.␣
RETURN_TZ=ES.␣
DATA_ROWS=2.␣
COLUMN_HEADERS=RECORD_STATUS,CONTINUATION_FLAG,ASSIGNMENT_REF, CUSTOMER_CODE, CUSTOMER_DUNS, PATH_NAME, POINT_OF_RECEIPT, POINT_OF_DELIVERY, SOURCE, SINK, CAPACITY_REQUESTED, CAPACITY_GRANTED, SERVICE_INCREMENT, TS_CLASS, TS_TYPE, TS_PERIOD,TS_WINDOW, TS_SUBCLASS, START_TIME, STOP_TIME, OFFER_PRICE, ANC_SVC_LNK, POSTING_NAME, REASSIGNED_REF, REASSIGNED_CAPACITY, REASSIGNED_START_TIME , REASSIGNED_STOP_TIME , SELLER_COMMENTS, SELLER_REF5, ERROR_MESSAGE.␣
200,N,8207, ACSTMR,987654321, , CE, VP,,,10,10, HOURLY, NON-FIRM, POINT_TO_POINT, OFF_PEAK,FIXED,, 20000423000000ES, 20000423060000ES,2, SC:(AEP:RQ);RV:(AEP:RQ);RF:(FT);EI:(FT);SP:(FT);SU:(FT);, Jane Doe ,7019,10, 20000423000000ES, 20000423060000ES, Seller comments go here, S1235, No error.␣
200,Y,8207,,,,,,,,,10,10,,,,,,,,, 20000423220000ES, 20000424000000ES,,,,,7019,10, 20000423220000ES, 20000424000000ES,,5, No error.␣

```

d. Query of Transmission Reservation Status:

The following typical response to a *transstatus* query might be delivered for 4/23 based on prior examples. Note that the only fields returned in "continuation" records are, ASSIGNMENT_REF, CAPACITY_REQUESTED, CAPACITY_GRANTED, START_TIME, STOP_TIME, REASSIGNED_REF, REASSIGNED_CAPACITY, REASSIGNED_START_TIME, and REASSIGNED_STOP_TIME (price fields are debatable).

Input:

<appropriate query name/value pairs to return reservations for 4/23>

Response:

```

REQUEST_STATUS=200.␣
ERROR_MESSAGE=No error. ␣
TIME_STAMP=20000423160523ES.␣
VERSION=1.4.␣
TEMPLATE=transstatus.␣
OUTPUT_FORMAT=DATA.␣
PRIMARY_PROVIDER_CODE=AEP.␣
PRIMARY_PROVIDER_DUNS=123456789.␣
RETURN_TZ=ES.␣

```

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```

DATA_ROWS=11.
COLUMN_HEADERS=CONTINUATION_FLAG, ASSIGNMENT_REF,
SELLER_CODE, SELLER_DUNS, CUSTOMER_CODE,
CUSTOMER_DUNS, AFFILIATE_FLAG, PATH_NAME,
POINT_OF_RECEIPT, POINT_OF_DELIVERY, SOURCE, SINK,
CAPACITY_REQUESTED, CAPACITY_GRANTED,
SERVICE_INCREMENT, TS_CLASS, TS_TYPE,
TS_PERIOD, TS_WINDOW, TS_SUBCLASS,
NERC_CURTAILMENT_PRIORITY, OTHER_CURTAILMENT_PRIORITY,
START_TIME , STOP_TIME, CEILING_PRICE, OFFER_PRICE,
BID_PRICE, PRICE_UNITS, PRECONFIRMED, ANC_SVC_LINK,
ANC_SVC_REQ, POSTING_REF, SALE_REF, REQUEST_REF,
DEAL_REF, IMPACTED, REQUEST_TYPE, RELATED_REF,
NEGOTIATED_PRICE_FLAG, STATUS, STATUS_NOTIFICATION,
STATUS_COMMENTS, TIME_QUEUED, TIME_OF_LAST_UPDATE,
PRIMARY_PROVIDER_COMMENTS, SELLER_REF,
SELLER_COMMENTS, CUSTOMER_COMMENTS, SELLER_NAME,
SELLER_PHONE, SELLER_FAX, SELLER_EMAIL, CUSTOMER_NAME,
CUSTOMER_PHONE, CUSTOMER_FAX, CUSTOMER_EMAIL,
REASSIGNED_REF, REASSIGNED_CAPACITY,
REASSIGNED_START_TIME , REASSIGNED_STOP_TIME.
N,8207, RSELLR,234567890, ACSTMR,987654321, N, , CE, VP, ,,10,10,
HOURLY, FIRM, POINT_TO_POINT, OFF_PEAK,,,,, 20000423000000ES,
20000423060000ES,2.25,2.2,$/MW, N,
SC:(AEP:AR:121);RV:(AEP:AR:122);RF:(FT);EI:(FT);SP:(FT);SU:(FT);,
SC:M;RV:M;RF:U;EI:U;SP:U;SU:U;, ,S1235, , ,0, RESALE,, L,
CONFIRMED,, , 20000422121354ES, 20000422123054ES, TP
Comments,, Seller comments go here, Customer comments, Joe Smith,
(888)-123-4567, (888)-123-1231, jsmith@xyz.com, Jane Doe, (999)-123-
4567, (999)-123-8823,,7019,10, 20000423000000ES,
20000423060000ES.
Y,8207,,,,,,,,,10,10,,,,,,,,, 20000423220000ES,
20000424000000ES,,,,,,,,,,,,,,,,,,,,,7019,10, 20000423220000ES,
20000424000000ES.
N,8234, AEP,123456789, CUSTMR,345678912, N, , CE, MECS, ,,35,35,
DAILY, FIRM, POINT_TO_POINT,FULL_PERIOD,FIXED,,,,,
20000423000000ES, 20000423060000ES,42,24.5,24.5,$/MW, N,
SC:(AEP:AR:123);RV:(AEP:AR:124);RF:(FT);EI:(FT);SP:(FT);SU:(FT);,
SC:M;RV:M;RF:U;EI:U;SP:U;SU:U;, P0123 , S123, R765, D123,0,
ORIGINAL,, L, CONFIRMED, pub/AEP/incoming,, 20000422131354ES,
20000422133354ES, Standard daily reservation,, System Operator,
Customer comments, Frank Orth, (999)-123-4567, (999)-123-1231,
jsmith@xyz.com, Jane Doe, (999)-123-4567, (999)-123-8823,,7019,10,
20000423000000ES, 20000423060000ES.
N,8235, AEP,123456789, CUSTMR,345678912, N, , CE, AMPO, ,,5,5,
HOURLY, NON-FIRM, POINT_TO_POINT,FULL_PERIOD,FIXED,,,,,
20000423060000ES, 20000423070000ES,2.5,2.5,2.5,$/MW, N,
SC:(AEP:AR:125);RV:(AEP:AR:126);RF:(FT);EI:(FT);SP:(FT);SU:(FT);,
SC:M;RV:M;RF:U;EI:U;SP:U;SU:U;, P0123 , S123, R765, D123,0,
ORIGINAL,,, CONFIRMED, pub/AEP/incoming,, 20000422160523ES,
20000422170523ES, Profile verified,, First piece, Customer comments,

```

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System Operator, (888)-123-4567, (888)-123-1231, jsmith@xyz.com, Jane Doe, (999)-123-4567, (999)-123-8823,,7019,10, 20000423000000ES, 20000423060000ES.↓
Y,8235,,,,,,,,,10,10,,,,,,,,, 20000423070000ES, 20000423080000ES,,,,,,,,,,,,,,,,,,,,,5 Y,8235,,,,,,,,,15,15,,,,,,,,, 20000423080000ES, 20000423200000ES,,,,,,,,,,,,,,,,,,,,,↓
Y,8235,,,,,,,,,10,10,,,,,,,,, 20000423200000ES, 20000423210000ES,,,,,,,,,,,,,,,,,,,,,5 Y,8235,,,,,,,,,5,5,,,,,,,,, 20000423210000ES, 20000423220000ES,,,,,,,,,,,,,,,,,,,,,↓
N,8236, AEP,123456789, CUSTMR,345678912, N, , CE, VP, ,,20,20, HOURLY,NON_FIRM, POINT_TO_POINT,FULL_PERIOD,FIXED,,,, 20000424040000ES, 20000424160000ES,2.5,2.5,2.5,\$/MW, N, SC:(AEP:AR:127);RV:(AEP:AR:128);RF:(FT);EI:(FT);SP:(FT);SU:(FT);, SC:M;RV:M;RF:U;EI:U;SP:U;SU:U;,, P0123 , S123, R765, D123,0, ORIGINAL,,, CONFIRMED, pub/AEP/incoming,, 20000422160723ES, 20000422171523ES, Bid price refused,, Negotiated OFFER_PRICE accepted,, Joe Smith, (888)-123-4567, (888)-123-1231, jsmith@xyz.com, Jane Doe, (999)-123-4567, (999)-123-8823,,7019,20, 20000423040000ES, 20000423080000ES.↓
Y,8236,,,,,,,,,,,,,,,,,,,,,,,,,,,,,7880,10, 20000423080000ES, 20000423160000ES.↓
Y,8236,,,,,,,,,,,,,,,,,,,,,,,,,,,,,7019,10, 20000423080000ES, 20000423160000ES.↓

002-4.4.6 Examples of Negotiation of Price and Partial Service Offer**002-4.4.6.1** Negotiation with Preconfirmation

- a. The Customer submits a PRECONFIRMED transmission service request using the *transrequest* Template. Initially, the STATUS is set to QUEUED by the OASIS Node.
- b. The Seller has the option of setting STATUS via the *transsell* Template to one of the following: INVALID, RECEIVED, STUDY, COUNTEROFFER, ACCEPTED, DECLINED, or REFUSED.
- c. The Seller has the option of entering a CAPACITY_GRANTED and setting the STATUS to COUNTEROFFER via the *transsell* Template if the seller can only provide partial service.
- d. If the Seller sets STATUS to ACCEPTED (and, as required by Section 4.2.10.1i, the OASIS Node forces the Seller to set OFFER_PRICE equal to BID_PRICE as a condition to setting STATUS to ACCEPTED) and CAPACITY_GRANTED is equal to CAPACITY_REQUESTED, the OASIS Node will immediately set STATUS to CONFIRMED. (Section 4.2.10.1k requires the OASIS Node to set a null CAPACITY_GRANTED equal to CAPACITY_REQUESTED when STATUS is set to ACCEPTED.)
- e. The Customer may WITHDRAW request via *transcust* Template at any time up to point where the Seller sets STATUS to ACCEPTED.

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- f. Once the STATUS is CONFIRMED, the OFFER_PRICE and CAPACITY_GRANTED officially becomes the terms of the reservation.

002-4.4.6.2 Negotiations without Preconfirmation

- a. The Customer submits a transmission reservation request with the BID_PRICE less than the CEILING_PRICE via the *transrequest* Template. Initially the STATUS is set to QUEUED by the OASIS Node.
- b. The Seller has the option of setting the STATUS via the *transsell* Template to one of the following: INVALID, RECEIVED, STUDY, ACCEPTED, DECLINED, COUNTEROFFER, or REFUSED. If INVALID (due to invalid entries in the request), DECLINED (due to the Seller determining that the proposed price is not acceptable and further negotiations are not desired), or REFUSED (due to the unavailability of the requested service) are set, the transmission reservation request is terminated.
- c. The Seller has the option of entering a CAPACITY_GRANTED and setting the STATUS to COUNTEROFFER via the *transsell* Template if the seller can only provide partial service.
- d. If the Seller set the STATUS to RECEIVED or STUDY, and determines that the BID_PRICE is too low, the Seller sets the OFFER_PRICE to the price desired, and sets the STATUS to COUNTEROFFER via the *transsell* Template.
- e. The Customer agrees to the OFFER_PRICE, sets the BID_PRICE equal to the OFFER_PRICE, and sets the STATUS to CONFIRMED via the *transcust* Template.
- f. The OFFER_PRICE and CAPACITY_GRANTED with the STATUS of CONFIRMED locks in the terms of the reservation.

002-4.4.6.3 Multiple Step Negotiations

- a. The Customer submits a transmission reservation request with the BID_PRICE less than the CEILING_PRICE via the *transrequest* Template. Initially the STATUS is set to QUEUED by the OASIS Node.
- b. The Seller has the option of setting the STATUS via the *transsell* Template to one of the following: INVALID, RECEIVED, STUDY, ACCEPTED, DECLINED, COUNTEROFFER, or REFUSED. If INVALID, DECLINED, or REFUSED are set, the transmission reservation request is terminated.
- c. The seller has the option of entering a CAPACITY_GRANTED and setting the STATUS to COUNTEROFFER via the *transsell* Template if the seller can only provide partial service. If ATC changes before the request reaches the STATUS of CONFIRMED, seller may change the CAPACITY_GRANTED.
- d. The Seller determines that the BID_PRICE is too low, sets the OFFER_PRICE to the desired value, and sets the STATUS to COUNTEROFFER via the *transsell* Template.

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- e. The Customer responds to the new OFFER_PRICE with an updated BID_PRICE and sets the STATUS to REBID for re-evaluation by the Seller.
- f. The Seller determines that the BID_PRICE now is acceptable, and sets the STATUS to ACCEPTED via the *transsell* Template. The transition to ACCEPTED state requires the OFFER_PRICE to be set to the BID_PRICE: accepting a reservation with an OFFER_PRICE different from BID_PRICE would require the STATUS be set to COUNTEROFFER rather than ACCEPTED (see item c).
- g. The Customer agrees to the OFFER_PRICE and sets the STATUS to CONFIRM via the *transcust* Template.
- h. The OFFER_PRICE and CAPACITY_GRANTED with the STATUS as CONFIRMED locks in the terms of the reservation.

002-4.4.6.4 Negotiations Declined by Seller

- a. The Customer submits a transmission reservation request with the BID_PRICE less than the CEILING_PRICE via the *transrequest* Template. Initially the STATUS is set to QUEUED by the OASIS Node.
- b. The Seller has the option of setting the STATUS via the *transsell* Template to one of the following: INVALID, RECEIVED, STUDY, ACCEPTED, DECLINED, COUNTEROFFER, or REFUSED. If INVALID, DECLINED, or REFUSED are set, the transmission reservation request is terminated.
- c. The Seller determines that the BID_PRICE is too low, sets OFFER_PRICE to his desired value, and sets STATUS to COUNTEROFFER via the *transsell* Template.
- d. The Customer responds to OFFER_PRICE with updated BID_PRICE and sets the STATUS to REBID via the *transcust* Template for re-evaluation by Seller.
- e. The Seller breaks off all further negotiations by setting the STATUS to DECLINED, indicating that the price is unacceptable and that he does not wish to continue negotiations.

002-4.4.6.5 Negotiations Withdrawn by Customer

- a. The Customer submits a transmission reservation request with the BID_PRICE less than the CEILING_PRICE via the *transrequest*. Initially the STATUS is set to QUEUED by the OASIS Node.
- b. The Seller has the option of setting the STATUS via the *transsell* Template to one of the following: INVALID, RECEIVED, STUDY, ACCEPTED, DECLINED, COUNTEROFFER, or REFUSED. If INVALID, DECLINED, or REFUSED are set, the transmission reservation request is terminated.

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- c. The Seller has the option of entering a `CAPACITY_GRANTED` and setting the `STATUS` to `COUNTEROFFER` via the *transell* Template if the seller can only provide partial service.
- d. The Seller determines that the `BID_PRICE` is too low, sets the `OFFER_PRICE` to his desired value, and sets the `STATUS` to `COUNTEROFFER` via the *transsell* Template.
- e. The Customer responds to the `OFFER_PRICE` with an updated `BID_PRICE` and sets the `STATUS` to `REBID` for re-evaluation by Seller.
- f. The Seller determines that the `BID_PRICE` is still too low, sets the `OFFER_PRICE` to another value, and sets `STATUS` to `COUNTEROFFER` via the *transsell* Template.
- g. The Customer breaks off all further negotiations, either because the `OFFER_PRICE` or `CAPACITY_GRANTED` are unacceptable, by setting `STATUS` to `WITHDRAWN` (or the Customer/Seller could go through additional iterations of `REBID/COUNTEROFFER` until negotiations are broken off or the reservation is `CONFIRMED`).

002-4.4.6.6 Negotiations Superseded by Higher Priority Reservation

- a. The Customer submits a transmission reservation request with the `BID_PRICE` less than the `CEILING_PRICE` via the *transrequest* Template. Initially the `STATUS` is set to `QUEUED` by the OASIS Node.
- b. The Seller has the option of setting the `STATUS` via the *transsell* Template to one of the following: `INVALID`, `RECEIVED`, `STUDY`, `ACCEPTED`, `DECLINED`, `COUNTEROFFER`, or `REFUSED`. If `INVALID`, `DECLINED`, or `REFUSED` are set, the transmission reservation request is terminated.
- c. If the Seller determines that another reservation has higher priority and must displace this request, he sets the `STATUS` to `SUPERSEDED` and the negotiations are terminated.
- d. However, if desired and permitted by the tariff, the Seller may set the `STATUS` of a request in any of these previous states (including `COUNTEROFFER` and `ACCEPTED`) to `COUNTEROFFER` with an `OFFER_PRICE` which could avoid the request being superseded, thus allowing the Customer the choice of being `SUPERSEDED` or accepting the proposed `OFFER_PRICE`.

002-4.4.7 Audit Template examples

The following examples are included to show the general type of audit report responses that could be expected to be returned by implementations of the audit reporting Templates as documented above.

002-4.4.7.1 Offerings

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The following is an example of a hypothetical audit query for daily non-firm offerings to the "DDD" point of delivery for Monday August 17, 1998 (line breaks and indentations added to improve readability):

```

REQUEST_STATUS=200 ↵
ERROR_MESSAGE ↵
TIME_STAMP=19980821091601ES ↵
VERSION=1.4 ↵
TEMPLATE=transofferingaudit ↵
OUTPUT_FORMAT=DATA ↵
PRIMARY_PROVIDER_CODE=WXYZ ↵
PRIMARY_PROVIDER_DUNS=78912345 ↵
RETURN_TZ=ES ↵
DATA_ROWS=14 ↵
COLUMN_HEADERS=RECORD_TYPE,TIME_OF_LAST_UPDATE,MODIFYIN
G_COMPANY_CODE,MODIFYIN G_NAME,
TIME_OF_LAST_UPDATE,SELLER_CODE,SELLER_DUNS,PATH_NAME,PO
INT_OF_RECEIPT,POINT_OF_DEL IVERY,
INTERFACE_TYPE,OFFER_START_TIME,OFFER_STOP_TIME,START_TIM
E,STOP_TIME,CAPACITY,SERVIC E_INCREMENT,
TS_CLASS,TS_TYPE,TS_PERIOD,TS_WINDOW,TS_SUBCLASS,ANC_SVC
_REQ,SALE_REF,POSTING_REF,CEILING_PRICE,
OFFER_PRICE,PRICE_UNITS,SERVICE_DESCRIPTION,NERC_CURTAILM
ENT_PRIORITY,OTHER_CURTAIL MENT_PRIORITY,
SELLER_NAME,SELLER_PHONE,SELLER_FAX,SELLER_EMAIL,SELLER_C
OMMENTS ↵
U,19980815131756ES,WXYZ,Jane Doe,19980815131756ES,
WXYZ,78912345,X/WXYZ/AAA-DDD//,AAA,DDD,E,19
980814000000ES,19980817000000ES,19980817000000ES,19980818000000
ES,800, DAILY, NON-
FIRM, POINT_TO_POINT, FULL_PERIOD, FIXED,, SC:M; RF:M,, 48732, 102.00, 8
5.00, $/MW-Day,, 3,, Jane Doe, 123-456-7813, 123-456-7801, doej@wxyz.com ↵
U,19980815124022ES,WXYZ, Jane Doe,19980815124022ES,
WXYZ,78912345,X/WXYZ/AAA-DDD//,AAA,DDD,E, 1
9980814000000ES,19980817000000ES,19980817000000ES,1998081800000
0ES,850, DAILY, NON-FIRM, POINT_TO_
POINT, FULL_PERIOD, FIXED,, SC:M; RF:M,, 48732, 102.00, 85.00, $/MW-
Day,, 3,, Jane Doe, 123-456-7813, 123-456-780 1, doej@wxyz.com, ↵
U,19980814120018ES,WXYZ, Joe
Smith,19980814120018ES,WXYZ,78912345,X/WXYZ/AAA-
DDD//,AAA,DDD,E,1
9980814000000ES,19980817000000ES,19980817000000ES,1998081800000
0ES,850, DAILY, NON-FIRM, POINT_TO_
POINT, FULL_PERIOD, FIXED,, SC:M; RF:M,, 48732, 102.00, 90.00, $/MW-
Day,, 3,, Joe Smith, 123-456-7893, 123-456-7801 ,smithj@wxyz.com ↵
I,19980813171204ES,WXYZ, Supervisor,19980813171204ES,
WXYZ,78912345,X/WXYZ/AAA-DDD//,AAA,DDD,E,
19980814000000ES,19980817000000ES,19980817000000ES,199808180000
00ES,850, DAILY, NON-FIRM, POINT_TO
_POINT, FULL_PERIOD, FIXED,, SC:M; RF:M,, 48732, 102.00, 95.00, $/MW-
Day,, 3,, Supervisor, 123-456-7890, 123-456-78 01 ↵

```

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U,19980815124022ES,WXYZ, Jane Doe,19980815124022ES,
 WXYZ,78912345,X/WXYZ/BBB-DDD//,BBB,DDD,E,19
 980814000000ES,19980817000000ES,19980817000000ES,19980818000000
 ES,1200,DAILY,NON-FIRM,POINT_TO_
 POINT,FULL_PERIOD,FIXED,,SC:M;RF:M,,48783,102.00,85.00,\$/MW-
 Day,,3,,Jane Doe,123-456-7813,123-456-7801, doej@wxyz.com ↵
 U,19980814120022ES,WXYZ,Joe
 Smith,19980814120022ES,WXYZ,78912345,X/WXYZ/BBB-
 DDD//,BBB,DDD,E,19
 980814000000ES,19980817000000ES,19980817000000ES,19980818000000
 ES,1200,DAILY,NON-FIRM,POINT_TO_
 POINT,FULL_PERIOD,FIXED,,SC:M;RF:M,,48783,102.00,90.00,\$/MW-
 Day,,3,,Joe Smith,123-456-7893,123-456-7801 ,smithj@wxyz.com ↵
 I,19980813171210ES,WXYZ,Supervisor,19980813171210ES,WXYZ,78912345
 ,X/WXYZ/BBB-DDD//,BBB,DDD,E,19
 980814000000ES,19980817000000ES,19980817000000ES,19980818000000
 ES,1200,DAILY,NON-FIRM,POINT_TO_
 POINT,FULL_PERIOD,FIXED,,SC:M;RF:M,,48783,102.00,95.00,\$/MW-
 Day,,3,,Supervisor,123-456-7890,123-456-7801, ↵
 U,19980816101000ES,WXYZ,Supervisor,19980816101000ES,WXYZ,7891234
 5,X/WXYZ/CCC-DDD//,CCC,DDD,E,19
 980814000000ES,19980817000000ES,19980817000000ES,19980818000000
 ES,85,DAILY,NON-FIRM,POINT_TO_PO
 INT,FULL_PERIOD,FIXED,,SC:M;RF:M,,48820,102.00,102.00,\$/MW-
 Day,,3,,Supervisor,123-456-7810,123-456-7801,
 5U,19980814143807ES,WXYZ,Supervisor,19980814143807ES,WXYZ,789123
 45,X/WXYZ/CCC-DDD//,CCC,DDD,E,19
 980814000000ES,19980817000000ES,19980817000000ES,19980818000000
 ES,90,DAILY,NON-FIRM,POINT_TO_PO
 INT,FULL_PERIOD,FIXED,,SC:M;RF:M,,48820,102.00,102.00,\$/MW-
 Day,,3,,Supervisor,123-456-7890,123-456-7801,
 5U,19980814120023ES,WXYZ,Joe
 Smith,19980814120023ES,WXYZ,78912345,X/WXYZ/CCC-
 DDD//,CCC,DDD,E,19
 980814000000ES,19980817000000ES,19980817000000ES,19980818000000
 ES,110,DAILY,NON-FIRM,POINT_TO_P
 OINT,FULL_PERIOD,FIXED,,SC:M;RF:M,,48820,102.00,90.00,\$/MW-
 Day,,3,,Joe Smith,123-456-7893,123-456-7801,s mithj@wxyz.com ↵
 I,19980813171214ES,WXYZ,Supervisor,19980813171214ES,WXYZ,78912345
 ,X/WXYZ/CCC-DDD//,CCC,DDD,E,19
 980814000000ES,19980817000000ES,19980817000000ES,19980818000000
 ES,110,DAILY,NON-FIRM,POINT_TO_P
 OINT,FULL_PERIOD,FIXED,,SC:M;RF:M,,48820,102.00,95.00,\$/MW-
 Day,,3,,Supervisor,123-456-7890,123-456-7801, ↵
 U,19980815124023ES,WXYZ,Jane
 Doe,19980815124023ES,WXYZ,78912345,X/WXYZ/WXYZ-
 DDD//,WXYZ,DDD,
 E,19980814000000ES,19980817000000ES,19980817000000ES,1998081800
 0000ES,340,DAILY,NON-FIRM,POINT_T
 O_POINT,FULL_PERIOD,FIXED,,SC:M;RF:M,,48855,102.00,85.00,\$/MW-
 Day,,3,,Jane Doe,123-456-7813,123-456-7801,doej@wxyz.com ↵

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U,19980814120023ES,WXYZ,Joe
 Smith,19980814120023ES,WXYZ,78912345,X/WXYZ/WXYZ-
 DDD//,WXYZ,DDD,
 E,19980814000000ES,19980817000000ES,19980817000000ES,1998081800
 0000ES,340,DAILY,NON-FIRM,POINT_T
 O_POINT,FULL_PERIOD,FIXED,,SC:M;RF:M,,48855,102.00,90.00,\$/MW-
 Day,,3,,Joe Smith,123-456-7893,123-456-7 801,smithj@wxyz.com ↵
 I,19980813171222ES,WXYZ,Supervisor,19980813171222ES,WXYZ,78912345
 ,X/WXYZ/WXYZ-DDD//,WXYZ,DDD,
 E,19980814000000ES,19980817000000ES,19980817000000ES,1998081800
 0000ES,340, DAILY,NON-FIRM,POINT_T
 O_POINT,FULL_PERIOD,FIXED,,SC:M;RF:M,,48855,102.00,95.00,\$/MW-
 Day,,3,,Supervisor,123-456-7890,123-456-7 801, ↵

From this audit report, the daily non-firm offerings on the four paths to "DDD" (AAA-DDD, BBB-DDD, CCC-DDD, and WXYZ-DDD) were all originally posted by WXYZ's "Supervisor" at approximately 17:12 on 8/13 at a price of \$95.00 /MW-Day discounted from a ceiling price of \$102.00.

At approximately 12:00 on 8/14, Joe Smith changed the offer price to \$90.00 on all four paths.

At 14:14 on 8/14, "Supervisor" adjusted the capacity available on path X/WXYZ/CCC-DDD// to 90 MW (POSTING_REF = 48820) and set the offer price up to match the tariff ceiling rate (presumably due to the path now being constrained and released from the requirement to have discounted service offered at the same rate as all other unconstrained paths to DDD). Capacity on this path was last updated to a value of 85 MW at 10:10 on 8/16, which is the current information posted on OASIS for this path at the time of the query.

Jane Doe adjusted the price on the three presumably unconstrained paths to DDD at 12:40 on 8/15 to \$85.00, which may have been in response to a negotiation for service on one of these paths. No further updates have occurred to the offerings on paths BBB-DDD and WXYZ-DDD since that time.

Finally, the capacity available on path X/WXYZ/AAA-DDD// was updated by Jane Doe from 850 to 800 MW at 13:17 on 8/15, which may have corresponded with final confirmation of a reservation at a negotiated discount by the customer that initiated the price change from \$90.00 to \$85.00.

002-4.4.7.2 Reservations

The following is an example of a hypothetical audit query for a specific transmission service reservation (line breaks and indentations added to improve readability):

```
REQUEST_STATUS=200.↵
ERROR_MESSAGE=↵
TIME_STAMP=19980821092048ES.↵
VERSION=1.4.↵
TEMPLATE=transstatusaudit.↵
OUTPUT_FORMAT=DATA.↵
```

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```

PRIMARY_PROVIDER_CODE=WXYZ.
PRIMARY_PROVIDER_DUNS=78912345.
RETURN_TZ=ES.
DATA_ROWS=9.
COLUMN_HEADERS=RECORD_TYPE,TIME_OF_UPDATE,MODIFYING_CO
MPANY_CODE,MODIFYING_NAME,
CONTINUATION_FLAG,ASSIGNMENT_REF,SELLER_CODE,SELLER_DUN
S,CUSTOMER_CODE,
CUSTOMER_DUNS,AFFILIATE_FLAG,PATH_NAME,POINT_OF_RECEIPT,P
OINT_OF_DELIVERY,
SOURCE,SINK,CAPACITY,SERVICE_INCREMENT,TS_CLASS,TS_TYPE,TS
_PERIOD,TS_WINDOW,
TS_SUBCLASS,NERC_CURTAILMENT_PRIORITY,OTHER_CURTAILMENT_
PRIORITY,START_TIME,
STOP_TIME,CEILING_PRICE,OFFER_PRICE,BID_PRICE,PRICE_UNITS,PR
ECONFIRMED,ANC_SVC_LINK,ANC
_SVC_REQ,POSTING_REF,SALE_REF,REQUEST_REF,DEAL_REF,NEGOT
IATED_PRICE_FLAG,
STATUS,STATUS_NOTIFICATION,STATUS_COMMENTS,TIME_QUEUED,R
ESPONSE_TIME_LIMIT,
TIME_OF_LAST_UPDATE,PRIMARY_PROVIDER_COMMENTS,SELLER_CO
MMENTS,
CUSTOMER_COMMENTS,SELLER_NAME,SELLER_PHONE,SELLER_FAX,
SELLER_EMAIL,
CUSTOMER_NAME,CUSTOMER_PHONE,CUSTOMER_FAX,CUSTOMER_E
MAIL,REASSIGNED_REF, REASSIGNED_CAPACITY,
REASSIGNED_START_TIME,REASSIGNED_STOP_TIME.
U,19980815131629ES,DEFPM,Alan
Trader,N,104392,WXYZ,78912345,DEFPM,912876543,N,X/WXYZ/AAA-
DDD//,A AA,DDD,AAA,ZZZ,50,DAILY,NON-
FIRM,POINT_TO_POINT,FULL_PERIOD,FIXED,,3,,19980817000000ES,1998
08 18000000ES,102.00,85.00,85.00,$/MW-
Day,N,,SC:M;RF:M,,,,,CONFIRMED,,,19980815121510ES,19980815144100E
S, 19980815131629ES,,,Jane Doe,123-456-7813,123-456-
7801,doej@wxyz.com,Alan Trader,312-678-9104,312-678-9100,a
.trader@defmarketing.com,,,
U,,,Y,,,,,,75,,,,,,19980818000000ES,19980819000000ES,,,,,,
,,,,,
U,,,Y,,,,,,100,,,,,,19980819000000ES,19980820000000ES,,,,,,
,,,,,
U,19980815125042ES,WXYZ,Jane
Doe,N,104392,WXYZ,78912345,DEFPM,912876543,N,X/WXYZ/AAA-
DDD//,AAA ,DDD,AAA,ZZZ,50,DAILY,NON-
FIRM,POINT_TO_POINT,FULL_PERIOD,FIXED,,3,,19980817000000ES,1998
0818 000000ES,102.00,85.00,82.00,$/MW-
Day,N,,SC:M;RF:M,,,,,COUNTEROFFER,,,19980815121510ES,19980815144
100 ES,19980815125042ES,,,Jane Doe,123-456-7813,123-456-
7801,doej@wxyz.com,Alan Trader,312-678-9104,312-678-910
0,a.trader@defmarketing.com,,,
U,19980815124811ES,DEFPM,Alan
Trader,N,104392,WXYZ,78912345,DEFPM,912876543,N,X/WXYZ/AAA-

```

Draft Recommendation for Modifications to S&CPs to address business practices adopted for WEQ 2007 Annual Plan Item 3(a)(2)

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```

DDD//,A AA,DDD,AAA,ZZZ,50,DAILY,NON-
FIRM,POINT_TO_POINT,FULL_PERIOD,FIXED,,3,,19980817000000ES,1998
08 18000000ES,102.00,85.00,82.00,$/MW-
Day,N,,SC:M;RF:M,,,,,REBID,,,19980815121510ES,19980815144100ES,1998
0 815124811ES,,,Jane Doe,123-456-7813,123-456-
7801,doej@wxyz.com,Alan Trader,312-678-9104,312-678-9100,a.trader
@defmarketing.com.␣
U,19980815124100ES,WXYZ,Jane
Doe,N,104392,WXYZ,78912345,DEFPM,912876543,N,X/WXYZ/AAA-
DDD//,AAA ,DDD,AAA,ZZZ,50,DAILY,NON-
FIRM,POINT_TO_POINT,FULL_PERIOD,FIXED,,3,,19980817000000ES,1998
0818 000000ES,102.00,85.00,80.00,$/MW-
Day,N,,SC:M;RF:M,,,,,COUNTEROFFER,,,19980815121510ES,19980815144
100 ES,19980815124100ES,,,Jane Doe,123-456-7813,123-456-
7801,doej@wxyz.com,Alan Trader,312-678-9104,312-678-910
0,a.trader@defmarketing.com.␣
I,19980815121510ES,DEFPM,Alan
Trader,N,104392,WXYZ,78912345,DEFPM,912876543,N,X/WXYZ/AAA-
DDD//,A AA,DDD,AAA,ZZZ,50,DAILY,NON-
FIRM,POINT_TO_POINT,FULL_PERIOD,FIXED,,3,,19980817000000ES,1998
08 18000000ES,102.00,90.00,80.00,$/MW-
Day,N,,SC:M;RF:M,,,,,QUEUED,,,19980815121510ES,,19980815121510ES,,,
,Company Default,123-456-7800,123-456-7801,,Alan Trader,312-678-
9104,312-678-9100,a.trader@defmarketing.com.␣
I,,,Y,,,,,,,,,75,,,,,,,,,19980818000000ES,19980819000000ES,,,,,,,,,
,, ␣
I,,,Y,,,,,,,,,100,,,,,,,,,19980819000000ES,19980820000000ES,,,,,,,,,
,,, ␣

```

First, this example shows the handling of continuation records which conveyed a time varying demand of 50 MW on 8/17, 75 MW on 8/18, and 100 MW on 8/19. This demand profile was initially entered with the original reservation request (*transrequest* Template) at 12:15 on 8/15 by Alan Trader. Since the Data Elements associated with the profile were never modified, the intervening audit response records do not repeat the data from these continuation records.

As part of the original reservation, Alan Trader attempted to negotiate a price for service of \$80.00 /MW-Day. Jane Doe responded to this request with a counter offer at the rate of \$85.00 /MW-Day at 12:41 on 8/15. Since the status of COUNTEROFFER constitutes acceptance of all terms of the reservation except price (i.e., transmission capability has been evaluated and is available), the RESPONSE_TIME_LIMIT Data Element has been updated to reflect the time by which the customer must confirm service (assuming the establishment of customer confirmation time limits is approved by FERC).

At 12:48, Alan Trader attempted to negotiate further for a rate of \$82.00 /MWDay and the reservation status was set to REBID. Jane Doe responded at 12:50 with a second counter offer restating a rate of \$85.00, which Alan Trader finally agreed to at 13:16 on 8/15. The current posted information on OASIS shows this final CONFIRMED reservation.

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002-4.5 ~~INFORMATION SUPPORTED BY WEB PAGE~~ GENERAL POSTINGS**002-4.5.1** INFO.HTM

When a regulatory order requires informational postings on OASIS and there is no OASIS S&CP template to support the postings or it is deemed inappropriate to use a template, or the location of the posting has not been required to be elsewhere, there shall be a reference in INFO.HTM to the required information, including, but not limited to, references to the following:

- o A common source of interconnection wide curtailment and interruption information, such as the NERC Transmission Loading Relief (TLR) web site.
- o Information related to the Transmission Provider's methodology for computing and application of Capacity Benefit Margin (CBM) and Transmission Reliability Margin (TRM). If the Transmission Provider does not use CBM or TRM in their assessment of Available Transmission Capability (ATC), that information shall also be in INFO.HTM.
- o The location of the list of system studies conducted. ~~There shall be a reference in INFO.HTM to the location of the company's organizational chart, job descriptions and personnel names as referenced in Section 3.4 k.~~
- o Information on requesting the text file of the tariffs and service agreements.

For the purposes of this section, any link to required informational postings that can be accessed from INFO.HTM would be considered to have met the OASIS posting requirements, provided that the linked information meets all other OASIS accessibility requirements.

002-4.5.2 STANDARDS OF CONDUCT

The Transmission Provider shall establish a link entitled "Standards of Conduct," located on the OASIS home page at the Transmission Provider's registered URL address.

The following types of information, as found in Standards of Conduct for Transmission Providers, Order 2004, 105 FERC ¶61,248 (2003); order on reh'g, Order 2004-A, 107 FERC ¶61,032; order on reh'g, Order 2004-B, 108 FERC ¶61,118 (2004); order on reh'g, Order 2004-C, 109 FERC ¶61,325; order on reh'g, Order 2004-D, 110 FERC ¶61,320, and 18 CFR §358 should be accessible from the Standards of Conduct link.

Emergency Circumstances Deviations (§358.4(a)(2))

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Marketing and Energy Affiliate List (§358.4(b)(1))

Shared Facilities (§358.4(b)(2))

Organizational Charts and Job Descriptions (§358.4(b)(3)(i))

Common Employees (§358.4(b)(3)(iii))

Potential Merger Partners (§358.4(b)(3)(v))

Transfers¹ (§358.4(c))

Information Disclosure² (§358.5(b) (3))

Voluntary Consent to Share Non-Affiliated Customer Information (§358.5(b)(4))

Discretionary Actions under Tariff³ (§358.5(c)(4))

Discounts⁴ (§358.5(d))

Chief Compliance Officer (§358.4(e)(6))

Written Procedures for Implementation (§358.4 (e)(3))

These items shall appear in the order specified above and before any other items which may be required as per specific FERC direction or local business practice. Posting of the cites noted in the parentheses is optional. Access to some of the information found under the Standards of Conduct link above may require the user to register with the individual OASIS sites according to WEQ-002-3.1

002-5 PERFORMANCE REQUIREMENTS

A critical aspect of any system is its performance. Performance encompasses many issues, such as security, sizing, response to user requests, availability, backup, and other parameters that are critical for the system to function as desired. The following sections cover the performance requirements for the OASIS Nodes .

002-5.1 SECURITY

Breaches of security include many inadvertent or possibly even planned actions. Therefore, several requirements shall be implemented by the TSIPs to avoid these problems:

1 According to WEQ-002-4.3.10.4 a template is required for this item.

2 According to WEQ-002-4.3.10.6 a template is required for this item.

3 According to WEQ-002-4.3.10.5 a template is required for this item.

4 According to WEQ-002-4.3.2.1 a template is required for this item.

Draft Recommendation for Modifications to S&CPs to address business practices adopted for WEQ 2007 Annual Plan Item 3(a)(2)

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- a. **Provider Update of TS Information:** Only Providers, including Secondary Providers, shall be permitted to update their own TS Information.
- b. **Customer Input Only ASCII Text:** TSIPs shall be permitted to require that inputs from Customers shall be filtered to permit only strict ASCII text (strip bit 8 from each byte).
- c. **Provider Updating Over Public Facilities:** If public facilities are involved in the connection between a Provider and the OASIS Node, the Provider shall be able to update his TS Information only through the use of ASCII or through encrypted files.
- d. **User Registration and Login:** All Users shall be required to register and login to a Provider's Account before accessing that Provider's TS Information.
- e. **User Passwords:** All Users shall enter their personal password when they wish access to TS Information beyond the lowest Access Privilege.
- f. **Service Request Transactions:** Whenever Service Request transactions are implemented entirely over OASIS Nodes, both an individual Customer password for the request, and an individual Provider password for the notification of acceptance shall be required.
- g. **Data Encryption:** Sophisticated data encryption techniques and the "secure id" mechanisms being used on the public Internet shall be used to transfer sensitive data across the Internet and directly between OASIS Nodes.
- h. **Viruses:** Since only data is being transmitted between the OASIS Nodes and the Users, viruses are unlikely to be passed between them. Therefore, TSIPs shall be responsible for ensuring that the OASIS Nodes are free from viruses, but need not screen data exchanges with Users for viruses.
- i. **Performance Log:** TSIPs shall keep a log on User usage of OASIS resources.
- j. **Disconnection:** TSIPs shall be allowed to disconnect any User who is degrading the performance of the OASIS Node through the excessive use of resources, beyond what is permitted in their Service Level Agreement.
- k. **Premature Access:** The TSIP log shall also be used to ensure that Users who are affiliated with the Provider's company (or any other User) do not have access to TS information before it is publicly available.
- l. **Firewalls:** TSIPs shall employ security measures such as firewalls to minimize the possibility that unauthorized users shall access or modify TS Information or reach into Provider or User systems. Interfaces through Public Data Networks or the Internet shall be permitted as long as these security requirements are met.

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m. **Certificates and Public Key Standards (optional):** Use of alternative forms of login and authentication using certificates and public key standards is acceptable.

002-5.2 ACCESS PRIVILEGES

Users shall be assigned different Access Privileges based on external agreements between the User and the Provider. These Access Privileges are associated with individual Users rather than just a company, to ensure that only authorized Users within a company have the appropriate access.

The following Access Privileges shall be available as a minimum:

a. **Access Privilege Read-Only:** The User may only read publicly available TS Information.

b. **Access Privilege for Transactions:** The Customer is authorized to transact Service Requests.

c. **Access Privilege Read/Write:** A Secondary Provider shall have write access to his own Provider Account on an OASIS Node.

002-5.3 OASIS RESPONSE TIME REQUIREMENTS**002-5.3.1** TSIPs can only be responsible for the response capabilities of two portions of the Internet-based OASIS network:

- The adequacy of the TSIP's internet interconnection(s) for reasonable high-volume utilization
- The response capabilities of the OASIS Node functions to process interactions with Users

002-5.3.2 Measurement Criteria for Internet Connections

An OASIS node's Internet connection(s) should not exceed 60% sustained utilization. To determine the sustained utilization, TSIPs shall retain usage records and logs related to the Internet service.

002-5.3.3 Measurement Criteria for OASIS Node functions

It is required that OASIS query functions meet or exceed the response times listed below during the normal conduct of business.

Template or GUI equivalent	Average Response not fewer than:	90% of Responses not fewer than:
<i>transstatus</i>	100 rows/minute	10 rows/minute
<i>transoffering</i>	500 rows/minute	100 rows/minute

It should be recognized that during periods of minimal interactivity there might be heavier loading due to automated processes gathering larger volumes of

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data or due to OASIS node housekeeping services. The offloading of such discretionary demand should not be discouraged if it serves to make the OASIS more responsive during primary periods of customer activity.

To assess whether these performance capabilities are obtainable, an OASIS application shall collect and log pertinent statistics on an hourly basis about each invocation of the primary types of data queries on the Templates ***transstatus*** and ***transofferring***. Statistics logged shall be the number of invocations per type of template, the service processing time to retrieve the information, format of the responses, and effective template data row count.

002-5.4 OASIS PROVIDER ACCOUNT AVAILABILITY

The following are the OASIS Provider Account availability requirements:

a. OASIS Provider Account Availability: The availability of each OASIS Provider account on an OASIS Node shall be at least **98.0%** (downtime of about 7 days per year).

Availability is defined as:

$$\% \text{ Availability} = \frac{(1 - \text{Cumulative Provider Account Downtime})}{\text{Total Time}} * 100$$

A Provider account shall be considered to be down, and downtime shall be accumulated, upon occurrence of any of the following:

1. One or more Users cannot link and log on to the Provider account. The downtime accumulated shall be calculated as:

Σ for affected Users of $1/n * (\text{Login Time})$, which is the time used by each affected User to try to link and log on to the Provider account, and where "n" is the total number of Users actively registered for that Provider account.

2. One or more Users cannot access TS Information once they have logged on to a Provider account. The downtime accumulated shall be calculated as:

Σ for affected Users of $1/n * (\text{Access Time})$, which is the time used by each affected User to try to access data, and where "n" is the total number of Users actively registered for that Provider.

3. A **five (5) minute** penalty shall be added to the cumulative downtime for every time a User loses their connection to a Provider's account due to an OASIS Node momentary failure or problem.

002-5.5 BACKUP AND RECOVERY

The following backup and recovery requirements shall be met:

Draft Recommendation for Modifications to S&CPs to address business practices adopted for WEQ 2007 Annual Plan Item 3(a)(2)

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a. **Normal Backup of TS Information:** Backup of TS Information and equipment shall be provided within the OASIS Nodes so that no data or transaction logs are lost or become inaccessible by Users due to any single point of failure. Backed up data shall be no older than **30 seconds**. Single points of failure include the loss of one:

- Disk drive or other storage device
- Processor
- Inter-processor communications (e.g. LAN)
- Inter-OASIS communications
- Software application
- Database
- Communication ports for access by Users
- Any other single item which affects the access of TS Information by Users

b. **Spurious Failure Recovery Time:** After a spurious failure situation, all affected Users shall regain access to all TS Information **within 30 minutes**. A spurious failure is a temporary loss of services which can be overcome by rebooting a system or restarting a program. Permanent loss of any physical component is considered a catastrophic failure.

c. **Long-Term Backup:** Permanent loss of critical data due to a catastrophic failure shall be minimized through off-line storage on a **daily basis** and through off-site data storage on a **periodic basis**.

d. **Catastrophic Failure Recovery:** Recovery from a catastrophic failure or loss of an OASIS Node may be provided through the use of alternate OASIS Nodes which meet the same availability and response time requirements. TSIPs may set up prior agreements with other TSIPs as to which Nodes will act as backups to which other Nodes, and what procedure will be used to undertake the recovery. Recovery from a catastrophic failure shall be designed to be achieved **within 24 hours**.

002-5.6 TIME SYNCHRONIZATION

The following are the time requirements:

a. **Time Synchronization:** Time shall be synchronized on OASIS Nodes such that all time stamps will be accurate to within "0.5 second of official time. This synchronization may be handled over the network using NTP, or may be synchronized locally using time standard signals (e.g. WWVB, GPS equipment).

b. **Network Time Protocol (NTP):** OASIS Nodes shall support the Internet tool for time synchronization, Network Time Protocol (NTP), which is described in RFC-1305, version 3, so that Users shall be able to request the display and the downloading of current time on an OASIS Node for purposes of user applications which might be sensitive to OASIS time.

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002-5.7 TS INFORMATION TIMING REQUIREMENTS

The TS Information timing requirements are as follows, except they are waived during emergencies.

a. TS Information Availability: The most recent Provider TS information shall be available on the OASIS Node within 5 minutes of its required posting time at least 98% of the time. The remaining 2% of the time the TS Information shall be available within 10 minutes of its scheduled posting time.

b. Notification of Posted or Changed TS Information: Notification of TS Information posted or changed by a Provider shall be made available within 60 seconds to the log. S&CP Version

c. Acknowledgment by the TSIP: Acknowledgment by the TSIP of the receipt of User Purchase requests shall occur within 1 minute. The actual negotiations and agreements on Purchase requests do not have time constraints.

002-5.8 TS INFORMATION ACCURACY

The following requirements relate to the accuracy of the TS information:

a. TS Information Reasonability: TS information posted and updated by the Provider shall be validated for reasonability and consistency through the use of limit checks and other validation methods.

b. TS Information Accuracy: Although precise measures of accuracy are difficult to establish, Providers shall use their best efforts to provide accurate information.

002-5.9 PERFORMANCE AUDITING

The following are the performance auditing requirements:

a. User Help Desk Support: TSIPs shall provide a "Help Desk" that is available at least during normal business hours (local time zone) and normal work days.

b. Monitoring Performance Parameters: TSIPs shall use their best efforts to monitor performance parameters. Any User shall be able to read or download these performance statistics.

002-5.10 MIGRATION REQUIREMENTS

Whenever a new version of the S&CP is to be implemented, a migration plan will be developed for cutting over to the new version.

NORTH AMERICAN ENERGY STANDARDS BOARD

Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials

February 6-7, 2007

Wholesale Electric Quadrant

TAB 8

Proposed Standard for Implementation of S&CP Changes to Support Standards of Conduct (Annual Plan Item 3a2)

- Action may be required of the WEQ EC to approve the proposed standard.
- This section includes the recommendation and comments due on February 5 will be provided under separate cover.
- Tab 8 corresponds to agenda item 4 for WEQ.

**RECOMMENDATION TO NAESB WEQ EXECUTIVE COMMITTEE
For Quadrant: Wholesale Electric Quadrant**

Requesters: Southern Company Services
Request No.: R04006C1
Request Title: OASIS 1A Enhancements – Redirects (Release Mechanism)

1. RECOMMENDED ACTION:

☒ Accept as requested
☐ Accept as modified below
☐ Decline

**EFFECT OF EC VOTE TO ACCEPT
RECOMMENDED ACTION:**

☒ Change to Existing Practice
☐ Status Quo

2. TYPE OF DEVELOPMENT/MAINTENANCE**Per Request:**

☒ Initiation
☐ Modification
☒ Interpretation
☐ Withdrawal

☐ Principle
☐ Definition
☐ Business Practice Standard
☐ Document
☐ Data Element
☐ Code Value
☐ X12 Implementation Guide
☐ Business Process Documentation

Per Recommendation:

☒ Initiation
☐ Modification
☒ Interpretation
☐ Withdrawal

☐ Principle
☐ Definition
☐ Business Practice Standard
☐ Document
☐ Data Element
☐ Code Value
☐ X12 Implementation Guide
☐ Business Process Documentation

3. RECOMMENDATION**SUMMARY:**

This recommendation establishes the required Request Type for a Transmission Customer (TC) to request the Transmission Provider (TP) to relinquish capacity associated with a confirmed request to Redirect on a Non-Firm basis.

Point-to-Point capacity of a request to Redirect on a Non-Firm basis which is Relinquished will be reinstated to the Parent (Firm) Reservation as required by the NAESB Standard 001-10.5.3 as presented in the Business Practice Standards section.

This recommendation implements a new reservation request type of RELINQUISH as modified in the Technical Standards section below. Further standards may be recommended under another request to apply the RELINQUISH request type to other services (e.g. Network service).

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For Quadrant: Wholesale Electric Quadrant**

Requesters: Southern Company Services
Request No.: R04006C1
Request Title: OASIS 1A Enhancements – Redirects (Release Mechanism)

RECOMMENDED STANDARDS:

Business Practices to be added and modified to allow use of the RELINQUISH request type to releasesome or all of the available capacity of a Redirect on a Non-Firm basis.

Modifications to Existing Standards:

001-0.6 Parent Reservation – an existing, confirmed reservation being modified by a Transmission Customer's request to redirect, reassign, resale, release, etc.

001-10.5.3. The TC shall have the right to request the TP to release capacity associated with a confirmed request to Redirect on a Non-Firm basis and reinstate that capacity to the Firm Parent (~~Firm~~) Reservation. The TP shall honor all such requests, and reinstate the capacity on the Firm Parent Reservation such that it may subsequently be scheduled, Redirected on a Firm or Non-Firm basis to a different path, resold, etc.

New standards:

001-10.5.3.1 The TC shall submit to the Transmission Provider (TP) a request to release with a request type of RELINQUISH.

001-10.5.3.2 Relinquish requests shall be submitted pre-confirmed.

001-10.5.3.2.1 The Relinquish request shall have the same TS_CLASS, TS_TYPE, TS_PERIOD, TS_WINDOW and SERVICE_INCREMENT values as the Redirect on a Non-Firm basis.

001-10.5.3.3 The CAPACITY_REQUESTED shall be the value(s) desired to be relinquished from the Redirect on a Non-Firm basis and added back to Capacity Available to Redirect on the Firm Parent Reservation.

001-10.5.3.4 The Relinquish request shall be bound by the start/stop times of the Firm Parent Reservation.

001-10.5.3.5 Relinquish requests may not be requested for past hours and must be within the bounds of the Redirect on a Non-Firm basis start/stop times.

001-10.5.3.6 The TP shall have the right to REFUSE the Relinquish request if the capacity requested for release is not available for the duration of the Relinquish request.

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001-10.5.3.6.1 The TC shall be allowed to request a Relinquish even if the transmission scheduling rights on the Redirect on a Non-Firm basis have been limited due to outages or other reliability-related events. The TC shall ensure adjustment of the schedule/e-Tag's transmission allocation prior to submitting the Relinquish request.

001-10.5.3.7 The TC's rights on the Redirect on a Non-Firm basis and on the Firm Parent Reservation shall remain unaffected by the Relinquish during the TP evaluation of the Relinquish request.

001-10.5.3.8 Upon confirmation of the Relinquish request, the Capacity Available to Redirect on the Firm Parent Reservation shall be increased by the amount released and for the time period of the Relinquish request.

001-10.5.3.9 Upon confirmation of the Relinquish request, the capacity_available on the Redirect on a Non-firm basis shall be decreased by the amount released and for the time period of the Relinquish request.

Technical Standards for Release of Transmission Service

The following excerpts contain the recommended changes to specific subsections in the OASIS Standards and Communications Protocols document required to support the above Business Practice standards. Each section or subsection is contained in its entirety with the recommended changes redlined.

Modifications to Existing Standards

002-4.2.13 Modifications to Transactions

Transactions processed by OASIS as outlined in Section 4.2.10 may be subject to modification by subsequent transactions or events as permitted under the Transmission Provider's Tariff. The following subsections describe the actions to be taken on OASIS to implement specific provisions of the Open Access Pro Forma Tariff related to transmission service. Depending on the exact form of the Provider's Tariff, some of these provisions may not be applicable, and implementation of other provisions may be Provider specific. In general, modification to any OASIS transaction initiated by the Customer shall involve the submission of a new transaction. The new transaction shall identify the specific type of modification being requested using the REQUEST_TYPE Data Element, and reference the transaction to be modified using the RELATED_REF Data Element. In the specific case of secondary market transactions, related transactions are identified with the use of the REASSIGNED_REF Data Element. The following are the specific restricted values for the REQUEST_TYPE Data Element and a brief description of their use:

- ORIGINAL – typical reservation requests submitted to the Primary Provider

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- RESALE – secondary market requests submitted to a Transmission Customer as Secondary Transmission Provider
- RENEWAL – request to renew an expiring transmission reservation
- MATCHING – request to meet or exceed a competing request to retain transmission service (right of first refusal)
- DEFERRAL – request to defer or apply for extension on start of transmission service
- REDIRECT – request to redirect all or portion of a transmission reservation to an alternate POR/POD and/or make other changes to the terms of service as permitted
- RELINQUISH – request to release all or a portion of the capacity of a Redirect on a Non-Firm basis to the Firm Parent Reservation.
- {registered} – Primary Transmission Provider's may register values for REQUEST_TYPE to implement specific provisions of their Tariffs.

The Primary Transmission Provider may also modify a Customer's transmission reservation to the extent that the original reservation's MW capacity available for scheduling may be reduced over all or a portion of the term of the original reservation subject to the terms of the Provider's Tariff. Any time a subsequent transaction initiated by the Customer modifies all or a portion of a prior transaction, or a reduction in reserved MWs is initiated by the Primary Provider, the IMPACTED counter will be incremented in the prior transaction shall be set. OASIS User's may view the list of all subsequent transactions or events impacting a given transaction using the **reduction** Template. The following subsections describe the application of REQUEST_TYPE to actions taken on OASIS, and how various modifications to existing reservations are to be affected.

002-4.3.6.1 Customer Capacity Purchase Request (transrequest)

The **Customer Capacity Purchase Request** (Input) (**transrequest**) is used by the Customer to request the purchase of transmission services or request changes to previously submitted reservations for transmission services. The response simply acknowledges that the Customer's request was received by the OASIS Node. It does not imply that the Seller has received the request. Inputting values into the reference Data Elements is optional.

CUSTOMER_CODE and CUSTOMER_DUNS shall be determined from the registered connection used to input the request.

Supporting "profiles" of service, which request different capacities (and optionally price) for different time periods within a single request, is at the discretion of the Primary Provider. Continuation records may be used to indicate requests for these service profiles; use of continuation records is only supported when using the CSV Format upload of Template data. Each segment of a profile is represented by the Data Elements CAPACITY_REQUESTED, START_TIME, and STOP_TIME, which define the intervals in time over which a non-zero MW demand is being requested. The initial segment of a profile is defined by the CAPACITY_REQUESTED, START_TIME and STOP_TIME Data Elements specified in the first/only record submitted; subsequent

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segments are specified in continuation records each containing the appropriate CAPACITY_REQUESTED, START_TIME and STOP_TIME values defining the segment. Provider's may optionally support price negotiation on segments of a profiled reservation request. In this case, the BID_PRICE Data Element is also included in each continuation record. If the BID_PRICE Data Element is not specified in the continuation records, the BID_PRICE specified in the first/only record submitted will be applied to the entire reservation request.

For requesting transmission services which include multiple paths, the following fields may be specified using continuation records: PATH_NAME, POINT_OF_RECEIPT, and POINT_OF_DELIVERY. Supporting multiple paths or multiple POINT_OF_RECEIPT and POINT_OF_DELIVERY is at the discretion of the Provider.

The START_TIME and STOP_TIME indicate the requested period of service.

When the request is received at the OASIS Node, the TSIP assigns a unique ASSIGNMENT_REF value and queues the request with a time stamp. The STATUS for the request is QUEUED. The IMPACTED counter is initially set to 0. If the new request is not modifying an existing reservation (as indicated by a null value for the RELATED_REF Data Element) and the SELLER is the Primary Provider, REQUEST_TYPE must either be specified as "ORIGINAL" or be left null and OASIS will substitute the default value of "ORIGINAL". If the new request is not modifying an existing reservation and the SELLER is not the Primary Provider, REQUEST_TYPE must either be specified as "RESALE" or be left null and OASIS will substitute the default value of "RESALE".

If the new request is modifying an existing transmission reservation, the Data Elements REQUEST_TYPE and RELATED_REF must be entered. RELATED_REF contains the ASSIGNMENT_REF for the transmission reservation being modified, and REQUEST_TYPE must be one of MATCHING, REDIRECT, DEFERRAL, RENEWAL, RELINQUISH, or a Primary Provider registered value.

Specification of a value YES in the PRECONFIRMED field authorizes the TSIP to automatically change the STATUS field in the **transstatus** Template to CONFIRMED when that request is ACCEPTED by the Seller.

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**Modifications to Existing Standards
Data Dictionary: Standard 003-0**

REQUEST_TYPE	REQTYPE	1{ALPHA}3 0	Valid Types: ORIGINAL RESALE RENEWAL MATCHING DEFERRAL REDIRECT <u>RELINQUISH</u> <u>H</u> {Registered}	ORIGINAL – typical reservation requests submitted to the Primary Provider RESALE – secondary market requests submitted to a Transmission Customer as Secondary Transmission Provider RENEWAL – request to renew an expiring transmission reservation MATCHING – request to meet or exceed a competing request to retain transmission service (right of first refusal) DEFERRAL – request to defer or apply for extension on start of transmission service REDIRECT – request to redirect all or portion of a transmission reservation to an alternate POR/POD and/or make other changes to the terms of service as permitted <u>RELINQUISH – request to release all or a portion of the capacity of a Redirect on a Non-Firm basis to the Firm Parent Reservation</u> {registered} – Primary Transmission Provider's may register values for REQUEST_TYPE to implement specific provisions of their Tariffs.

4. SUPPORTING DOCUMENTATION

a. Description of Request:

In NAESB Standard 10.5.3 a release mechanism was required in the standard. This request establishes that mechanism for release. When transmission rights are redirected on a non-firm basis there is currently not a way to reinstate these MW's back to the parent reservation.

b. Description of Recommendation:

**RECOMMENDATION TO NAESB WEQ EXECUTIVE COMMITTEE
For Quadrant: Wholesale Electric Quadrant**

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Request Title: OASIS 1A Enhancements – Redirects (Release Mechanism)

When NAESB Standard 001-10 was created to clarify REDIRECT requests on a non-firm basis the OASIS 1A Task Force determined there was a need for a release mechanism. This recommended standard defines that mechanism along with the required OASIS S&CP changes.

In support of the Release Mechanism Recommendation to the NAESB Executive Committee for a proposed business practice standard, please see the following sets of NAESB subcommittee minutes:

WEQ ESS/ITS	November 18-19, 2004	http://www.naesb.org/pdf/weq_ess_its111804fm.doc
WEQ ESS/ITS	January 12-13, 2005	http://www.naesb.org/pdf2/weq_ess_its011205fm.doc
WEQ OASIS 1A Task Force	February 15, 2005	http://www.naesb.org/pdf2/weq_oasis1a_021505fm.doc
WEQ OASIS 1A Task Force	April 4, 2005	http://www.naesb.org/pdf2/weq_oasis1a_040405fm.doc
WEQ OASIS 1A Task Force	April 22, 2005	http://www.naesb.org/pdf2/weq_oasis1a_042205fm.doc
WEQ ESS/ITS, OASIS II, and OASIS IA	April 26, 2005	http://www.naesb.org/pdf2/weq_ess_its042605dm.doc
WEQ ESS/ITS	July 13-14, 2005	http://www.naesb.org/pdf2/weq_ess_its071305fm.doc
WEQ ESS/ITS	August 31-September 1, 2005	http://www.naesb.org/pdf2/weq_ess_its083105dm.doc
WEQ ESS/ITS	October 20-21, 2005	http://www.naesb.org/pdf2/weq_ess_its102005fm.doc
WEQ ESS/ITS	March 6-7, 2006	http://www.naesb.org/pdf2/weq_ess_its030606fm.doc
WEQ ESS/ITS	April 4-5, 2006	http://www.naesb.org/pdf2/weq_ess_its040406fm.doc
WEQ ESS/ITS	June 27-28, 2006	http://www.naesb.org/pdf2/weq_ess_its062706fm.doc
WEQ ESS/ITS	July 10-11, 2006	http://www.naesb.org/pdf2/weq_ess_its071006fm.doc
WEQ OASIS Task Force	August 22, 2006	http://www.naesb.org/pdf2/weq_oasis082206dm.doc
WEQ OASIS Task Force	August 31, 2006	http://www.naesb.org/pdf2/weq_oasis083106dm.doc
WEQ ESS/ITS	September 25-26, 2006	http://www.naesb.org/pdf2/weq_ess_its092506fm.doc
WEQ ESS/ITS	October 23-24, 2006	http://www.naesb.org/pdf2/weq_ess_its102306fm.doc
WEQ ESS/ITS	December 4, 2006	

c. Business Purpose:

This recommendation will provide transmission customers the ability to release unused capacity on any redirect on a non-firm basis reservation to reinstate this capacity back on the Firm Parent Reservation

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such that it may subsequently be scheduled, Redirected on a Firm or Non-Firm basis to a different path, resold, etc. This standard will help clarify Section 22.1(c) in the FERC Pro Forma Tariff.

d. Commentary/Rationale of Subcommittee(s)/Task Force(s):

**RECOMMENDATION TO NAESB WEQ EXECUTIVE COMMITTEE
For Quadrant: Wholesale Electric Quadrant**

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Request No.: R04006C1
Request Title: OASIS 1A Enhancements – Redirects (Release Mechanism)

1. RECOMMENDED ACTION:

☒ Accept as requested
☐ Accept as modified below
☐ Decline

**EFFECT OF EC VOTE TO ACCEPT
RECOMMENDED ACTION:**

☒ Change to Existing Practice
☐ Status Quo

2. TYPE OF DEVELOPMENT/MAINTENANCE

Per Request:

☒ Initiation
☐ Modification
☒ Interpretation
☐ Withdrawal

☐ Principle
☐ Definition
☐ Business Practice Standard
☐ Document
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☐ Code Value
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Per Recommendation:

☒ Initiation
☐ Modification
☒ Interpretation
☐ Withdrawal

☐ Principle
☐ Definition
☐ Business Practice Standard
☐ Document
☐ Data Element
☐ Code Value
☐ X12 Implementation Guide
☐ Business Process Documentation

3. RECOMMENDATION

SUMMARY:

This recommendation implements a new reservation request type of RELINQUISH as modified in the Technical Standards section below. Further standards may be recommended under another request to apply the RELINQUISH request type to other services (e.g. Network service).

This recommendation establishes the required Request Type for a Transmission Customer (TC) to request the Transmission Provider (TP) to relinquish capacity associated with a confirmed request to Redirect on a Non-Firm basis. [b1] [b2]

Point-to-Point capacity of a request to Redirect on a Non-Firm basis which is Relinquished will be reinstated to the Parent (Firm) Reservation as required by the NAESB Standard 001-10.5.3 as presented in the Business Practice Standards section.

~~This recommendation implements a new reservation request type of RELINQUISH as modified in the Technical Standards section below. Further standards may be~~

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~~recommended under another request to apply the RELINQUISH request type to other services (e.g. Network service).~~

RECOMMENDED STANDARDS:

Business Practices to be added and modified to allow use of the RELINQUISH request type to release some or all of the available capacity of a Redirect on a Non-Firm basis.

Modifications to Existing Standards:

001-0.6 Parent Reservation – an existing, confirmed reservation ~~which has been being~~ modified by a Transmission Customer's request to redirect, reassign, resale, ~~release~~, etc.^[b3]

001-10.5.3. The TC shall have the right to request the TP to release capacity associated with a confirmed ~~request to~~ Redirect on a Non-Firm basis ~~reservation~~ and reinstate that capacity to the ~~Firm~~ Parent (~~Firm~~) Reservation. The TP shall honor all such requests, and reinstate the capacity on the ~~Firm~~ Parent Reservation such that it may subsequently be scheduled, Redirected on a Firm or Non-Firm basis to a different path, resold, etc.

New standards:

001-10.5.3.1 The TC shall submit to the Transmission Provider (TP) a request to release with a request type of RELINQUISH.

001-10.5.3.2 Relinquish requests shall be submitted pre-confirmed.

001-10.5.3.2.1 The Relinquish request shall have the same TS_CLASS, TS_TYPE, TS_PERIOD, TS_WINDOW and SERVICE_INCREMENT values as the Redirect on a Non-Firm basis ~~reservation being released~~.

001-10.5.3.3 The CAPACITY_REQUESTED shall be the value(s) desired to be relinquished from the Redirect on a Non-Firm basis ~~reservation~~ and added back to Capacity Available to Redirect on the Firm Parent Reservation.

001-10.5.3.4 The Relinquish request shall be bound by the start/stop times of the Firm Parent ~~Reservation~~^[b4].

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- 001-10.5.3.5 Relinquish requests may not be requested for past hours -and must be within the bounds of the Redirect on a Non-Firm basis start/stop times.
- 001-10.5.3.6 The TP shall have the right to REFUSE the Relinquish request if the capacity requested for release is not available for the duration of the Relinquish request (b5).
- 001-10.5.3.6.1 The TC shall be allowed to request a Relinquish even if the transmission scheduling rights on the Redirect on a Non-Firm basis have been limited due to outages or other reliability-related events. The TC shall ensure adjustment of the schedule/e-Tag's transmission allocation prior to submitting the Relinquish request.
- 001-10.5.3.7 The TC's rights on the Redirect on a Non-Firm basis and on the Firm Parent Reservation shall remain unaffected by the Relinquish during the TP evaluation of the Relinquish request.
- 001-10.5.3.8 Upon confirmation of the Relinquish request, the Capacity Available to Redirect on the Firm Parent Reservation shall be increased by the amount released and for the time period of the Relinquish request.
- 001-10.5.3.9 Upon confirmation of the Relinquish request, the capacity_available on the Redirect on a Non-firm basis shall be decreased by the amount released and for the time period of the Relinquish request.

Technical Standards for Release of Transmission Service

The following excerpts contain the recommended changes to specific subsections in the OASIS Standards and Communications Protocols document required to support the above Business Practice standards. Each section or subsection is contained in its entirety with the recommended changes redlined.

Modifications to Existing Standards

002-4.2.13 Modifications to Transactions

Transactions processed by OASIS as outlined in Section 4.2.10 may be subject to modification by subsequent transactions or events as permitted under the Transmission Provider's Tariff. The following subsections describe the actions to be taken on OASIS to implement specific provisions of the Open Access Pro Forma Tariff related to transmission service. Depending on the exact form of the Provider's Tariff, some of these provisions may not be applicable, and implementation of other provisions may be Provider specific. In general, modification to any OASIS transaction initiated by the Customer shall involve the submission of a new transaction. The new transaction shall identify the specific type of modification being requested using the REQUEST_TYPE Data Element, and reference the transaction to be modified using the

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RELATED_REF Data Element. In the specific case of secondary market transactions, related transactions are identified with the use of the REASSIGNED_REF Data Element. The following are the specific restricted values for the REQUEST_TYPE Data Element and a brief description of their use:

- ORIGINAL – typical reservation requests submitted to the Primary Provider
- RESALE – secondary market requests submitted to a Transmission Customer as Secondary Transmission Provider
- RENEWAL – request to renew an expiring transmission reservation
- MATCHING – request to meet or exceed a competing request to retain transmission service (right of first refusal)
- DEFERRAL – request to defer or apply for extension on start of transmission service
- REDIRECT – request to redirect all or portion of a transmission reservation to an alternate POR/POD and/or make other changes to the terms of service as permitted
- RELINQUISH – request to release all or a portion of the capacity of a Redirect on a Non-Firm basis to the Firm Parent Reservation.
- {registered} – Primary Transmission Provider's may register values for REQUEST_TYPE to implement specific provisions of their Tariffs.

The Primary Transmission Provider may also modify a Customer's transmission reservation to the extent that the original reservation's MW capacity available for scheduling may be reduced over all or a portion of the term of the original reservation subject to the terms of the Provider's Tariff. Any time a subsequent transaction initiated by the Customer modifies all or a portion of a prior transaction, or a reduction in reserved MWs is initiated by the Primary Provider, the IMPACTED counter will be incremented in the prior transaction shall be set. OASIS User's may view the list of all subsequent transactions or events impacting a given transaction using the **reduction** Template. The following subsections describe the application of REQUEST_TYPE to actions taken on OASIS, and how various modifications to existing reservations are to be affected.

002-4.3.6.1 Customer Capacity Purchase Request (transrequest)

The **Customer Capacity Purchase Request** (Input) (**transrequest**) is used by the Customer to request the purchase of transmission services or request changes to previously submitted reservations for transmission services. The response simply acknowledges that the Customer's request was received by the OASIS Node. It does not imply that the Seller has received the request. Inputting values into the reference Data Elements is optional.

CUSTOMER_CODE and CUSTOMER_DUNS shall be determined from the registered connection used to input the request.

Supporting "profiles" of service, which request different capacities (and optionally price) for different time periods within a single request, is at the discretion of the Primary Provider. Continuation records may be used to indicate requests for these service

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profiles; use of continuation records is only supported when using the CSV Format upload of Template data. Each segment of a profile is represented by the Data Elements CAPACITY_REQUESTED, START_TIME, and STOP_TIME, which define the intervals in time over which a non-zero MW demand is being requested. The initial segment of a profile is defined by the CAPACITY_REQUESTED, START_TIME and STOP_TIME Data Elements specified in the first/only record submitted; subsequent segments are specified in continuation records each containing the appropriate CAPACITY_REQUESTED, START_TIME and STOP_TIME values defining the segment. Provider's may optionally support price negotiation on segments of a profiled reservation request. In this case, the BID_PRICE Data Element is also included in each continuation record. If the BID_PRICE Data Element is not specified in the continuation records, the BID_PRICE specified in the first/only record submitted will be applied to the entire reservation request.

For requesting transmission services which include multiple paths, the following fields may be specified using continuation records: PATH_NAME, POINT_OF_RECEIPT, and POINT_OF_DELIVERY. Supporting multiple paths or multiple POINT_OF_RECEIPT and POINT_OF_DELIVERY is at the discretion of the Provider.

The START_TIME and STOP_TIME indicate the requested period of service.

When the request is received at the OASIS Node, the TSIP assigns a unique ASSIGNMENT_REF value and queues the request with a time stamp. The STATUS for the request is QUEUED. The IMPACTED counter is initially set to 0. If the new request is not modifying an existing reservation (as indicated by a null value for the RELATED_REF Data Element) and the SELLER is the Primary Provider, REQUEST_TYPE must either be specified as "ORIGINAL" or be left null and OASIS will substitute the default value of "ORIGINAL". If the new request is not modifying an existing reservation and the SELLER is not the Primary Provider, REQUEST_TYPE must either be specified as "RESALE" or be left null and OASIS will substitute the default value of "RESALE".

If the new request is modifying an existing transmission reservation, the Data Elements REQUEST_TYPE and RELATED_REF must be entered. RELATED_REF contains the ASSIGNMENT_REF for the transmission reservation being modified, and REQUEST_TYPE must be one of MATCHING, REDIRECT, DEFERRAL, RENEWAL, RELINQUISH, or a Primary Provider registered value.

Specification of a value YES in the PRECONFIRMED field authorizes the TSIP to automatically change the STATUS field in the *transstatus* Template to CONFIRMED when that request is ACCEPTED by the Seller.

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**Modifications to Existing Standards
Data Dictionary: Standard 003-0**

REQUEST_TYPE	REQTYPE	1{ALPHA}3 0	Valid Types: ORIGINAL RESALE RENEWAL MATCHING DEFERRAL REDIRECT <u>RELINQUISH</u> <u>H</u> {Registered}	ORIGINAL – typical reservation requests submitted to the Primary Provider RESALE – secondary market requests submitted to a Transmission Customer as Secondary Transmission Provider RENEWAL – request to renew an expiring transmission reservation MATCHING – request to meet or exceed a competing request to retain transmission service (right of first refusal) DEFERRAL – request to defer or apply for extension on start of transmission service REDIRECT – request to redirect all or portion of a transmission reservation to an alternate POR/POD and/or make other changes to the terms of service as permitted <u>RELINQUISH – request to release all or a portion of the capacity of a Redirect on a Non-Firm basis to the Firm Parent Reservation</u> {registered} – Primary Transmission Provider's may register values for REQUEST_TYPE to implement specific provisions of their Tariffs.

4. SUPPORTING DOCUMENTATION

a. Description of Request:

In NAESB Standard 10.5.3 a release mechanism was required in the standard. This request establishes that mechanism for release. When transmission rights are redirected on a non-firm basis there is currently not a way to reinstate these MW's back to the parent reservation.

b. Description of Recommendation:

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When NAESB Standard 001-10 was created to clarify REDIRECT requests on a non-firm basis the OASIS 1A Task Force determined there was a need for a release mechanism. This recommended standard defines that mechanism along with the required OASIS S&CP changes.

In support of the Release Mechanism Recommendation to the NAESB Executive Committee for a proposed business practice standard, please see the following sets of NAESB subcommittee minutes:

WEQ ESS/ITS	November 18-19, 2004	http://www.naesb.org/pdf/weq_ess_its111804fm.doc
WEQ ESS/ITS	January 12-13, 2005	http://www.naesb.org/pdf2/weq_ess_its011205fm.doc
WEQ OASIS 1A Task Force	February 15, 2005	http://www.naesb.org/pdf2/weq_oasis1a_021505fm.doc
WEQ OASIS 1A Task Force	April 4, 2005	http://www.naesb.org/pdf2/weq_oasis1a_040405fm.doc
WEQ OASIS 1A Task Force	April 22, 2005	http://www.naesb.org/pdf2/weq_oasis1a_042205fm.doc
WEQ ESS/ITS, OASIS II, and OASIS IA	April 26, 2005	http://www.naesb.org/pdf2/weq_ess_its042605dm.doc
WEQ ESS/ITS	July 13-14, 2005	http://www.naesb.org/pdf2/weq_ess_its071305fm.doc
WEQ ESS/ITS	August 31-September 1, 2005	http://www.naesb.org/pdf2/weq_ess_its083105dm.doc
WEQ ESS/ITS	October 20-21, 2005	http://www.naesb.org/pdf2/weq_ess_its102005fm.doc
WEQ ESS/ITS	March 6-7, 2006	http://www.naesb.org/pdf2/weq_ess_its030606fm.doc
WEQ ESS/ITS	April 4-5, 2006	http://www.naesb.org/pdf2/weq_ess_its040406fm.doc
WEQ ESS/ITS	June 27-28, 2006	http://www.naesb.org/pdf2/weq_ess_its062706fm.doc
WEQ ESS/ITS	July 10-11, 2006	http://www.naesb.org/pdf2/weq_ess_its071006fm.doc
WEQ OASIS Task Force	August 22, 2006	http://www.naesb.org/pdf2/weq_oasis082206dm.doc
WEQ OASIS Task Force	August 31, 2006	http://www.naesb.org/pdf2/weq_oasis083106dm.doc
WEQ ESS/ITS	September 25-26, 2006	http://www.naesb.org/pdf2/weq_ess_its092506fm.doc
WEQ ESS/ITS	October 23-24, 2006	http://www.naesb.org/pdf2/weq_ess_its102306fm.doc
WEQ ESS/ITS	December 4, 2006	

c. Business Purpose:

This recommendation will provide transmission customers the ability to release unused capacity on any redirect on a non-firm basis reservation to reinstate this capacity back on the Firm Parent Reservation

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such that it may subsequently be scheduled, Redirected on a Firm or Non-Firm basis to a different path, resold, etc. This standard will help clarify Section 22.1(c) in the FERC Pro Forma Tariff.

d. Commentary/Rationale of Subcommittee(s)/Task Force(s):

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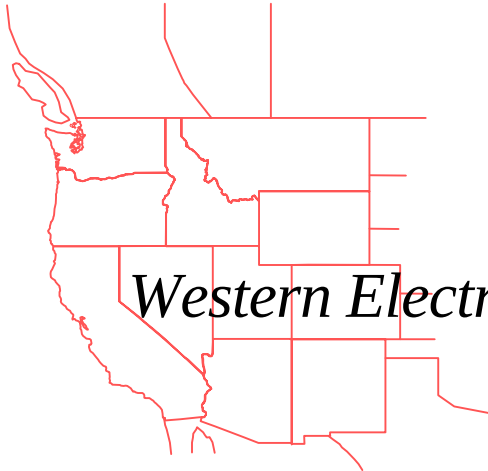
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TAB 9

Minor Correction

- Action may be required of the WEQ EC to approve the proposed standard.
- This section includes the minor correction
- Tab 8 corresponds to agenda item 4 for WEQ.



Western Electricity Coordinating Council

Carol Ballantine
Interchange Scheduling & Accounting Subcommittee
Chair
Platte River Power Authority
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Fort Collins, Colorado 80525
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FAX: (970) 229-5219
Ballantinec@prpa.org

January 29, 2007

To: NAESB Office, WEQ Executive Committee Chairs

From: Carol Ballantine, WECC ISAS Chair

Subject: Minor Correction: WEQ-004, Request No. R05001
Appendix D Commercial Timing Table WECC Correction

There is a consensus in the Western Interconnection that there has been a misinterpretation of the Commercial Timing Table section for transactions <1 hour prior to ramp start applying to the Western Interconnection.

The total assessment time of 10 minutes was assumed to be given for Reliability Entity assessment. The Western Interconnection members would like to request two changes to the current timing table.

These changes increase the reliability assessment period from 5 minutes to 10 minutes for e-Tags submitted <1 hour but ≥ 20 minutes prior to ramp start and keep the assessment period at 5 minutes for those e-Tags submitted <20 minutes but ≥ 10 minutes prior to ramp start. These minor changes to the timing table are highlighted in Attachment 1.

We sincerely appreciate your time and consideration of this request.

Attachment

cc: Steve Cobb
Don Watkins
Steve Rueckert

Attachment 1

If Actual Arranged Interchange (RFI) is Submitted	IA Assigns Initial Status of	IA Makes Initial Distribution of Arranged Interchange	BA and TSP Conduct Reliability Assessments IA Verifies Reliability Data Complete	IA Compiles and Distributes Status	BA Prepares Confirmed Interchange for Implementation	Minimum Total Reliability Period (Columns A through D)
>1 hour after the start time	<u>ATF</u>	≤ 1 minute from RFI submission	≤ 2 hours from Arranged Interchange receipt from IA	≤ 1 minute from receipt of all Reliability Assessments	NA	NA
<15 minutes prior to ramp start but ≤ 1 hour after the start time	<u>Late</u>	< 1 minute from RFI submission	< 10 minutes from Arranged Interchange receipt from IA for all Interconnections except WECC	< 1 minute from receipt of all Reliability Assessments	≤ 3 minutes after receipt of confirmed RFI	15 minutes* according to reasonable efforts
<10 minutes prior to ramp start but ≤ 1 hour after the start time	<u>Late</u>	< 1 minute from RFI submission	< 5 minutes from Arranged Interchange receipt from IA for WECC	< 1 minute from receipt of all Reliability Assessments	≤ 3 minutes after receipt of confirmed RFI	10 minutes* according to reasonable efforts
<1 hour but ≥ 15 minutes prior to ramp start	<u>On-time</u>	< 1 minute from RFI submission	< 10 minutes from Arranged Interchange receipt from IA for all Interconnections except WECC	< 1 minute from receipt of all Reliability Assessments	> 3 minutes prior to ramp start	15 minutes
<20 minutes but ≥ 10 minutes prior to ramp start	<u>On-time</u>	< 1 minute from RFI submission	< 5 minutes from Arranged Interchange receipt from IA for WECC	< 1 minute from receipt of all Reliability Assessments	> 3 minutes prior to ramp start	10 minutes
<1 hour but ≥ 20 minutes prior to ramp start	<u>On-time</u>	< 1 minute from RFI submission	< 10 minutes from Arranged Interchange receipt from IA for WECC	< 1 minute from receipt of all Reliability Assessments	> 3 minutes prior to ramp start	15 minutes
>1 hour but < 4 hours prior to ramp start	<u>On-time</u>	≤ 1 minute from RFI submission	≤ 20 minutes from Arranged Interchange receipt from IA	≤ 1 minute from receipt of all Reliability Assessments	≥ 39 minutes prior to ramp start	1 hour plus 1 minute

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TAB 10

Subcommittee Updates

- This material is provided to support reviews given by the subcommittee leadership. No action is needed of the EC.

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WEQ EC Subcommittee Updates

WEQ SUBCOMMITTEES AND TASK FORCES

Electronic Scheduling/Information Technology

- **November 15, 2006:** The WEQ BPS and ESS/ITS met jointly in Dallas, TX to continue development of R05004A. The subcommittees reviewed the second round of informal comments submitted on Item 1B (granting of partial service by capacity requested, both partial period and partial MW). The language was revised and plans were made to review the language and the comments submitted with the NERC ATC Drafting Team at the next joint meeting of the NERC and NAESB ATC teams. In addition, MOD 001 was reviewed for the second time by the NAESB team. Comments were provided and plans were made to review the comments with the NERC team during their next ATC DT conference call meeting. NERC plans to post MOD 001 for comments on December 1.
- **December 4, 2006:** The ESS/ITS will met via conference call on December 4, 2006 from 10:00 AM to 4:00 PM Central. During this call, the ESS/ITS reviewed the comments submitted during the Informal Comment period for the draft Relinquish standards to address Request No. R04006C1 (Develop OASIS 1A capacity release request standards). The ESS/ITS voted to submit the recommendation to the WEQ Executive Committee for adoption after being posted for formal comment. The ESS/ITS also voted to send [Draft S&CP Modifications Standards of Conduct Modifications \(WEQ 2006 Annual Plan Item 3\(c\)\(i\)\(S&CP\)](#) for Informal Comment, with comments due on December 22, 2006. The ESS/ITS also discussed the Next Steps for the development of the Implementation Guide; reviewed examples submitted by subcommittee participants in response to Request No. R04006E (Network Service Transactions); and reviewed the work of the joint effort with the WEQ Business Practices Subcommittee and the NERC ATC Drafting Team to draft standards to address Request No. R05004A.
- **December 6, 2006:** The WEQ BPS and ESS/ITS met jointly to review informal comments submitted on Item 1D (defining whether Contract Path for systems using flow-based analysis is between control areas or between Transmission Service Providers), Item 1A (allocation of flowgate capability based on historical Network Native Load impacts the evaluation of transmission service requests, requiring the posting of those allocation values in conjunction with queries of service offerings on OASIS), and item 3E (business practices for calculation and frequency of posting ATC calculation) (frequency of calculation and frequency of posting) of R05004A. The subcommittee drafted language for the definition of Contract Path (between Transmission Service Providers) to address R05004A 1D. The language was posted for informal comments on December 7th, with comments due on January 5th. An updates was given on the progress of the NERC ATC Drafting Team. It is expected that NERC MOD-001-1 for ATC will be posted soon. In addition, work papers were developed on all ATC posting requirements (FERC and NERC) in order to begin standards drafting language for R05004 Item 3E.
- **January 4, 2007:** The ESS/ITS met via conference call on January 4, 2007. During this call, the ESS/ITS reviewed the informal comments submitted on [Draft S&CP Modifications Standards of Conduct Modifications \(WEQ 2006 Annual Plan Item 3\(c\)\(i\)\(S&CP\)](#). After making revisions in response to the comments, the subcommittee voted to send the recommendation to the WEQ Executive Committee for adoption. The recommendation will be posted for formal comment with the title Recommendation 2007 Annual Plan Item 3(a)(2) – Implementation of S&CP changes to support Standards of Conduct business practices due to the adoption of the 2007 WEQ Annual Plan. The ESS/ITS also reviewed the draft Implementation Guide and companion revisions to the S&CPs drafted by Mr. Sorenson.
- **January 8, 2007:** The WEQ BPS and ESS/ITS met via conference jointly to review comments submitted on the Contract Path definition (Item 1D of R5004A). The group reviewed progress made on work papers drafted to outline the standards language for Item 3E of R05004A. The group planned to begin drafting standards language for this item (ATC posting requirements).
- **January 9-10, 2007:** The ESS/ITS held a meeting at NAESB's offices in Houston, Texas on January 9-10. During this meeting, the subcommittee further reviewed the draft Implementation Guide and

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WEQ EC Subcommittee Updates

companion revisions to the S&CPs, reviewed the work papers submitted in response to Request No. R04006E (Network Service Transactions), reviewed any comments submitted on Recommendation 2007 Annual Plan Item 3(a)(2) in preparation of the WEQ Executive Committee meeting, and planned the work of the subcommittee for the first quarter 2007.

- **January 26, 2007:** The ESS/ITS held a conference call to review the draft Implementation Guide and proposed revision to the S&CPs drafted by Mr. Sorenson, review comments submitted to date in response to request for formal comments on Recommendation 2007 Annual Plan Item 3(a)(2) - Implementation of S&CP changes to support Standards of Conduct business practices (standards of conduct link on OASIS home page), review Draft Recommendation re: S&CP changes to complement the modifications made to the existing business practice standards ratified in Final Action R04035/R05002 (Mr. Wood to provide recommendation stating that no modifications to the S&CPs are needed), review Draft Recommendation re: S&CP changes to complement the business practice standards ratified in Final Action R04006D – Sale or Assignment of Transmission Service (Resales and Transfers) (Mr. Pritchard to provide draft recommendation for this item), update the joint effort with the WEQ Business Practices Subcommittee and the NERC ATC Drafting Team to draft standards to address Request No. R05004A, and continue discussion of Request No. R04006E (Network Service Transactions).

NERC/NAESB Joint Interchange Scheduling Working Group

- **Planned, late January, 2007:** The JISWG will meet in Houston, TX to continue work to update the NAESB R05001 Coordinate Interchange Standard and the NERC INT Version 1 Standards to align them with changes made to the e-Tag tool and Interchange timing tables. The working group will also review the NAESB 2007 Annual Plan and assignments given to them by the NERC IS for 2007 and the NAESB WEQ EC for 2007.
- **December 15, 2006:** The JISWG planned to meet via conference call to review any comments submitted on Recommendation WEQ 2006 Annual Plan 3 b iii/R03007: PKI Initiative (e-MARC) and to prepare for the WEQ Executive Committee conference call to adopt the standards scheduled for December 19th. However, due to weather complications in the Pacific Northwest, the chairs requested the meeting be cancelled..
- **January 23-24, 2007:** The JISWG met in Houston, TX to continue work to update the NAESB R05001 Coordinate Interchange Standard and the NERC INT Version 1 Standards to align them with changes made to the e-Tag tool and Interchange timing tables. In addition, the JISWG considered Recommendation for WEQ 2006 Annual Plan Item 3 (b) (i) (Develop companion business practices to NERC's Cyber Standard (CIP002-009), and specifically review section 1303-Personnel & Training to determine if business practices are needed.) The working group reviewed the NAESB 2007 Annual Plan and assignments given to them by the NERC IS for 2007 and the NAESB WEQ EC for 2007.

Business Practices Subcommittee

- **November 15, 2006:** The WEQ BPS and ESS/ITS met jointly in Dallas, TX to continue development of R05004A. The subcommittees reviewed the second round of informal comments submitted on Item 1B (granting of partial service by capacity requested, both partial period and partial MW). The language was revised and plans were made to review the language and the comments submitted with the NERC ATC Drafting Team at the next joint meeting of the NERC and NAESB ATC teams. In addition, MOD 001 was reviewed for the second time by the NAESB team. Comments were provided and plans were made to review the comments with the NERC team during their next ATC DT conference call meeting. NERC plans to post MOD 001 for comments on December 1.
- **December 6, 2006:** The WEQ BPS and ESS/ITS met jointly to review informal comments submitted on Item 1D (defining whether Contract Path for systems using flow-based analysis is between control areas or between Transmission Service Providers), Item 1A (allocation of flowgate capability based on historical Network Native Load impacts the evaluation of transmission service requests, requiring the posting of those allocation values in conjunction with queries of service offerings on OASIS), and item 3E (business practices for calculation and frequency of posting ATC calculation) (frequency of calculation and frequency of posting) of R05004A. The subcommittee

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drafted language for the definition of Contract Path (between Transmission Service Providers) to address R05004A 1D. The language was posted for informal comments on December 7th, with comments due on January 5th. An update was given on the progress of the NERC ATC Drafting Team. It is expected that NERC MOD-001-1 for ATC will be posted soon. In addition, work papers were developed on all ATC posting requirements (FERC and NERC) in order to begin standards drafting language for R05004 Item 3E.

- **January 3, 2007:** The WEQ BPS met to plan for upcoming joint meetings with the NERC TLR Standards Drafting Team. These meetings will be held in January, February, and March in an effort to complete the NERC portion of the TLR post split standards. The subcommittee discussed how the development of the NERC standards could affect the companion NAESB business practices, ratified in April 2006.
- **January 8, 2007:** The WEQ BPS and ESS/ITS met via conference jointly to review comments submitted on the Contract Path definition (Item 1D of R5004A). The group reviewed progress made on work papers drafted to outline the standards language for Item 3E of R05004A. The group planned to begin drafting standards language for this item (ATC posting requirements).
- **January 10-11, 2007:** Joint meeting with NERC for TLR drafting, during which the group was to consider determination of remaining work to complete NERC/NAESB split, discussion of format for joint TLR operators manual, establish schedule of activities, MISO/SPP/PJM Curtailment Threshold Field Test, review schedule, review IDC changes needed, and assign drafting team members to monitor and report progress.
- **January 30, 2007:** A joint conference call meeting of the WEQ BPS and ESS/ITS was held to review draft standards language submitted by MISO representatives for R05004A Item 1A (where the allocation of flowgate capability based on historical Network Native Load impacts the evaluation of transmission service requests, requiring the posting of those allocation values in conjunction with queries of service offerings on OASIS). In addition, the group continued work on R05004A Item 3E (business practices for calculation and frequency of posting ATC calculation) by identifying all ATC posting requirements found in Federal Energy Regulatory Commission Orders and NERC MOD-001 and drafting business practice standard language for those posting requirements. The subcommittees discussed future meeting agendas and the agenda for the next joint NERC/NAESB meeting on ATC/AFC.

Standards Review Subcommittee

- **November 20, 2006:** The WEQ Standards Review Subcommittee met to review the draft scoping document for R05026. The document was finalized during this meeting and posted for the next WEQ EC meeting in February 2007. The subcommittee continued its review of NERC Standards Authorization Requests (SARs) and Ballots to determine if corresponding commercial practices are warranted. .
- **December 18, 2006:** The subcommittee reviewed NERC Standards Authorization Requests (SARs) and Ballots to determine if corresponding commercial practices are warranted. Several were noted as being monitored by the SRS. Although the subcommittee expected to receive updates from SAR drafting team leaders on the SARs related to Manual Time Error, Area Control Error Equation, and Inadvertent Interchange, those updates were not made during this meeting. The subcommittee discussed a new way of conducting business for the WEQ SRS. It was proposed that the WEQ SRS meet once every two months and hold longer meetings. During those meeting, NERC SARs and Standards will be reviewed by the entire subcommittee via conference call. It is expected that this type of meeting will help the subcommittee progress on updates on NERC SARs that are taken as action items.
- **January 29, 2007:** The Standards Review Subcommittee continued its review of NERC Standards Authorization Requests (SARs) and Ballots to determine if corresponding commercial practices are warranted. In addition, the subcommittee continued its discussions on how best to conduct meetings and schedule future meetings for 2007.

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Seams Subcommittee

- **January 16, 2007:** The Seams Subcommittee, reactivated by the WEQ Executive Committee during the November 14 meeting, held a conference call on January 16, 2007. During this call, the Seams Subcommittee discussed the Seams Catalog and any potential business practice standards related issues. This group is chaired by Mr. Schwermann.

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Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials

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Wholesale Electric Quadrant

TAB 11

2007 Annual Plan

- The 2007 plan as approved by the Board of Directors at its December 2006 meeting is included. Should the WEQ EC determine that changes are to be made to the plan as a result of the subcommittee updates; a motion to approve the changes for forwarding to the Board for approval would be required. The motion would require a simple majority to pass.
- The materials in Tab 11 correspond to agenda item 5 for the WEQ EC agenda.
- .



North American Energy Standards Board

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NORTH AMERICAN ENERGY STANDARDS BOARD

2007 WEQ Annual Plan – Approved by the Board of Directors on December 14, 2006

Item Description	Completion ¹	Assignment ²
1 Develop business practices standards as needed to complement reliability standards		
Develop business practice standards to support and complement NERC reliability standards, NERC policies and NERC standards authorization requests (SARs) using the NERC/NAESB Coordination Joint Standards Development Process as appropriate. Current NAESB activities underway to develop business practice standards that are supportive of this annual plan item are:		
a) Make version 1 changes to business practices as requested.	Ongoing	BPS
i) Make changes to business practices as related to inclusion of the NERC Reliability Functional Model functional model entities as NERC undertakes the same efforts.	As requested	BPS
Status: No requests.		
b) Develop business practices to support Coordinate Interchange – R05020 “Include a guideline for rounding schedules with partial mWh's in the coordinate interchange business practice WEQ BPS-002-000”	2 nd Q, 2007	BPS
		JISWG
Status: Not Started.		
c) Develop business practice standards to support Operate Within Limits (R03017).	2007	BPS
Status: Not Started. Coordination of NAESB timeline with NERC timeline is required.		
d) Develop business practices to support the reliability components of TLR.		
i) Version 0 Split of TLR business practices from reliability components.	2 nd Q, 2007	BPS
Status: Completed ratification and delayed publication and filing with FERC until NERC has had the opportunity to complete its split. <i>[This date may change to the 1st Q 2007 depending on outcome of November SAC meeting.]</i>		
ii) Continuous support of TLR Procedure in alignment with NERC efforts including version 1 development.	Ongoing	BPS
Status: Ongoing as NERC makes changes. R06002 completed and approved by the WEQ EC on 5-9-06.		
iii) Complete version 1 TLR business practices.	2 nd Q, 2007	BPS
Status: Dependent on successful completion of NERC efforts – 1(d)(i).		
e) Determine any needed NAESB action in support of the Interchange Distribution Calculator (IDC) and develop any necessary standards.	4 th Q, 2007	BPS
Status: Not Started.		
f) Develop jointly with NERC a Joint NERC/NAESB Operating training manual.	2 nd Q, 2007	BPS
Status: Not Started. Dependent on completion of version 1 TLR BPs, 1(d)(i).		



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NORTH AMERICAN ENERGY STANDARDS BOARD

2007 WEQ Annual Plan – Approved by the Board of Directors on December 14, 2006

	Item Description	Completion ¹	Assignment ²
2	Develop business practice standards in support of the FERC RM05-25-000 and RM05-17-000 (OATT Reform)		
a)	Develop version 1 business practice standards to better coordinate the use of the transmission system among neighboring transmission providers. Such business practice standards would be based on recommendations from NERC's Long Term ATC/AFC Task Force and would involve revised procedures for the ATC calculation and/or revised protocols as determined by the final order. Status: Underway using joint standards development process with NERC. Request R050004 was expanded to include the OATT NOPR items (NOPR, Docket Nos. RM05-25-000 and RM05-17-000 , "Preventing Undue Discrimination and Preference in Transmission Services", issued May 19, 2006).	2007	BPS/ESS
b)	Develop the needed business practices as companion to the NERC standards for ATC related efforts. Status: Not Started.	TBD	BPS/ESS
i)	Develop standards to support existing Request No. R05004 .	TBD	BPS/ESS
ii)	Develop the needed business practices to support NERC efforts (MOD 001-MOD 009, FAC 12/13).	TBD	BPS/ESS
c)	Develop version 1 business practice standards to support transparency reporting and related functions that may be required as a result of the final order. Status: Not Started.	TBD	BPS/ESS
3	Develop business practices standards to improve the current operation of the wholesale electric market and develop and maintain business practice and communication standards for OASIS and Electronic Scheduling		
a)	Develop and/or maintain business practice standards as needed for OASIS and electronic scheduling. Specific items to address include:		
i)	Develop OASIS S&CP changes to support OASIS business practices:		
1)	Implementation of S&CP changes to support "relinquish" mechanism to complement non-firm redirects (R04006C1). Status: Underway, to be packaged with other S&CP changes to avoid the cost of piecemeal implementation of S&CP changes.	1st Q, 2007	ESS/ITS
2)	Implementation of S&CP changes to support Standards of Conduct business practices. Status: Not Started.	1st Q, 2007	ESS/ITS



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NORTH AMERICAN ENERGY STANDARDS BOARD

2007 WEQ Annual Plan – Approved by the Board of Directors on December 14, 2006

	Item Description	Completion ¹	Assignment ²
ii)	Network Services: Determine and develop needed business practice standards or other support is needed to support use of OASIS for Network Service transactions (R04006E). Status: Not Started.	3 rd Q, 2007	ESS/ITS
iii)	Registry: Determine and develop needed business practice standards to support the registry functions currently supported by NERC (R04037). Status: Underway.	2 nd Q, 2007	JISWG
iv)	Identify e-Tag enhancements to support business practices (including e-Tag specification changes) (R05018). Status: Underway.	3 rd Q, 2007	JISWG
v)	Document procedures used to implement the displacement/interruption terms of the Pro Forma tariff (R05019). Status: Not Started.	4 th Q, 2007	ESS/ITS
vi)	Make incremental enhancements to OASIS as an outgrowth of the NAESB March 29, 2005 conference on the future of OASIS (R05026). Status: Scoping statement being prepared by SRS.	TBD	Not Assigned
vii)	Respond to issues in FERC Order No. 676 (Docket No. RM05-5-000) – NAESB WEQ Standards 001 9.7, (paragraph 51 of the order). Status: Underway – see item 7 in provisional items. Delayed awaiting rulemaking on OATT NOPR.	Delayed	ESS/ITS
b)	Develop and/or maintain standard communication protocols and cyber-security business practices as needed.		
i)	Address the surety assessment findings on NAESB PKI standards. Status: Not Started.	1st Q, 2007	JISWG
ii)	Develop PKI standards for OASIS. Status: Not Started.	2nd Q, 2007	ESS
iii)	Develop PKI Standards for e-tagging. Status: Not Started.	2nd Q, 2007	JISWG
c)	Develop needed business practice standards for organization/company codes for NAESB standards – and address current issues on the use of DUNs numbers. Status: Not Started.	3 rd Q, 2007	NAESB Staff with WEQ support



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2007 WEQ Annual Plan – Approved by the Board of Directors on December 14, 2006

	Item Description	Completion ¹	Assignment ²
PROVISIONAL ITEMS			
1	Develop and or modify business practices related to support of NERC effort on the NERC Resources and Transmission Adequacy and Inadvertent Interchange Data Standards BAL-006 revisions.		
2	Develop business practice standards as requested by the regional and state advisory groups.		
3	Using the NERC Interconnected Operations Services reference document (March 2002, version 1.1) as a guide and starting point, develop business practices as necessary for ancillary services and/or interconnected operating services transactions.		
4	Evaluate the entries on the seams catalog , determine the need for business practice standards and draft the standards requests to develop business practice standards to complement or assist specific seams mitigation efforts as noted in the seams catalog.		
5	Develop business practice standards according to approved and assigned standards requests that complement or assist specific seams mitigation efforts as noted in the seams catalog .		
6	Develop business practice standards as related to the Effectiveness Study of Competitive Wholesale Markets (Congressional Mandate), Electric Energy Market Competition Task Force, Docket No. AD05-17-000 , issued by the FERC on October 13, 2005.		
7	Develop and or modify business practices as requested by FERC related to gas-electric coordination issues in Docket No. RM05-5-001 , "Standards for business practices for Interstate Natural Gas Pipelines", "Standards for Business Practices for Public Utilities," issued October 25, 2006 and related order on inquiry , "Order Instituting Inquiries into Gas-Electric Coordination Issues," also issued on October 25, 2006.		
8	Develop and/or maintain business practice standards to support gas-electric interdependencies - Respond to requests as received that are related to Docket No. RM05-28-000. - Respond directives related to the conclusions of the NAESB reports submitted in Docket No. RM05-28-000.		
9	Develop business practices as needed to support NAESB Retail Electric Quadrant efforts on demand side management and energy efficiency programs.		

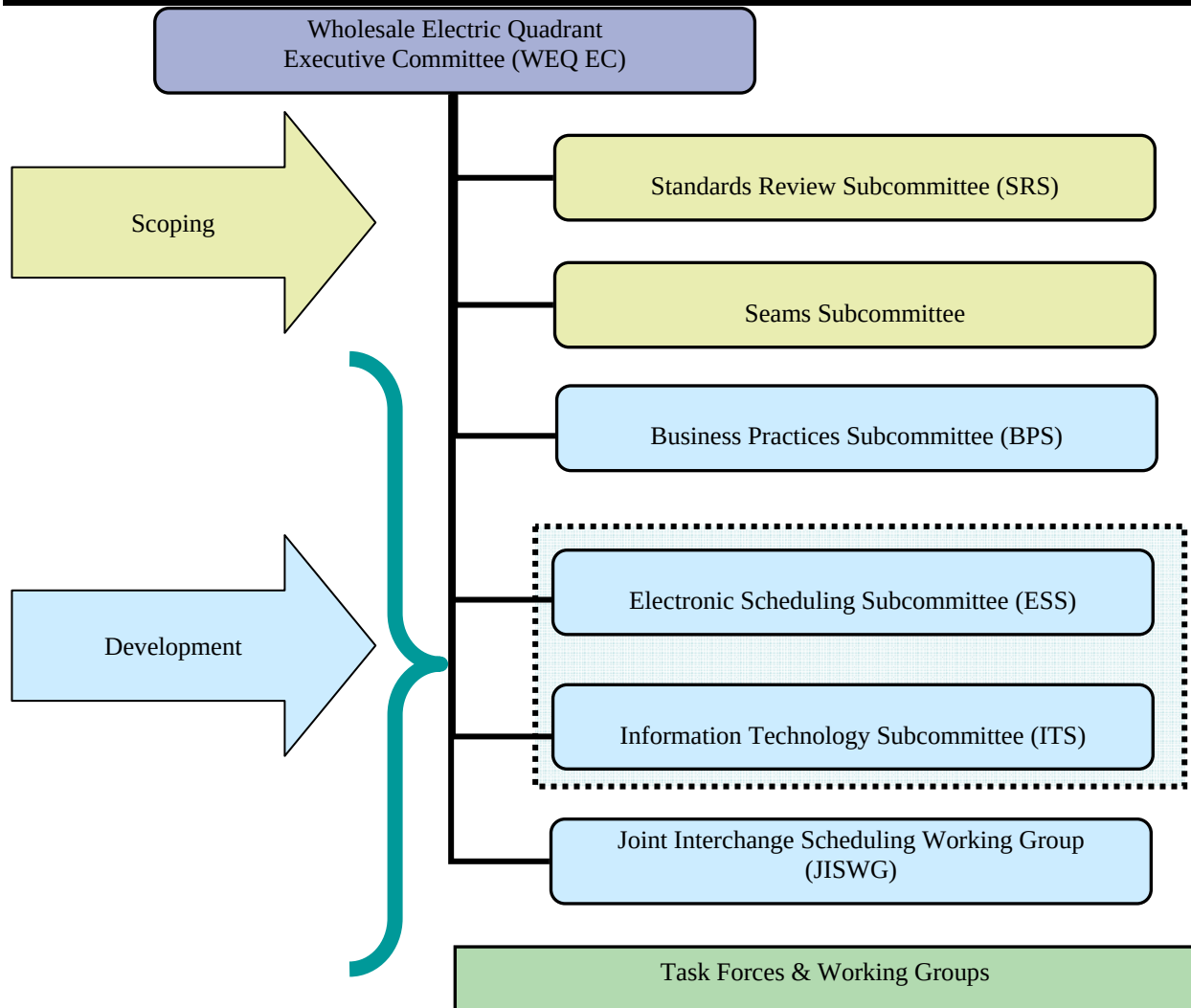


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NAESB WEQ EC and Subcommittee Leadership:

Executive Committee: Kathy York (WEQ EC Chair) and Lou Oberski (WEQ EC Vice Chair)

Standards Review Subcommittee: Raj Rana, Narinder Saini

Seams Subcommittee: Robert Schwermann

Business Practices Subcommittee & Task Forces: Kathy York & Jim Busbin

Electronic Scheduling Subcommittee/Information Technology Subcommittee & Task Forces: Paul Sorenson, J.T. Wood

- Coordinate Interchange: Roman Carter
- OASIS: J.T. Wood

Joint Interchange Scheduling Working Group (JISWG): Bob Harshbarger



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End Notes:

¹ Dates in the completion column are by end of the quarter for completion by the assigned committee. The dates do not necessarily mean that the standards are fully staffed so as to be implementable by the industry, and/or ratified by membership. If one item is completed earlier than planned, another item can begin earlier and possibly complete earlier than planned. There are no begin dates on the plan.

² The assignments are abbreviated. The abbreviations and committee structure can be found at the end of the annual plan document.

NORTH AMERICAN ENERGY STANDARDS BOARD

Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials

February 6-7, 2007

Retail Quadrants

TAB 12

Proposed Standard for Annual Plan Item 1-a Technical Electronic Implementation Standards – Billing and Payments

- Action may be required of the Retail ECs to approve the proposed standard.
- This section includes the recommendation and comments due on February 5 will be provided under separate cover. Comments from Energy Services Group are provided.
- Tab 12 corresponds to agenda item 3 for the Retail ECs.



RECOMMENDATION TO NAESB
Retail Electric Quadrant Executive Committee And
Retail Gas Quadrant Executive Committee
For Quadrant: REQ and RGQ
Requesters:
Request No.: 2007 Retail Quadrants Annual Plan item 1(a)
Request Title: RXQ. 3: Technical Electronic Implementation
Standards – Billing & Payments

1. RECOMMENDED ACTION:

☒ Accept as requested
☐ Accept as modified below
☐ Decline

**EFFECT OF EC VOTE TO ACCEPT
RECOMMENDED ACTION:**

☐ Change to Existing Practice
☐ Status Quo

2. TYPE OF DEVELOPMENT/MAINTENANCE**Per Request:**

☐ Initiation
☐ Modification
☐ Interpretation
☐ Withdrawal

☐ Principle
☐ Definition
☐ Business Practice Standard
☐ Document
☐ Data Element
☐ Code Value
☐ X12 Implementation Guide
☐ Business Process Documentation

Per Recommendation:

☐ Initiation
☐ Modification
☐ Interpretation
☐ Withdrawal

☐ Principle
☐ Definition
☐ Business Practice Standard
☐ Document
☐ Data Element
☐ Code Value
☐ X12 Implementation Guide
☐ Business Process Documentation

3. RECOMMENDATION

SUMMARY: The RXQ TEIS has completed revision work on standards for RXQ.3 Billing and Payment from comments received. The document posted at the following link:

http://naesb.org/pdf2/2007_retail_apila_rec_attachment.doc

is the proposed addition to the RXQ.3 book.

RECOMMENDED STANDARDS: See the attachment to the recommendation:

http://naesb.org/pdf2/2007_retail_apila_rec_attachment.doc



RECOMMENDATION TO NAESB
Retail Electric Quadrant Executive Committee And
Retail Gas Quadrant Executive Committee
For Quadrant: REQ and RGQ
Requesters:
Request No.: 2007 Retail Quadrants Annual Plan item 1(a)
Request Title: RXQ. 3: Technical Electronic Implementation
Standards – Billing & Payments

4. SUPPORTING DOCUMENTATION

- a. Description of Request:** The REQ and RGQ IR & TEIS request that the respective EC's review the technical model business practices that complete the technical sections of the RXQ.3 book.
- b. Description of Recommendation:** The REQ and RGQ IR and TEIS recommend that the IR & TEIS model business practices be ratified and included along with existing ratified RXQ.3 BPS model business practices.
- c. Business Purpose:** The RXQ.3 technical model business practices define the technical Model business practices that support the RCQ.3 model business Practices.

d. Commentary/Rationale of Subcommittee(s)/Task Force(s):

The TEIS voted to send the recommendation to the recommendation to the Executive Committee after a 30 day formal comment period on December 13, 2006. The following is the motion made during the December 13, 2006 conference call:

Mr. Behr moved to adopt the work paper as the technical implementation document for 2006 Annual Plan Item 1a – Billing and Payment (this item is 2007 Retail Annual Plan Item 1a) and to forward the document to the Retail Executive Committees for adoption. The motion passed without objection.

The attendees of this conference call were:

George Behr	Energy Services Group
Laura Kennedy	NAESB
Dan Rothfuss	Duke Energy
Phil Precht	Baltimore Gas & Electric
Dan Jones	Duke Energy

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RXQ.3.2 DEFINITIONS

[??these need to be merged with existing definitions]

ID	Title	Description
RXQ.3.2.1	Added Flat/Bypass Missing or Abundance of Consumption	For adjusting consumption when the added consumption provided has not been registered by the meter. The condition exists only for non-interval meters on the same Customer ID. The receiver must add this consumption to the meter number
RXQ.3.2.2	Added Slow- missing or abundance of Consumption	For adjusting consumption when the added consumption provided has not been registered by the meter. The conditions exist only for non-interval meters on the same Customer ID. The receiver must add this consumption for the meter.
RXQ.3.2.3	Added Tampering- Missing or abundance of Consumption	For adjusting consumption when the added consumption provided has not been registered by the meter. The condition exists only for non-interval meters on the same Customer ID. The receiver must add this consumption for the meter.
RXQ.3.2.4	Additive Metering	Usage for additive meters off the master meter where a different Customer ID has been assigned to the master and/or all applicable additive meters
RXQ.3.2.5	Additive/Subtractive	Master Meter is on one Customer ID and the additive and/or subtractive meters are on Customer IDs that are different than the master Meter. All additive usage is summed. All subtractive usage is summed. It is possible to receive summed additive usage and summed subtractive usage.
RXQ.3.2.6	Beginning / Ending Actual	Beginning and ending reading are actual reads.
RXQ.3.2.7	Beginning / Ending Estimated	Beginning and ending reading are estimated reads.
RXQ.3.2.8	Beginning Actual / Ending Estimated	Beginning reading is an actual read, and the ending reading is an estimated read.
RXQ.3.2.9	Beginning Estimated / Ending Actual	Beginning reading is an estimated read, and the ending reading is an actual read.
RXQ.3.2.10	Beginning Read	The Beginning Read is required for kiloVolt Amperes Reactive Hour, kiloVolt Amperes, and kiloWatt Hour. The Beginning Read is not used for kiloWatt Demand and kiloVolt Amperes Reactive Demand
RXQ.3.2.11	Clearinghouse	An agency that serves as a central location for sending and receiving transactions, as well as maintaining the current 'Supplier' ('supplier of record')
RXQ.3.2.12	Commodity Service Type	Only one type of commodity (i.e. electric or gas) is included in a transaction.
RXQ.3.2.13	Customer Account ID	Unique account number assigned to an account by a Distribution Company or Supplier. Some markets use account numbers as the marketplace Customer ID (unique ID for a Customer in that marketplace). See Customer ID.
RXQ.3.2.14	Customer ID	The 'Customer ID' data element is the unique identification of a Customer in a marketplace. The Distribution Company assigns the Customer ID to a Customer. Two models are supported for Customer ID: - Account Number of the Distribution Company. In this marketplace model, the account number of the Distribution Company defines the unique Customer ID for a Customer. - Service Delivery ID. In this marketplace model either a Distribution Company

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		defines the unique Customer ID for a Customer using the ID for the service delivery location (e.g. ESI ID).
		In cases where the Customer is not assigned to a Supplier, an additional data element is required to confirm that the Customer ID provided is correct. The ZIP Code for the Customer must be provided whenever the Supplier is not the Supplier of Record. This includes both Customer Information requests as well as initial enrollment requests.
RXQ.3.2.15	Document Due	Date the Non-Billing Party must provide the Invoice transaction back to the Billing Party. In Bill-Ready billing, the meter read party sends usage to the Non-Billing Party, who calculates their own portion of the bill and sends an invoice to the Billing Party. Transactions received by the Billing Party after this date and require the Billing Party to notify the Non-Billing Party via the Application Advice to either: (a) resend the transaction during the next billing window, or (b) do nothing; the Billing Party will hold the transaction until the next billing window.
RXQ.3.2.16	Ending / Single Reading	The Ending Read is used for kiloVolt Amperes Reactive Hour, kiloVolt Amperes, and kiloWatt Hour. The Ending Read is NOT used for kiloWatt Demand and kiloVolt Amperes Reactive Demand
RXQ.3.2.17	Entity ID	Trading partners use Entity ID's in inner and outer transaction envelopes, including name segments such as the X12 N1 and NM1. Includes: Supplier Entity ID, Distribution Company Entity ID, Sender Entity ID, Receiver Entity ID, Billing Party Entity ID, Non-Billing Party Entity ID, Customer Entity ID See 'Entity Common Code ID' in 'Related Standards' for more information.
RXQ.3.2.18	Final Invoice	The last electronic invoice sent for a Customer.
RXQ.3.2.19	Intermediate Peak / Mid Peak	Indicator that usage provided is for intermediate-peak time periods as defined by the Distribution Company
RXQ.3.2.20	Interval Date	Date of interval recording. See 'Interval Time'
RXQ.3.2.21	Interval Detail	Detail of interval usage
RXQ.3.2.22	Interval End Date Time	Timestamp for the interval reported
RXQ.3.2.23	Interval Meter Channel Number	
RXQ.3.2.24	Interval Summary	Summary of interval usage
RXQ.3.2.25	Interval Time	Timestamp for the interval reported. Interval reads require the time of the read. Most meter reading software applications use the ending period time to record a read: e.g. 0015 (12:15 AM) is the first 15-minute read of the day; 2400 (12:00 AM) is the last. X12 does not allow 2400 as a valid time. Parties are required to submit 2359 (11:59 PM) as the time for the last read of the day. For example, midnight between October 15th and October 16th is reflected as 2359 of October 15th.
RXQ.3.2.26	Master Meter	
RXQ.3.2.27	Master/Additive	
RXQ.3.2.28	Master/Additive/Subtractive	

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RXQ.3.2.29 Master/Subtractive

RXQ.3.2.30 Meter Exchanges

Usage information is divided into two separate reports when a meter is exchanged:

- The first report starts with the Service Period Start Date and ends with the Meter Exchange Date
- The second report starts with the Meter Exchange Date and ends with the Service Period End Date

Example:

	Service Period Start Date	Meter Exchange Date	Service Period End Date
First Report	DTM~150~20010101	DTM~514~20010114	
Second Report		DTM~514~20010114	DTM~151~20010128

See 'Service Period'.

RXQ.3.2.31 Meter Multiplier

$(\text{Ending read} - \text{Beginning read}) * \text{Meter Multiplier} = \text{Billed Usage}$

If no meter multiplier, then populate with "1"

Format of the multiplier could be in the form of a fraction (e.g. 48.78432)

RXQ.3.2.32 Meter Number

Meter numbers contain only uppercase letters (A to Z) and digits (0 to 9). Punctuation (spaces, dashes, etc.) is excluded, and significant leading and trailing zeros that are part of the meter number must be present.

RXQ.3.2.33 Meter Role

Role defines whether to add, subtract or do neither with the read value and the summarized total

RXQ.3.2.34 Meter Type

Meter Type uses a five-character field to identify what measure the meter is reporting, and in what interval. The first two characters are the type of consumption/demand, the last three characters are the metering interval reported by the metering agent. Valid values can be a combination of the following values:

Type of Consumption		Metering Interval Reported for Billing Purposes	
K1	kiloWatt Demand (kW)	[nnn] Number of minutes from 001 to 999 DAY Daily MON Monthly	
K2	kiloVolt Amperes Reactive Demand (kVAR)		
K3	kiloVolt Amperes Reactive Hour (kVARH)		
K4	kiloVolt Amperes (kVA)		
KH	kiloWatt Hour (kWh)		

Examples:

KHMON kiloWatt hours per month

K1015 kiloWatt demand per 15 minute interval

RXQ.3.2.35 Missing/Abundance of Consumption

When the consumption (added or subtracted) provided has not been registered by the meter, for example: tampering, fast, slow and/or flat/bypass. Only applies to non-interval meters on the same Customer ID. The meter number must be provided, as well as the type of missing or abundance consumption. The receiver must add or subtract this consumption.

RXQ.3.2.36 Monthly Billed Summary

Usage that is used by the Distribution Company as the basis for their transmission and distribution charges.

RXQ.3.2.37 Non-Billing Party Account ID

Billing Parties and Clearinghouses store the Non-Billing Party Account ID if provided by the Non-Billing Party. For example, when a Supplier enrolls a Customer, they must

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include the Customer ID, but may also choose to include their account number from their internal systems for that Customer. If provided, this ID should be echoed in all future transactions.

RXQ.3.2.38	Non-Billing Party Account ID	Account number used by the Non-Billing Party. Maintained in Billing Party and Clearinghouse systems when provided by the Non-Billing Party, and echoed on transaction to the Non-Billing Party.
RXQ.3.2.39	Non-Billing Party Invoice Due Date	Date that an invoice is due back from Non-Billing Party in order to be placed on this month's invoice.
RXQ.3.2.40	Non-Billing Party Messages	Regulatory and required messages provided by the Non-Billing Party for insert on the bill.
RXQ.3.2.41	Non-Interval Consumption	Consumption for non-interval meters.
RXQ.3.2.42	Non-Interval Detail	Detailed non-interval usage.
RXQ.3.2.43	Non-Interval Summary	Summary of non-interval usage
RXQ.3.2.44	Number of Dials / Digits	Number of dials or digits on the meter displayed as a decimal where: -the number of dials is integer value (number to the left of the decimal point), and -the number of dials is the decimal value (number to the right of the decimal point)
RXQ.3.2.45	Off Peak	Indicator that usage provided is for off-peak time periods as defined by the Distribution Company
RXQ.3.2.46	Old Customer ID	When a Distribution Company changes the Customer ID key for a Customer, they will send the original Customer ID (prior to change) for a Customer in each transaction for a period of 90 days to be used for cross-reference purposes by the Supplier.
RXQ.3.2.47	On Peak	Indicator that usage provided is for on-peak time periods as defined by the Distribution Company
RXQ.3.2.48	Original Invoice ID	Cross-reference ID from original invoice transaction
RXQ.3.2.49	Original Usage ID	Cross-reference ID from original usage transaction
RXQ.3.2.50	Party Calculating Non-Billing Party Charges	Defines who calculates charges for the Non-Billing Party. The table below summarizes the use of the Billing Party and Party Calculating Charges data elements, using X12 as an example.

Billing Model	Bills Customer	Calculates Distribution Company Portion	Calculates Supplier Portion	Billing Party REF*BLT	Calc. Party REF*PC
Distribution Company Rate-Ready Consolidated Billing	Distribution Company	Distribution Company	Distribution Company	LDC	LDC
Distribution Company Bill-Ready Consolidated Billing	Distribution Company	Distribution Company	Supplier	LDC	DUAL
Supplier Bill-Ready Billing, includes Single	Supplier	Distribution Company	Supplier	ESP	DUAL

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Retailer Billing Option					
Dual Billing	Both	Distribution Company	Supplier	DUAL	DUAL

See 'Party Sending Bill'

RXQ.3.2.51	Party Sending Bill	Defines who sends bill to Customer. See 'Party Calculating Non-Billing Party Charges'.									
RXQ.3.2.52	Payment Notification	Transaction sent to notify Non-Billing Party that payment has been received from a Customer									
RXQ.3.2.53	Power Factor	Relationship between Watts and Volt - Amperes necessary to supply electric load									
RXQ.3.2.54	Power Region	Reliability region of the Customer									
RXQ.3.2.55	Primary Metering Indicator	Indicates Primary Metering is used									
RXQ.3.2.56	Rate Class	Rate Class of Customer									
RXQ.3.2.57	Rate Subclass	Rate Subclass of Customer									
RXQ.3.2.58	Service Delivery ID	Unique number assigned to the service location by the Distribution Company. Some markets use Service Delivery ID as the marketplace Customer ID (unique ID for a Customer in that marketplace). See Customer ID and ESI ID.									
RXQ.3.2.59	Service Period	Service Period to defines discrete units of usage by a Customer used for billing purposes. Usage is created and if necessary cancelled by Service Period dates, which include a Start Date and an End Date. Invoices are created, and if necessary cancelled, using the Service Period originally defined in the Usage transaction. Restatements of both Usage and Invoice transactions are done using a new Service Period, which creates a new discrete unit. Service Periods should overlap from month to month. For example, last month's Service Period End Date should equal this month's Service Period Start Date. Example: <table border="1"> <thead> <tr> <th></th><th>Service Period Start Date</th><th>Service Period End Date</th></tr> </thead> <tbody> <tr> <td>First Report</td><td>DTM~150~20050501</td><td>DTM~151~20050601</td></tr> <tr> <td>Second Report</td><td>DTM~150~20050601</td><td>DTM~151~20050701</td></tr> </tbody> </table> See 'Meter Exchanges'.		Service Period Start Date	Service Period End Date	First Report	DTM~150~20050501	DTM~151~20050601	Second Report	DTM~150~20050601	DTM~151~20050701
	Service Period Start Date	Service Period End Date									
First Report	DTM~150~20050501	DTM~151~20050601									
Second Report	DTM~150~20050601	DTM~151~20050701									
RXQ.3.2.60	Service Period End Date	See Service Period.									
RXQ.3.2.61	Service Period Start Date	See Service Period.									
RXQ.3.2.62	Submitter/Receiver	Transactions flow in multiple directions, including: (a) Usage can flow from Distribution Company to Clearinghouse, Clearinghouse to Supplier, and Distribution Company to Supplier, (b) Invoices and Payments can flow from Distribution Company to Supplier and Supplier to Distribution Company While Model Business Practices are worded as using explicit terms such as 'Billing Party' and 'Non-Billing Party', technical specifications often do not use these terms. Rather they require that parties define themselves and their trading partners in each transaction as both: (a) the type of entity (e.g. Distribution Company), and (b) whether the defined entity is the submitter, or receiver.									

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RXQ.3.2.63	Subtracted Fast- Missing or abundance of Consumption	For adjusting consumption when the subtracted consumption provided has not been registered by the meter. The condition exists only for non-interval meters on the same Customer ID. The receiver must subtract this consumption for the meter.
RXQ.3.2.64	Subtractive Metering	Usage for subtract meters off the master meter where a different Customer ID has been assigned to the master and/or all applicable subtractive meters.
RXQ.3.2.65	Summary Level	Indicator for what level of summary has been done on usage
RXQ.3.2.66	Totalizer/Total/Max	
RXQ.3.2.67	Transformer Loss Factor	Where the delivery point is prior to the transformation such that the Customer is responsible for losses and the meter is after the transformer and therefore does not record losses, the transformer loss factor will be greater than unity. E.g. 1.006, to reflect a positive adjustment to the meter readiness. Where the delivery point is after the transformation such that the Customer is not responsible for transformer losses, and the meter is prior to the transformer and therefore does reflect transformer losses, the transformer loss factor will be less than unity. E.g. 0.995, to reflect a negative adjustment to the meter reads.
RXQ.3.2.68	Unmetered Services	Includes services that do not provide meter readings such as streetlights.
RXQ.3.2.69	Unmetered Services Detail	Usage details for unmetered services
RXQ.3.2.70	Unmetered Services Summary	Usage summary for unmetered services
RXQ.3.2.71	Usage ID	The Usage ID data element serves as a cross-reference between the Usage and the associated Invoice and Payment In X12, these data elements are used for the cross-reference: • 867 – BPT02 – This document establishes the Usage ID cross reference number. • 810 – BIG05 – This document must have the cross reference number from the respective 867. • 820 – REF6O (letter O) – When making the other party whole, the 820 to the non-billing party must also include the cross reference number from 867/810 document.

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RXQ.3.4 MODELS

No models defined at this time.

RXQ.3.5 Related Standards**RXQ.3.5 RELATED MODEL BUSINESS PRACTICES****Entity Common Codes ID**

For NAESB RXQ Common Code purposes, an entity will use one and only one D-U-N-S® Number. Entity common codes should be "legal entities," that is, Ultimate Location, Headquarters Location, and/or Single Location (in Dun & Bradstreet Corporation ("D&B") terms). However, in the following situations, a Branch Location (in D&B terms) can also be an entity common code: 1. When the contracting party provides a D-U-N-S® Number at the Branch Location level; or 2. to accommodate accounting for an entity that is identified at the Branch Location level. Since D&B offers customers the option of carrying more than one D-U-N-S® Number per entity, please refer to NAESB's Web Page at www.naesb.org for directions on determining the one and only one D-U-N-S® Number constituting the NAESB RXQ Entity Common Code.

In the datasets, the data elements that end in 'Entity ID' means that they are to use "common codes," so the field will reflect the industry-supported common code for location or company.

NAESB RXQ Electronic Data Interchange Trading Partner Agreement

The NAESB RXQ TPA defines the relationship of the sender and receiver of NAESB RXQ electronic documents. This agreement represents a complete set of balanced terms which a company should accept whether it is sender or receiver of electronic documents. It has established all the data items necessary to exchange electronic documents in a step by step, fill in the blank model form. The use of the TPA minimizes preparation, negotiation and review time. This will allow more time for implementation of electronic commerce. Copies of this agreement may be obtained from the NAESB office or may be downloaded from the NAESB home page at www.naesb.org.

NAESB RXQ.7 Internet Electronic Transport

The default transport mechanism for RXQ electronic documents is the NAESB RXQ.7 Internet ET. This mechanism provides a secure and reliable transport protocol that includes Privacy, Authentication, Integrity and Non-repudiation (PAIN).

RXQ.3.6.1 Usage**RXQ.3.6 TECHNICAL IMPLEMENTATION**

This section provides technical details for the implementation of NAESB Billing and Payment transactions in support of deregulated energy marketplaces.

Use of Capitalization

NAESB RXQ adopted a capitalization convention where each term that was capitalized was a defined term.

Throughout the technical section of these model business practices, several adjustments to that convention are made. Capitalized terms in technical model business practices fall into one of X categories:

- RXQ Glossary Definitions (book RXQ.0). These terms are defined in the RXQ.0 book, and appear in section RXQ.3.2. They can be identified in that section because they are numbered 'RXQ.0.2.y', where 0 is the book number, and 'y' is a sequential number.
- RXQ Billing & Payment Definitions (book RXQ.3). These terms are defined in the RXQ.3 book, and appear in section RXQ.3.2. They can be identified in that section because they are numbered 'RXQ.3.2.y', where 3 is the book number, and 'y' is a sequential number.
- Data Element Names. Data element names used in the Data Dictionary tables as well as the X12 implementation guides contain capitalized terms not found in RXQ definitions.
- Codes. Code values used in the Code Value tables as well as the X12 implementation guides contain capitalized terms not found in RXQ definitions. Many of these terms are defined by X12. NAESB uses software to generate the X12 implementation guides, which forces some constraints on the standardized use of capitalization.
- Examples. The sample paper transactions as well as the X12 implementation guides include examples that have capitalized terms.

RXQ.3.6.1 Usage

RXQ.3.6.1: BILLING USAGE

Technical Implementation Of Business Process

Related Model Business Practices: RXQ.3.3.2.3, RXQ.3.3.2.4, RXQ.3.3.1.5, RXQ.3.3.4.9, RXQ.3.3.4.10, RXQ.3.3.5.4, RXQ.3.3.5.5, RXQ.3.3.6.2

The Billing Usage transaction is the inter-company communication that itemizes energy consumption or demand for a given period of time, used to determine invoice charges. The transaction reflects usage from actual meter reads, estimated meter reads, interval meter reads, unmetered usage, and usage used by the meter reader for billing. Billing Usage is not used to communicate historical usage.

The Billing Usage transaction supports all market billing models (Dual billing, consolidated bill-ready and rate ready, and single retailer billing option).

The types of usage transactions supported by Billing Usage in retail energy markets are:

- Monthly usage
- Interval usage
- Summarized interval usage
- Cancel usage (all of the above can be cancelled)

Each Billing Usage transaction can include any of the following categories of Usage:

- Summary (X12=PTD*SU)
- Non-Interval Detail (X12=PTD*PL) – Monthly usage, including time of use, additive/subtractive, missing/abundance consumption,
- Unmetered Services Summary (X12=PTD*BC)
- Unmetered Services Detail (X12=PTD*BD)
- Interval Summary (X12=PTD*BO)
- Interval Detail (X12=PTD*PM)

The **Sender** of the transaction is either the meter reading entity, the distribution company, or a central registration agent (e.g. ERCOT). The **Receiver** of the usage could be a supplier/retailer, a distribution company or a central registration agent (e.g. ERCOT).

The usage is identified by the **Usage ID** (formerly 'Reference Number ID'). This Usage ID is assigned by the originator of the usage UET – either the meter reading entity or the Distribution Company. If usage is cancelled, the **Original Usage ID indicates the specific** Usage ID to be cancelled.

The Usage ID is echoed in any invoice or payment UET's that use this usage, establishing a thread to tie these transactions together for involved parties.

Each original Billing Usage header contains:

- Final Indicator
- Sender Entity ID
- Sender Name
- Customer Account ID
- Customer Name
- Customer Name Overflow
- Non-Billing Party Invoice Due Date

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- Receiver Entity ID
- Receiver Name
- Receiver Account ID
- Original Usage ID
- Party Calculating Bill
- Party Sending Bill
- Purpose = 'Original'
- Usage ID
- Report Type Code
- Commodity Service Type
- Transaction Date

Each original Billing Usage can contain multiple detail records. Each detail record contains:

- Ending/Single Reading
- Quantity
- Summary Level
- Unit of Measure
- Interval Time
- Measurement Reference ID
- Service Period End Date
- Service Period Start Date
- Therm Factor
- Transformer Loss Multiplier
- Usage Detail Category
- Usage Code

If providing information at a meter level, each original Billing Usage detail contains, if available:

- Beginning and Ending reads
- Meter Multiplier
- Meter Type
- Meter Interval Type
- Meter Number
- Meter Role
- Number of Dials / Digits
- Power Factor
- Pressure Correction Factor
- Primary Metering Indicator

In addition to the above detail elements, each original Billing Usage interval usage transaction has a interval detail record for each interval, as defined by **Meter Type** and **Meter Report Period**, including:

- Interval Date
- Interval Time
- Interval Quantity
- Interval Unit of Measure

Each cancel Billing Usage includes **Purpose Code = 'Cancel'**, the Usage ID trace number to the original transaction, and the same data found in the original Billing Usage transaction.

RXQ.3.6.1 Usage

Reissuing cancelled usage is treated as original usage.

This section describes the purpose of each category of usage reported, which depends on the characteristics of the Customer account.

Monthly Billed Summary Information (X12:PTD=BB): This section is always required for every type of account, and reports what was billed by the party reading the meters, usually the Distribution Company.

Non-Interval Metered Services Information (X12: PTD01 = SU, PL) – These sections are used to report usage for metered data, at both a detail level by meter by unit of measure, and at a summary level for all meters.

Non-Interval Metered Services Summary (X12:PTD01=SU): This section sums to the account level by kWh and KVARH. The Summary report is not provided for kW or KVAR. Data is obtained from the metering system. If you have two meters and each meter measures kW and kWh, you will send one Summary report, with kWh readings from Meter 1 and Meter 2 summed.

Non-Interval Metered Services Detail (X12:PTD01=PL): There will be one Non-interval detail report for:

- each meter for each unit of measure
- missing or abundance of consumption
- meter exchange before: includes the Service Period Start Date and the Meter Exchange Date
- meter exchange after: includes the Meter Exchange Date and the Service Period End Date.

For Additive/Subtractive Metering Only: This report is also used for Additive/Subtractive Metering when the Master Meter is on one Customer ID and the additive and/or subtractive meters are on Customer IDs that are different than the master Meter. All additive usage is summed. All subtractive usage is summed. It is possible to receive two additive/subtractive loops - one with summed additive usage and one with summed subtractive usage. When reporting usage for the additive/Master and/or subtractive/Master usage, the meter number is not provided in the PTD04 and PTD05. The type of Master/Additive/Subtractive usage must be provided in the PTD06 by using code "AI" or code "AO".

For missing or abundance of Non-Interval Consumption: This report is also used to report missing or abundance of consumption when the consumption (added or subtracted) provided has not been registered by the meter, for example: tampering, fast, slow and/or flat/bypass. The conditions exist only for non-interval meters on the same Customer ID. The meter number must be provided, as well as the type of missing or abundance consumption. The receiver must add or subtract this consumption.

Interval Metered Services Information (X12: PTD01 = BO, PM) – These sections are used to report usage for interval metered data, at both a detail level by meter by unit of measure by interval time, and at a summary level for all meters.

Interval Metered Services Summary (X12: PTD01=BO): This section sums to the account level by kWh and KVARH. The Summary report is not provided for kW or KVAR. Data is obtained from the metering system. If you have two meters and each

RXQ.3.6.1 Usage

meter measures kW and kWh, you will send one Summary report, with kWh readings from Meter 1 and Meter 2 summed.

Metered Services Detail (X12=PTD01=PL): This section has reports for one or more meters for each unit of measure. Data is obtained from the metering system. In the case of one meter reporting one unit of measure (kWh), the PTD01=PM will be the same as the PTD01=SU and both must be provided.

Unmetered Services Information (X12=PTD01 = BC) – This report is usage for any unmetered portion of an account. This information must be provided at the summary level (X12=PTD01=BC). Total Consumption for all unmetered services at the account level. Even though some of the consumption may be estimated, the consumption is reported as actual for unmetered services. The summary is required at this time for Unmetered Services.

Cancellations

- Usage Cancellations are by metering period, i.e. same as the original Usage. Restated original Usage transactions may be for multiple periods.
- The “from” and “to” dates on the Cancel must match exactly with the original usage.
- On a cancellation, the signs are not reversed (don't change positive usage to negative usage). Quantities will not be negative on Cancels. Cancels should be interpreted as negative consumption.
- The consumption sent in the cancel must match the consumption sent in the original transaction.
- Cancels must be sent at the same level of detail as the original usage.
- There is a cross reference between billing related documents.

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RXQ.3.6.1 Usage**Sample Paper Transaction**

Usage Header	
Usage Date:	20040413
Usage ID:	04132004TR4877
Original Usage ID:	
Purpose:	Original
Final Indicator:	No
Sender Name:	Distribute-It Incorporated
Sender Entity ID:	123456789
Receiver Name:	Sell-It Incorporated
Receiver Entity ID:	546897321
Total KWH Billed	4,000
Total KW Billed	20
Total KVA Billed	18

Category	Meter #	Service Period Start Date	Service Period End Date	Interval End Time	Actual/ Estimated	Unit of Measure	Quantity
IU	12345678	20040410	20040509	0015	Actual	KW	200
IU	12345678	20040410	20040509	0030	Estimated	KW	

Category	Meter #	Service Period Start Date	Service Period End Date	Actual/ Estimated	Unit of Measure	Quantity
MU	23456789	20040410	20040509	Actual	KWH	200
MU	23456789	20040410	20040509	Estimated	KWH	

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RXQ.3.6.1 Usage**Data Dictionary**

Data Elem. Name	Description	Use	Condition	Comments [Options]
Transaction Purpose	Identifies the reason for sending this information	M		[Original, Cancellation]
Usage ID	Unique ID created by the originator of the usage transaction; used for cross-reference between Usage, Invoice and Payment transactions	M		
Usage Date	Date this transaction was created by the sender's application system.	M		
Report Type Code	Defines if usage is reported at interval, non-interval or mixed	M		[Interval, Non-Interval, Mixed]
Final Indicator	Indicates whether this is a final usage	M		[Yes, No]
Original Usage ID	The UUID from the original transaction provides a cross-reference; used only to cancel the original	C	[M] when Purpose='Reverse' or 'Cancel'	
Non-Billing Party Invoice Due Date	The last date invoices will be accepted by the Billing Party for inclusion on the bill	RBC	CBBR only	
Receiver Entity ID	Receiver's Entity ID (e.g. DUNS Number)	M		
Receiver Entity Name	Receiver Name	M		
Sender Entity ID	Entity ID (DUNS Number or DUNS+4 Number or other mutually-agreed upon number) of the party that initiates the transaction.	M		
Sender Name	Name of the trading partner that initiates the transaction.	M		
Service Period Start Date	Previous Meter Reading Date	M		
Service Period End Date	Current Meter Reading Date	M		
Customer Name	Customer Name	M		
Receiver Customer Account ID	Receiver Customer Account ID assigned by the Receiver. Not the Customer ID.	RBC	BR: sent if previously received by Non-Billing Party	
Customer ID	Customer Account ID or SDID; ID that uniquely defines the Customer in the marketplace.	M		
Party Sending Bill	Identifies party sending the bill to the Customer	RBC		[Distribution Company, DUAL, Supplier]
Party Calculating Bill	Identifies party calculating the Non-Billing Party Charges	RBC		[Distribution Company, DUAL, Supplier]
Commodity Service Type	Identifies type of energy commodity service	M		[Electric, Gas]
Power Region	Reliability Council	RBC		
Usage Detail Category	Code that defines what type of detailed usage is reported	M		[Non-Interval Metered, Interval Metered, Summary Interval, Unmetered, Billed]
Billed Demand	Demand Customer was actually billed. Billed (derived) Demand is based on contract or rate minimum and may be different than measured demand.	M		
Billed Consumption	Consumption Customer was billed	M		
Measured Demand	Measured Demand	M		
Interval Meter Read End Time	Timestamp for end of interval read	C	[M] when Report Type='INTERVAL'	
Interval Meter Exchange Date	Date meter was exchanged	M		
Interval Meter Read Transformer Loss Multiplier	Transformer Loss Multiplier. When a Customer owns a transformer and the transformer loss is not measured by the	C	[M] when this measure is available	

Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

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RXQ.3.6.1 Usage

Data Elem. Name	Description	Use	Condition	Comments [Options]
	meter.			
Interval Meter Read Multiplier	Represents the number of units that are reflected by one dial or digit increment. Can be multiple multipliers per meter	C	[M] when Report Type='METER'	
Interval Meter Read Power Factor	Relationship between Watts and Volt - Amperes necessary to supply electric load	C	[M] when this measure is available	
Interval Meter Read Estimated Actual Flag	Flag identifying if beginning and ending meter reads are estimated or actual		[M] when Report Type ='METER'	[Beg / End actual; Beg actual / End estimated; Actual Total; As Billed; Beg est. / End actual; Beg est. / End est.]
Interval Meter Read Unit of Measure	Unit of measure for read	BC	M when line item has a measure	[kiloWatt demand, kiloVolt Amperes Reactive Demand, kiloVolt Amperes Reactive Hour, kiloVolt Amperes, kiloWatt Hour]
Interval Meter Read Beginning	Value specifying beginning reading for the metering period.	C	[M] when Report Type ='METER'	
Interval Meter Read Ending/Single	The ending reading or single reading for metering period.	C	[M] when Report Type ='METER'	
Interval Meter Quantity Usage Code	Code distinguishes between estimated usage and actual usage	M		[Actual, Estimated]
Interval Meter Quantity	Usage	M		
Interval Meter Quantity Unit of Measure	Unit of measure for quantity	BC	M when line item has a measure	[kiloWatt demand, kiloVolt Amperes Reactive Demand, kiloVolt Amperes Reactive Hour, kiloVolt Amperes, kiloWatt Hour]
Interval Meter Channel Number	Interval Meter Channel Number	M		
Interval Meter Number of Dials / Digits	Number of meter dials or digits on the meter	C	[M] when Report Type ='METER'	X12 uses dials to left of decimal, digits to right of decimal
Interval Meter Role	Code that defines the effect of consumption on summarized total.	C	[M] when Report Type ='METER'	[Subtractive; Additive; Ignore]
Interval Meter ID	Serial number identifier for a specific interval meter	RBC		
Interval Meter Type	Meter Type			[See Meter Type Definition]
Interval Meter Rate Class	Rate Class	C		
Interval Meter Rate Subclass	Rate Subclass	C		
Interval Meter Summary Consumption	Total consumption on interval metered services			
Summary Interval Read End Time	Timestamp for end of interval read	C	[M] when Report Type='INTERVAL'	
Summary Interval Exchange Date	Date meter was exchanged	M		
Summary Interval Read Transformer Loss Multiplier	Transformer Loss Multiplier. When a Customer owns a transformer and the transformer loss is not measured by the meter.	C	[M] when this measure is available	
Summary Interval Read Multiplier	Represents the number of units that are reflected by one dial or digit increment. Can be multiple multipliers per meter	C	[M] when Report Type='METER'	
Summary Interval Read Power Factor	Relationship between Watts and Volt - Amperes necessary to supply electric load	C	[M] when this measure is available	
Summary Interval Read Estimated Actual Flag	Flag identifying if beginning and ending meter reads are estimated or actual		[M] when Report Type ='METER'	[Beg / End actual; Beg actual / End estimated; Actual Total; As Billed; Beg est. / End actual; Beg est. / End est.]
Summary Interval Read Unit of	Unit of measure for read	BC	M when line item has a measure	[kiloWatt demand, kiloVolt Amperes

Use Legend: M = Mandatory; C = Conditional; SO=Sender's Option; BC=Business Conditional; RBC=Retail Business Conditional

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RXQ.3.6.1 Usage

Data Elem. Name	Description	Use	Condition	Comments [Options]
Measure				Reactive Demand, kiloVolt Amperes Reactive Hour, kiloVolt Amperes, kiloWatt Hour]
Summary Interval Read Beginning	Value specifying beginning reading for the metering period.	C	[M] when Report Type ='METER'	
Summary Interval Read Ending/Single	The ending reading or single reading for metering period.	C	[M] when Report Type ='METER'	
Summary Interval Summary Consumption	Total consumption on interval metered services			
Summary Interval Quantity Usage Code	Code distinguishes between estimated usage and actual usage	M		[Actual, Estimated]
Summary Interval Quantity	Usage	M		
Summary Interval Quantity Unit of Measure	Unit of measure for quantity	BC	M when line item has a measure	[kiloWatt demand, kiloVolt Amperes Reactive Demand, kiloVolt Amperes Reactive Hour, kiloVolt Amperes, kiloWatt Hour]
Summary Interval Number of Dials / Digits	Number of meter dials or digits on the meter	C	[M] when Report Type ='METER'	X12 uses dials to left of decimal, digits to right of decimal
Summary Interval Role	Code that defines the effect of consumption on summarized total.	C	[M] when Report Type ='METER'	[Subtractive; Additive; Ignore]
Summary Interval ID	Serial number identifier for a specific interval meter	RBC		
Summary Interval Type	Meter Type			[See Meter Type Definition]
Summary Interval Rate Class	Rate Class	C		
Summary Interval Rate Subclass	Rate Subclass	C		
Meter Add'l Info Code	Code used to define if the meter is 'behind the meter' (e.g. Cogen')	BC	[M] when meter is considered 'behind the meter']	[Behind the meter]
Pressure Correction Factor	Corrects for varying delivery pressures	C	[M] when Report Type= 'METER'	
Non-Interval Meter Read Therm Factor	Converts volumetric meter reading data to therm values	C	[M] when Report Type= 'METER' and ServiceType= 'GAS' and UnitMeasure = 'THERM'	
Non-Interval Meter Exchange Date	Date meter was exchanged	M		
Non-Interval Meter Read Transformer Loss Multiplier	Transformer Loss Multiplier. When a Customer owns a transformer and the transformer loss is not measured by the meter.	C	[M] when this measure is available	
Non-Interval Meter Read Multiplier	Represents the number of units that are reflected by one dial or digit increment. Can be multiple multipliers per meter	C	[M] when Report Type='METER'	
Non-Interval Meter Read Power Factor	Relationship between Watts and Volt - Amperes necessary to supply electric load	C	[M] when this measure is available	
Non-Interval Meter Read Estimated Actual Flag	Flag identifying if beginning and ending meter reads are estimated or actual	C	[M] when Report Type ='METER'	[Beg / End actual; Beg actual / End estimated; Actual Total; As Billed; Beg est. / End actual; Beg est. / End est.]
Non-Interval Meter Read Unit of Measure	Unit of measure for read	BC	M when line item has a measure	[kiloWatt demand, kiloVolt Amperes Reactive Demand, kiloVolt Amperes Reactive Hour, kiloVolt Amperes, kiloWatt Hour, therms, ccf, mcf]
Non-Interval Meter Read Beginning	Value specifying beginning reading for the metering period.	C	[M] when Report Type ='METER'	
Non-Interval Meter Read Ending/Single	The ending reading or single reading for metering period.	C	[M] when Report Type ='METER'	

Use Legend: M = Mandatory; C = Conditional; SO=Sender's Option; BC=Business Conditional; RBC=Retail Business Conditional

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RXQ.3.6.1 Usage

Data Elem. Name	Description	Use	Condition	Comments [Options]
Non-Interval Meter Read Time Of Use	Code that defines whether this usage is on peak, off peak, or intermediate peak			[On Peak, Off Peak, Intermediate Peak, Total, Low]
Non-Interval Meter Number of Dials / Digits	Number of meter dials or digits on the meter	C	[M] when Report Type ='METER'	
Non-Interval Meter Role	Code that defines the effect of consumption on summarized total.	C	[M] when Report Type ='METER'	[Subtractive; Additive; Ignore]
Non-Interval Meter ID	Serial number identifier for a specific interval meter	RBC		
Non-Interval Meter Type	Type of usage that is reported. Consists of 2-digit prefix and 3-digit suffix. See 'X.X Meter Type Definition'.			[See Meter Type Definition]
Non-Interval Rate Class	Rate Class	C		
Non-Interval Rate Subclass	Rate Subclass	C		
Unmetered Quantity Usage Code	Code distinguishes between estimated usage and actual usage	M		[Actual, Estimated]
Unmetered Quantity	Unmetered Usage	M		
Unmetered Quantity Unit of Measure	Unit of measure for quantity	BC	M when line item has a measure	[kiloWatt demand, kiloVolt Amperes Reactive Demand, kiloVolt Amperes Reactive Hour, kiloVolt Amperes, kiloWatt Hour, therms, ccf, mcf]

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RXQ.3.6.1 Usage**Code Values Dictionary**

Data Element	Code Description	Code Definition	Code Value
Actual Estimated Flag	Actual	Actual	QD
Actual Estimated Flag	Estimated	Estimated	KA
Commodity Service Type	Electric	Electric	ELECTRIC
Commodity Service Type	Gas	Natural Gas	GAS
Final Indicator	No	Not last usage to be sent by metering agent	[blank]
Final Indicator	Yes	Identifies last usage to be sent by metering agent	F
Meter Role (Non-Interval, Interval, Summary Interval)	Additive	Additive	A
Meter Role (Non-Interval, Interval, Summary Interval)	Ignore	Ignore	I
Meter Role (Non-Interval, Interval, Summary Interval)	Subtractive	Subtractive	S
Party Calculating Bill	Distribution Company	Distribution Company	LDC
Party Calculating Bill	Dual	Each party calculates own charges	DUAL
Party Calculating Bill	Retailer	Retailer	ESP
Party Sending Bill	Distribution Company	Distribution Company	LDC
Party Sending Bill	Dual	Each party sends bill to customer	DUAL
Party Sending Bill	Retailer	Retailer	ESP
Read Estimated Actual (Non-Interval, Interval, Summary Interval)	Actual Total	Total is actual reading	AF
Read Estimated Actual (Non-Interval, Interval, Summary Interval)	As Billed	As Billed	BO
Read Estimated Actual (Non-Interval, Interval, Summary Interval)	Beg / End Actual	Beginning and Ending reading are actual readings	AA
Read Estimated Actual (Non-Interval, Interval, Summary Interval)	Beg / End Estimated	Beginning and Ending reading are estimated	EE
Read Estimated Actual (Non-Interval, Interval, Summary Interval)	Beg Actual / End Estimated	Beginning reading is actual reading; Ending reading is an estimate	AE
Read Estimated Actual (Non-Interval, Interval, Summary Interval)	Beg Estimated / End Actual	Beginning reading is estimated reading; Ending reading is actual	EA
Read Time of Use (Non-Interval, Summary Interval)	Intermediate Peak	Intermediate Peak	43
Read Time of Use (Non-Interval, Summary Interval)	Low	Low	66
Read Time of Use (Non-Interval, Summary Interval)	Off Peak	Off Peak	41
Read Time of Use (Non-Interval, Summary Interval)	On Peak	On Peak	42
Read Time of Use (Non-Interval, Summary Interval)	Total	Total	51
Read Unit of Measure	Ccf	CCF	CCF
Read Unit of Measure	kiloVolt Amperes	kiloVolt Amperes	K4
Read Unit of Measure	kiloVolt Amperes Reactive Demand	kiloVolt Amperes Reactive Demand	K2
Read Unit of Measure	kiloVolt Amperes Reactive Hour	kiloVolt Amperes Reactive Hour	K3
Read Unit of Measure	kiloWatt demand	kiloWatt demand	K1
Read Unit of Measure	kiloWatt Hour	kiloWatt hour consumption	KH
Read Unit of Measure	Mcf	MCF	MCF
Read Unit of Measure	Therms	Therms	THERMS
Report Type Code	Interval	Interval	CI

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RXQ.3.6.1 Usage

Data Element	Code Description	Code Definition	Code Value
Report Type Code	Mixed	Mixed	DR
Report Type Code	Non-Interval	Non-Interval	DD
Transaction Purpose	Cancellation	Cancellation	01
Transaction Purpose	Original	Original	00
Unmetered Unit of Measure	kiloWatt demand	kiloWatt demand	K1
Unmetered Unit of Measure	kiloWatt hour	kiloWatt hour consumption	KH
Unmetered Unit of Measure	Watts	Watts	99
Usage Detail Category	Billed	Usage actually billed to Customer by Billing Party	BB
Usage Detail Category	Interval	Interval usage detail	PM
Usage Detail Category	Interval Summary	Interval usage summarized by meter, time of use	BO
Usage Detail Category	Non-Interval	Non-interval usage summarized by meter, read period	PL
Usage Detail Category	Non-Interval Summary	Non-interval usage summarized by read period	SU
Usage Detail Category	Unmetered	Unmetered usage	BD

RXQ.3.6.2 Bill-Ready & SRBO Invoice**RXQ.3.6.2: CONSOLIDATED BILL-READY INVOICE &
SINGLE RETAIL BILL OPTION INVOICE****Technical Implementation Of Business Process**

Related Model Business Practices: RXQ.3.3.3.1, RXQ.3.3.4.2 through 3.3.4.12

The Consolidated Billing Bill-Ready Invoice transaction is the communication used by the non-billing party to transmit the billing components and amounts of charges to the billing party for presentation on the customer's bill. The billing party sends an invoice to the customer that displays both the billing and non-billing parties' charges.

The types of invoice transactions supported by Consolidated Bill-Ready Invoice in retail energy markets include:

- Invoice (original)
- Invoice (cancel)
- Final Invoice

The **Sender** and **Receiver** of the transaction is either the distribution company or the supplier/retailer.

The **Invoice Number ID (InVID)** identifies the invoice. This is a unique number assigned by the originator of the transaction.

The Non-Billing Party echoes in the invoice transaction the specific **Usage ID** originally transmitted with the usage information. The UUID links the usage, invoice and payment transactions together for tracking purposes.

Each Invoice Header contains the following:

- **Invoice Date**
- **Invoice ID**
- **Usage ID**
- **Purpose**
- **Final Indicator (when applicable)**
- **Billing Party Name**
- **Billing Party ID**
- **Non-Billing Party Name**
- **Non-Billing Party Entity ID**
- **Non-Billing Party Account ID (when applicable)**
- **Customer Name**
- **Customer ID**
- **Old Customer ID**
- **Service Address**
- **Commodity Service Type**
- **Party Calculating Bill**
- **Party Sending Bill**
- **Non-Billing Party Rate Code**
- **Non-Billing Party Message to Customer**
- **Service Period Start Date**
- **Service Period End Date**
- **Transaction Date**

RXQ.3.6.2 Bill-Ready & SRBO Invoice

- **Non-Billing Party Current Total Charges.**

Each Invoice can have multiple Charge Detail records. Each Invoice Detail contains the following:

- **Charge/Allowance Line Amount**
- **Charge/Allowance Line Category**
- **Charge/Allowance Credit/Debit Code**
- **Charge Allowance Line Description**
- **Charge Allowance Line Quantity**
- **Charge/Allowance Line Summary**
- **Charge/Allowance Line Unit of Measure.**

Each Single Retailer Billing Option (SRBO) Invoice Detail contains

- **Non-Billing Party Charge/Allowance Rate ID**
- **Non-Billing Party Charge/Allowance Rate Class**
- **Non-Billing Party Charge/Allowance Rate Subclass**

Each Invoice can have multiple Tax Detail records. Each Tax Detail contains the following:

- **Taxes**
- **Taxing Entity.**

Each cancel transaction includes **Purpose Code = Cancel**, the **UUID** trace number from the original Billing Usage transaction, and the same data found in the original Invoice transaction.

Reissuing an invoice is treated as an original invoice.

Invoice Sections

Invoice transactions use a single section for Account charges and taxes, and does not support charges in separate 'Rate' or 'Unmetered' sections.

Budget Billing and Payment Plans

There is no current support for budget billing or payment plans/arrangements.

Cancellations: Rate-Ready

- The prior 810 will be sent (cancel by billing period), however, it is not necessary to include the BAL segments in Rate-Ready Distribution Company Consolidated Billing scenario.
- The values will be identical in sign to what they were on the original bill. The way to indicate the bill is being reversed is through the use of the BIG08 field – value "01".
- The rebill will always be coded as an original (BIG08 – "00")

Distribution Company Consolidated with Distribution Company Meter Read:

Some Distribution Company's will cancel 810 charges when they cancel 867 usage. Others will not and will require the Supplier to send back an 810 cancel if they want to cancel the corresponding charges. See the Notes Section for each State for each Bill-Ready eDistribution Company's requirements

Usage ID Cross Reference

There is a cross reference between billing related documents.

- 867 – BPT02 – This document establishes the cross reference number.

RXQ.3.6.2 Bill-Ready & SRBO Invoice

- 810 – BIG05 – This document must have the cross reference number from the respective 867.
- 820 – REF60 (letter O) – When making the other party whole, the 820 to the non-billing party must also include the cross reference number from 867/810 document.

Bill-Ready Scenario – Not directly related to usage

- Supplier will send their 810 Reversal (BIG08 = “17”)
 - The service period dates must match original bill period
 - The total of reversed charges will show as a line item on the bill and must equal the total charges on the original 810.
- The cross-reference number (BIG05) must be provided.
- The 810 Reversal ((BIG08=17) can be received at any time prior to or in the same ISA as the Reissue (BIG08=“18”), however, the 810 Reissue (BIG08 = “18”) must be received during the billing window
- Supplier will send their 810 Reissue (BIG08 = “18”)
 - The service period dates must match original bill period
- New charges will be sent during the billing window
- The 810 Reissue must be received prior to the 810 current charges or in the same ISA envelope. (Sending at the same time does not guarantee that PECO will receive them at the same time unless they are in the same ISA envelope).
- Supplier will send their 810 Current Charges (BIG08 = “00”)
 - All prior and current charges must be sent to Distribution Company during current bill window

Missed Bill Windows

If the Supplier does not get the 810 to the Distribution Company in time for the charges to be added to the bill, the Distribution Company will queue up received 810s until the next bill window opens.

Missed Bill Window and Switch Overlap

The following outlines the rules that apply when there is an Supplier switch and the previous Supplier misses the billing window:

- Once the switch has taken place the old Supplier must bill the customer directly for previously unbilled Supplier charges. An Supplier reversal (BIG08=“17”) will be processed if it is received after the switch; however, a reissue (BIG08=“18”) must be billed to the Customer directly by the Supplier.

Bill-Ready - Cancel / Rebill due to usage

	867 BPT01 or 810 BIG08	867 BPT02	867 BPT09	810 BIG02	810 BIG05	810 REF*OI
Utility sends Usage via 867	00	111				
Supplier sends 810 invoice	00			301	111	
Utility cancels usage via 867	01	112	111			
Supplier cancels original charge via 810	01			302	111	301
Utility sends restated charges via 867	00	113				
Supplier sends restated charges via 810	00			303	113	

Bill-Ready - Supplier Initiated cancellation (not related to usage)

	867 BPT01 or 810 BIG08	867 BPT02	867 BPT09	810 BIG02	810 BIG05	810 REF*OI
Utility sends Usage via 867	00	111				
Supplier sends 810 invoice	00			301	111	
Supplier cancels original charge via 810	17			302	111	301
Supplier sends restated charges via 810	18			303	111	

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RXQ.3.6.2 Bill-Ready & SRBO Invoice**Sample Paper Transaction**

Invoice Header	
Invoice Date:	20040413
Invoice Number:	04132004TR4877
Usage ID:	04132004MR8392
Invoice Purpose:	Original
Final Invoice Indicator:	No
Billing Party Name:	Distribute-It Incorporated
Billing Party Entity ID:	123456789
Non-Billing Party Name:	Sell-It Incorporated
Non-Billing Party Entity ID:	546897321
Billing Party Customer Name:	John Shoulders
Customer ID:	8473937UHFTR41304
Billing Party Old Customer ID:	
Commodity Service Type:	Electric
Non-Billing Party Rate Code:	Non-Billing PartyR1
Service Period Start Date:	20040313
Service Period End Date:	20040412

Line Item Charges and Allowances						
Indicator	Category	Unit	Qty	Rate	Amt	Description
Charge	GEN002	KWh	500	\$0.100	\$50.00	Current Basic Generation - Consumption
Charge	DMD009	KW	20	\$1.000	\$20.00	Current Basic Generation - Peak Demand
Charge	LPC001		1	\$20.00	\$20.00	Late Payment Charge
Allowance	ADJ002		1	\$10.00	\$10.00	Adjustment to Last Bill
Charge	BAS001		1	\$0.750	\$0.75	Miscellaneous: Receivables Charge
Total of Non-Billing Party Line Item Charges:					\$79.25	

D R A F T IR/TEIS Working Paper

RXQ.3.6.2 Bill-Ready & SRBO Invoice

Data Dictionary

Data Elem. Name	Description	Use	Condition	Comments [Options]
Invoice Date	Date this transaction was created by the sender's application system.	M		
Invoice ID	Unique number identifying this transaction, created by the originator of this transaction	M		
Usage ID	Unique ID created by the originator of the usage transaction; used for cross-reference between Usage, Invoice and Payment transactions	M		
Transaction Purpose	Identifies the reason for sending this information	M		[Original, Cancellation]
Final Indicator	Indicates whether this is a final bill	M		[Yes, No]
Original Invoice ID	The unique number assigned to the original document, used only to cancel the original. When a transaction is cancelled, the Original Invoice ID is used as a cross-reference.	C	Send when Purpose is 'Reversal' or 'Cancellation'	
Current Total Charges	Sum of all current charges	M		
Billing Party Entity ID	Billing Party Entity ID (e.g. DUNS Number)	M		
Billing Party Entity Name	Billing Party's Name	M		
Non-Billing Party Entity ID	Non-Billing Party Entity ID (e.g. DUNS Number)	M		
Non-Billing Party Entity Name	Non-Billing Party's Name	M		
Submitter/Receiver Code	Code that defines if a party is the submitter or the receiver of the invoice	M		
Service Period Start Date	Previous Meter Reading Date	M		
Service Period End Date	Current Meter Reading Date	M		
Commodity Service Type	Identifies type of energy commodity service	M		[Electric, Gas]
Customer Name	Customer Name	M		
Service Location Address	Service Location Street Address	RBC		
Non-Billing Party Message To Customer	A text message the Non-Billing Party wants to appear on the Customer's bill	RBC		
Non-Billing Party Account ID	Customer Account ID assigned by the Non-Billing Party	BC		
Customer ID	Customer Account ID or SDID; ID that uniquely defines the Customer in the marketplace.	M		
Old Customer ID	Old Customer ID used if Billing Party changes Customer ID	BC		

Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

tab 12 -- 2007_retail_api1a_rec_attachment.doc

D R A F T IR/TEIS Working Paper

RXQ.3.6.2 Bill-Ready & SRBO Invoice

Data Elem. Name	Description	Use	Condition	Comments [Options]
Party Sending Bill	Identifies party sending the bill to the Customer	RBC		[Distribution Company, DUAL, Supplier]
Party Calculating Bill	Identifies party calculating the Non-Billing Party Charges	RBC		[Distribution Company, DUAL, Supplier]
Currency	Code that defines currency	M		[American \$, Canadian \$, pesos]
Rate Class	Non-Billing Party Rate Class	RBC		
Rate Subclass	Non-Billing Party Rate Subclass	RBC		
Chg/Allow Summary Level	Code that defines if the data is summarized by Account, Rate, SDID, Un-metered, or Meter.	M		[Account, Rate, SDID, Un-metered, Metered]
Chg/Allow Credit/Debit Code	Identifies if Line Item is allowance/credit, charge/debit or no charge	M		Allowance, Charge, No Charge
Chg/Allow Category	Code for the class of charge	M		[Adjustment, Budget, Late Payment, Miscellaneous, Payment Plan Charge, etc.]
Chg/Allow Amount	Dollar amount for the credit/debit	M		
Chg/Allow Rate	Non-Billing Party Rate	RBC		
Chg/Allow Unit of Measure	Unit of measure for quantity	BC	M when line item has a measure	[Each, kiloWatt demand, kiloVolt Amperes Reactive Demand, kiloVolt Amperes Reactive Hour, kiloVolt Amperes, kiloWatt Hour, therms, ccf, mcf]
Chg/Allow Quantity	Usage	M		
Chg/Allow Description	Line Item text that will print on the customer's bill	RBC		
Tax Type	Tax Type	RBC		
Tax Amount	A taxable amount transmitted to the non-taxing Party	RBC		
Tax Percent	Tax Percent	RBC		
Taxing Jurisdiction	Identifies the taxing jurisdiction	RBC		
Tax Inclusion Indicator	Include or exclude from total charges	RBC		

Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

tab 12 -- 2007_retail_api1a_rec_attachment.doc

D R A F T IR/TEIS Working Paper

RXQ.3.6.2 Bill-Ready & SRBO Invoice

Code Values Dictionary

Data Element	Code Description	Code Definition	Code Value
Charge/Allowance Credit/Debit Code	Allowance	Allowance	A
Charge/Allowance Line Credit/Debit Code	Charge	Charge	C
Charge/Allowance Line Credit/Debit Code	No	No Allowance or Charge	N
Charge/Allowance Line Unit of Measure Code	British Thermal Units	British Thermal Units	BTU?
Charge/Allowance Line Unit of Measure Code	Each	Each	EA
Charge/Allowance Line Unit of Measure Code	Hundred Cubic Feet	Hundred Cubic Feet	CCF?
Charge/Allowance Line Unit of Measure Code	kiloVolt Amperes	kiloVolt Amperes	K4
Charge/Allowance Line Unit of Measure Code	kiloVolt Amperes Reactive Hour	kiloVolt Amperes Reactive Hour	K3
Charge/Allowance Line Unit of Measure Code	kiloWatt demand	potential power load measured at predetermined intervals	K1
Charge/Allowance Line Unit of Measure Code	kiloWatt Hour	kiloWatt Hour	KH
Charge/Allowance Line Unit of Measure Code	KVAR kiloVolt Amperes Reactive Demand	KVAR kiloVolt Amperes Reactive Demand	K2
Charge/Allowance Line Unit of Measure Code	Months	Months	MO
Charge/Allowance Line Unit of Measure Code	Therms	Therms	THERMS
Charge/Allowance Line Unit of Measure Code	Thousand Cubic Feet	Thousand Cubic Feet	MCF
Charge/Allowance Line Unit of Measure Code	Watt	Watt	99
Charge/Allowance Line Unit of Measure Code	Watt	Watt	99
Charge/AllowanceLine Credit/Debit Code	Allowance	Allowance	A
Commodity Service Type	Electric	Electric	ELECTRIC
Commodity Service Type	Gas	Natural Gas	GAS
Final Indicator	No	Not the final bill	[blank]
Final Indicator	Yes	Identifies this bill as the final bill	F
Party Calculating Bill	Distribution Company	Distribution Company calculates charges	LDC
Party Calculating Bill	Dual	Each party calculates own charges	DUAL
Party Calculating Bill	Supplier	Supplier calculates charges	ESP
Party Sending Bill	Distribution Company	Distribution Company sends bill to Customer	LDC
Party Sending Bill	Dual	Both parties send bill to customer	DUAL
Party Sending Bill	Supplier	Supplier sends bill to Customer	ESP
Transaction Purpose	Cancellation	Cancellation	01
Transaction Purpose	Original	Original	00

Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

tab 12 -- 2007_retail_api1a_rec_attachment.doc

RXQ.3.6.3 Rate-Ready Invoice

RXQ.3.6.3: CONSOLIDATED RATE-READY INVOICE

Technical Implementation Of Business Process

Related Model Business Practices: RXQ.3.3.5.1 through 3.3.5.6

The Rate-Ready Invoice transaction is used when billing data is transmitted from the Billing Party to the Non-Billing Party in the form of an invoice that contains individual Customer bill components and their corresponding amounts for both parties.

The Billing Party is responsible for calculating charges and issuing bills to the retail customer on behalf of the Non-Billing Party.

The Billing Party sends the Rate-Ready invoice transaction to the Non-Billing Party as notification that a Customer bill has been calculated and rendered.

The **Sender** and **Receiver** of the Consolidated Billing Rate-Ready transaction is either a distribution company (LDC) or a supplier / retailer.

The Rate-Ready Invoice transaction includes the specific **Usage ID** originally transmitted with the usage information. The UUID links the usage, invoice and payment transactions together for tracking purposes.

The Rate-Ready Invoice transaction also notifies the Non-Billing Party of data concerning the Customer accounts that it has recently billed on behalf of the Non-Billing Party. Accordingly, the exchange of billing data between the Billing Party and Non Billing Party under this scenario is to have the Billing Party send the Non-Billing Party “after-the-fact information” concerning the Customer accounts that it has recently billed on behalf of the Non-Billing Party.

Each original Consolidated Billing Rate-Ready transaction header contains

- **Invoice Date**
- **Invoice Number**
- **Usage ID**
- **Invoice Purpose**
- **Billing Final Indicator**
- **Original Invoice ID**
- **Invoice Due Date**
- **Billing Party Name**
- **Billing Party ID**
- **Non-Billing Party Name**
- **Non-Billing Party ID**
- **Customer ID**
- **Billing Party Customer Name**
- **Old Customer ID**
- **Customer Balance Total**
- **Commodity Service Type**
- **Service Period Start Date**
- **Service Period End Date**
- **and Payment Plan Indicator.**

Each original Consolidated Billing Rate-Ready transaction detail contains one or more

RXQ.3.6.3 Rate-Ready Invoice

- **Line Item Charges and Allowances**
- **Summary Level**
- **Unit of Measure for Quantity**
- **Usage Category**
- **Usage Code**
- **and Rate Codes**

Each cancel Rate-Ready invoice transaction must include an **Invoice Purpose Code = 'Cancel'**, the UUID from the original transaction, and the same data found in the original Rate-Ready invoice.

Rebilling of a cancelled Rate-Ready invoice transaction is processed as an original Rate-Ready invoice transaction.

Rate-Ready – Cancel / Rebill due to usage

	867 BPT01 or 810 BIG08	867 BPT02	867 BPT09	810 BIG02	810 BIG05	810 REF*OI
Utility sends Usage via 867	00	111				
Utility sends 810 invoice	00			301	111	
Utility cancels usage via 867	01	112	111			
Utility cancels original charge via 810	01			302	111	301
Utility sends restated charges via 867	00	113				
Utility sends restated charges via 810	00			303	113	

D R A F T IR/TEIS Working Paper

RXQ.3.6.3 Rate-Ready Invoice**Sample Paper Transaction**

Invoice Header	
Invoice Date:	20040413
Invoice Number:	04132004TR4877
Original Usage ID:	
Invoice Purpose:	Original
Billing Final Indicator:	No
Original Invoice ID:	X2004042312345
Invoice Due Date:	20040508
Billing Party Name:	Distribute-It Incorporated
Billing Party ID:	123456789
Non-Billing Party Name:	Sell-It Incorporated
Non-Billing Party Account Number:	546897321
Billing Party Customer Name:	John Shoulders
Billing Party Customer ID:	8473937UHFTR41304
Customer ID:	
Customer Balance Total:	\$100.00
Commodity Service Type:	Electric
Service Period Start Date:	20040313
Service Period End Date:	20040412

Line Item Charges and Allowances						
Indicator	Category	Unit	Qty	Rate	Amt	Description
Charge	GEN002	KWh	500	\$0.100	\$50.00	Current Basic Generation - Consumption
Charge	DMD009	KW	20	\$1.000	\$20.00	Current Basic Generation - Peak Demand
Total of Non-Billing Party Line Item Current Charges:					\$79.25	

D R A F T IR/TEIS Working Paper

RXQ.3.6.3 Rate-Ready Invoice**Data Dictionary**

Data Elem. Name	Description	Use	Condition	Comments [Options]
Invoice Date	Date this transaction was created by the sender's application system.	M		
Invoice ID	Unique number identifying this transaction, created by the originator of this transaction	M		
Usage ID	Unique ID created by the originator of the usage transaction; used for cross-reference between Usage, Invoice and Payment transactions	RBC		
Transaction Purpose	Identifies the reason for sending this information	M		[Original, Cancellation]
Final Indicator	Indicates whether this is a final bill	M		[Yes, No]
Original Invoice ID	The unique number assigned to the original document, used only to cancel the original. When a transaction is cancelled, the Original Reference Number is used as a trace number.	C	Send when Purpose is 'Reversal' or 'Cancellation'	
Billing Party Entity ID	Billing Party Entity ID (e.g. DUNS Number)	M		
Billing Party Entity Name	Billing Party's Name	M		
Non-Billing Party Entity ID	Non-Billing Party Entity ID (e.g. DUNS Number)	M		
Non-Billing Party Entity Name	Non-Billing Party's Name	M		
Non-Billing Party Balance, Prior to Current Charges	Also known as Non-Billing Party Arrears	M		
Non-Billing Party Balance, After Current Charges	Amount due on the previous bill	M		
Non-Billing Party Balance, Previous	Total Non-Billing Party Account Balance	RBC		
Billing Cycle	Cycle number (1-99) on which the bill will be rendered.	RBC		
Date Customer Bill Issued	Date the Customer bill was issued	M		
Date Customer Payment Due	Date payment is due from Customer	M		
Service Period Start Date	Previous Meter Reading Date	M		
Service Period End Date	Current Meter Reading Date	M		
Commodity Service Type	Identifies type of energy commodity service	M		[Electric, Gas]
Customer Name	Customer Name	M		
Customer Name	Customer Name	M		
Customer Name Overflow	Customer Name Overflow (e.g. store number)	BC		
Customer Name Overflow	Additional information used to further identify the Customer, as defined in Billing Party's systems.	SO		
Non-Billing Party Account ID	Customer Account ID assigned by the Non-Billing Party	RBC		
Customer ID	Customer Account ID or SDID; ID that uniquely defines the Customer in the marketplace.	M		
Party Sending Bill	Identifies party sending the bill to the Customer	RBC		[Distribution Company, DUAL, Supplier]
Party Calculating Bill	Identifies party calculating the Non-Billing Party Charges	RBC		[Distribution Company, DUAL, Supplier]
Current Total Charges	Sum of all current charges	M		
Total Current Charge	Total Non-Billing Party Current Charge	M		
Chg/Allow Summary Level	Code that defines if the data is summarized by Account, Rate, SDID, Un-metered, or Meter.	M		[Account, Rate, SDID, Un-metered, Metered]
Chg/Allow Credit/Debit Code	Identifies if Line Item is allowance/credit, charge/debit or no	M		Allowance, Charge, No Charge

Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

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RXQ.3.6.3 Rate-Ready Invoice

Data Elem. Name	Description	Use	Condition	Comments [Options]
	charge			
Chg/Allow Category	Code for the class of charge	M		[Adjustment, Budget, Late Payment, Miscellaneous, Payment Plan Charge, etc.]
Chg/Allow Amount	Dollar amount for the credit/debit	M		
Chg/Allow Rate	Non-Billing Party Rate	M		
Chg/Allow Unit of Measure	Unit of measure for quantity	BC	M when line item has a measure	[Each, kiloWatt demand, kiloVolt Amperes Reactive Demand, kiloVolt Amperes Reactive Hour, kiloVolt Amperes, kiloWatt Hour, therms, ccf, mcf]
Chg/Allow Quantity	Usage	M		
Chg/Allow Description	Line Item text that will print on the customer's bill	RBC		
Tax Type	Tax Type	RBC		
Tax Amount	Dollar amount for the tax	M		
Tax Percent	Tax Percent	RBC		
Taxing Jurisdiction	Identifies the taxing jurisdiction	RBC		
Tax Inclusion Indicator	Include or exclude from total charges	RBC		

D R A F T IR/TEIS Working Paper

RXQ.3.6.3 Rate-Ready Invoice

Code Values Dictionary

Data Element	Code Description	Code Definition	Code Value
Charge/Allowance Credit/Debit Code	Allowance	Allowance	A
Charge/Allowance Line Credit/Debit Code	Charge	Charge	C
Charge/Allowance Line Credit/Debit Code	No	No Allowance or Charge	N
Charge/Allowance Line Unit of Measure Code	British Thermal Units	British Thermal Units	BTU
Charge/Allowance Line Unit of Measure Code	Hundred Cubic Feet	Hundred Cubic Feet	CCF
Charge/Allowance Line Unit of Measure Code	kiloVolt Amperes	kiloVolt Amperes	K4
Charge/Allowance Line Unit of Measure Code	kiloVolt Amperes Reactive Hour	kiloVolt Amperes Reactive Hour	K3
Charge/Allowance Line Unit of Measure Code	kiloWatt Hour	kiloWatt Hour	KH
Charge/Allowance Line Unit of Measure Code	KVAR	KVAR kiloVolt Amperes Reactive Demand	K2
Charge/Allowance Line Unit of Measure Code	kW	kW - Represents potential power load measured at predetermined intervals	K1
Charge/Allowance Line Unit of Measure Code	Months	Months	MO
Charge/Allowance Line Unit of Measure Code	Therms	Therms	THERMS
Charge/Allowance Line Unit of Measure Code	Thousand Cubic Feet	Thousand Cubic Feet	MCF
Charge/Allowance Line Unit of Measure Code	Watt	Watt	99
Charge/Allowance Line Unit of Measure Code	Watt	Watt	99
Charge/Allowance Line Credit/Debit Code	Allowance	Allowance	A
Commodity Service Type	Electric	Electric	ELECTRIC
Commodity Service Type	Gas	Natural Gas	GAS
FinalInd	No	Not a final bill	[blank]
FinalInd	Yes	Identifies last bill to be sent	F
Party Calculating Bill	Distribution Company	Distribution Company calculates charges	LDC
Party Calculating Bill	Supplier	Supplier calculates charges	ESP
Party Sending Bill	Distribution Company	Distribution Company sends bill to Customer	LDC
Party Sending Bill	Supplier	Supplier sends bill to Customer	ESP
Purpose	Cancellation	Cancellation	1
Purpose	Duplicate	Duplicate	7
Purpose	Original	Original	0

RXQ.3.6.4 Payments

RXQ.3.6.4: PAYMENT REMITTANCE

Technical Implementation Of Business Process

Related Model Business Practices: RXQ.3.3.3.7

The Payment Remittance transaction is the communication between companies that itemizes payments made from the Billing Party to the Non-Billing Party.

The Payment Remittance transaction is designed to be sent directly from the Billing Party to the Non-Billing Party. By mutual agreement Payment Remittance and actual Payments may be combined under a single transaction (e.g. CTX payments). These standards do not address this scenario. Different banks have different requirements that must be addressed.

The payment is identified by the **Reference Number ID**.

The payment header includes:

- Billing Party ID
- Billing Party Name
- Funds Transfer Date
- Monetary Amount
- Non-Billing Party ID
- Non-Billing Party Name
- Payment Format Code
- Payment Method Code
- Purpose
- Payment Reference ID
- Transaction Date
- Transaction Handling Code

The remittance detail includes:

- Adjustment Reason Code
- Credit/Debit Indicator
- Customer Account ID
- Customer Payment Posting Date
- Discount Amount
- Money Collected
- Non-Billing Party Account ID
- Payment/Adjustment Type

D R A F T IR/TEIS Working Paper

RXQ.3.6.4 Payments**Sample Paper Transaction**

Remittance Header	
Remittance Date:	20040413
Number:	04132004TR4877
Remittance / Payment Cross-Reference Number:	04132004MR8392
Trace Type:	Remittance Only
Payment Method Type	ACH
Settlement Date:	20040413
Billing Party Name:	Distribute-It Incorporated
Billing Party Entity ID:	123456789
Non-Billing Party (Non-Billing Party) Name:	Sell-It Incorporated
Non-Billing Party Entity ID:	546897321
Total Monetary Amount Transferred	\$100.00

Payment Action Code	Billing Party Customer ID	Date Posted	Usage Reference Number	Orig Invoice Amount	Disc Amt	Payment Amt	Cred/Debit Code	Adj Amt	Adj Reason
Payment	123456789012	20040410	200403251234	\$100.00	\$5.00	\$95.00	C		
Payment	12345678123	20040411	200403255678	\$100.00			C		
Adjustment			200403265678				D		

D R A F T IR/TEIS Working Paper

RXQ.3.6.4 Payments**Data Dictionary**

Data Elem. Name	Description	Use	Condition	Comments [Options]
Payment Reference ID	Unique number identifying this transaction and created by the originator of this transaction	M		
Transaction Handling Code	A code to identify which type of transaction is being used	M		[Remittance only, Remittance and payment together]
Monetary Amount	The positive dollar amount being sent to the Non-Billing Party. This amount should sum to the individual amounts in detail.	M		
Payment Method Code	Defines the method for transmitting payment	M		[Automated Clearing House, Check]
Payment Format Code	Defines the payment format to be used	M		[Corp Trade Exchange, Cash Concentration Disbursement, Check]
Date Funds Transferred	Date the Billing Party intends for the transaction to be settled	M		
Bank Trace ID	Links remittance transaction to the bank payment transaction	M		
Billing Party Entity ID	Billing Party Entity ID (e.g. DUNS Number)	M		
Billing Party Entity Name	Billing Party's Name	M		
Non-Billing Party Entity ID	Non-Billing Party Entity ID (e.g. DUNS Number)	M		
Non-Billing Party Entity Name	Non-Billing Party's Name	M		
Customer Payment Posting Date	Date the Customer's payment was posted	M		
Non-Billing Party Account ID	Customer Account ID assigned by the Non-Billing Party	RBC		
Non-Billing Party Customer Account ID	Non-Billing Party Customer Account ID	M		
Customer ID	Customer Account ID or SDID; ID that uniquely defines the Customer in the marketplace.	M		
Old Customer ID	Old Customer Account ID	M		
Usage ID	Unique ID created by the originator of the usage transaction; used for cross-reference between Usage, Invoice and Payment transactions	M		
Payment/Adjustment Type	A code to indicate the type of payment or adjustment	M		[Adjustment, Payment on Account]
Money Collected	Payments / Credits applied (+/-)	M		
Adjustment Reason Code	Code that specifies the reason for the accounting adjustment	C	Send when Payment/Adjustment Type is "Adjustment"	[Adjustment, Invoice Cancelled, Insufficient Funds, Authorized Return]
Discount Amount	The amount of discount the Billing Party is entitled to when assuming receivables	M		

D R A F T IR/TEIS Working Paper

RXQ.3.6.4 Payments**Code Values Dictionary**

Data Element	Code Description	Code Definition	Code Value
Adjustment Reason Code	Adjustment	Adjustment	CS
Adjustment Reason Code	Authorized Return	Authorized Return	72
Adjustment Reason Code	Insufficient Funds	Insufficient Funds	IF
Adjustment Reason Code	Invoice Cancelled	Invoice Cancelled	26
Commodity Service Type	Electric	Electric	ELECTRIC
Commodity Service Type	Gas	Natural Gas	GAS
Payment Format	CCD+	Cash Concentration/Disbursement plus Addenda	CCP
Payment Format	CTX	Corporate Trade Exchange	CTX
Payment Method	ACH	Automated Clearing House	ACH
Payment Method	Check	Check	CHK
Payment/Adjustment Code	Adjustment	Adjustment	AJ
Payment/Adjustment Code	Payment on Account	Payment on Account	PO
Transaction Handling Code	Handling Party Option	Handling parties option to split payment and remittance	X
Transaction Handling Code	Payment Only	Make Payment Only	D
Transaction Handling Code	Prenotification	Prenotification of future transfers	P
Transaction Handling Code	Remittance and Payment	Remittance and Payment	C
Transaction Handling Code	Remittance Only	Remittance Only	I
Transaction Handling Code	Split Payment and Remittance	Split payment and Remittance	U

RXQ.3.6.5 Payment Notification

RXQ.3.6.5: PAYMENT NOTIFICATION (COLLECTIONS)

Technical Implementation Of Business Process

Related Model Business Practices: RXQ.3.3.8.1 through 3.3.9.5, 3.3.7.1, 3.3.7.2, 3.3.8.3,

The Payment Notification/Collections transaction is used in the 'Assumption of Receivables' scenario to enable Non-Billing Parties to identify accounts that are delinquent. It is the communication of all payments and adjustments made to customer accounts by the Billing Party. A single Payment Notification transaction is sent each day.

The transaction is sent by the **Billing Party**. The transaction is received by the **Non-Billing Party**.

The transaction is identified by the **Collection Unique ID**.

Each original Payment Notice header contains

- **Transaction Purpose**
- **Collection Unique ID**
- **Transaction Date**
- **Total Monetary Amount**
- **Billing Party ID and name**
- **Non-Billing Party ID and name.**

The Payment Notice detail repeats for each payment being reported. Multiple payments for a single customer are allowed. Each original Payment Notice detail contains

- **Customer ID and Name**
- **Supplier ID**
- **Commodity Service Type**
- **Assigned line number**
- **Transaction reference number for the amount**
- **Payment/Adjustment Indicator.**

D R A F T IR/TEIS Working Paper

RXQ.3.6.5 Payment Notification**Sample Paper Transaction**

Payment Notification Header	
Transaction Date:	20040413
Collection Unique ID:	04132004TR4877
Trans Purpose:	Original
Billing Party Name:	Distribute-It Incorporated
Billing Party Entity ID:	123456789
Non-Billing Party (NBilling Party) Name:	Sell-It Incorporated
NBilling Party Entity ID:	546897321
Total Monetary Amount	\$190.00
Detail	
Customer ID:	12345767890
NBilling Party Customer ID:	12345656788
Customer Name	John Doe
Commodity Service Type:	Electric
Transaction Reference Number	Dkoejdhhk20040511
Payment / Adjustment Flag:	Payment
Payment Level Allocated Amount::	\$100.00
Customer Acct ID:	12345767890
Non-Billing Party Customer Acct ID:	12345656788
Customer Name	John Doe
Commodity Service Type:	Electric
Transaction Reference Number	Dkoejdhhk20040514
Payment / Adjustment Flag:	Payment
Payment Level Allocated Amount::	\$90.00

Note: this example shows a notification for a single customer, so the Total Monetary Amount is \$190.00. In the event other customers are to be reported, the Total Monetary Amount would include those monies associated with the other customers.

D R A F T IR/TEIS Working Paper

RXQ.3.6.5 Payment Notification**Data Dictionary**

Data Elem. Name	Description	Use	Condition	Comments [Options]
Transaction Purpose	Identifies the reason for sending this information	M		[Original, Cancel]
Payment Notification Unique ID	Unique number assigned by the originator of this transaction. This should be unique over time.	M		
Payment Notification Date	Date this transaction was created by the sender's application system.	M		
Total Monetary Amount Allocated	Total Monetary Amount allocated to the non-billing party; Sum of all detail amounts in this transaction.	M		
Billing Party Entity ID	Billing Party Entity ID (e.g. DUNS Number)	M		
Billing Party Entity Name	Billing Party's Name	M		
Non-Billing Party Entity ID	Non-Billing Party Entity ID (e.g. DUNS Number)	M		
Non-Billing Party Entity Name	Non-Billing Party's Name	M		
Customer ID	Customer Account ID or SDID; ID that uniquely defines the Customer in the marketplace.	M		
Non-Billing Party Amount Allocated for Account	Total Monetary or Adjustment allocated for this Customer by the Billing Party on behalf of the Non-Billing Party	M		
Non-Billing Party Account ID	Customer Account ID assigned by the Non-Billing Party	RBC	Send if previously sent	
Old Customer ID	Previous Customer ID	BC	Send if Customer ID changed in last 45 days	
Transaction Tracking ID	Transaction tracking number used to uniquely identify this allocation	M		
Customer Name	Customer Name	M		
Payment Level Allocated Amount	Individual allocated amount or amounts. If more than one Customer payment was posted to this Customer account, this will be repeated for each Customer payment.	M		
Transaction Detail ID	Unique Number identifying this Customer account record.	M		
Type of Adjustment	Adjustment reason code	C	Send when Payment/Adjustment code indicates Adjustment	[Adjustment, Insufficient Funds, Returned Items]
Posting Date	Date the payment or adjustment was posted in the billing party's system. Format: CCYYMMDD	M		
Commodity Service Type	Identifies type of energy commodity service	M		[Electric, Gas]

Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

D R A F T IR/TEIS Working Paper

RXQ.3.6.5 Payment Notification**Code Values Dictionary**

Data Element	Code Description	Code Definition	Code Value
Commodity Service Type	Electric	Electric	ELECTRIC
Commodity Service Type	Gas	Natural Gas	GAS
Payment/Adjustment Indicator	Adjustment	Adjustment	BM
Payment/Adjustment Indicator	Collected Amount	Collected Amount	KL
Purpose	Original	Original	00
Type of Adjustment	Adjustment	Adjustment	CS
Type of Adjustment	Insufficient Funds	Insufficient Funds	IF
Type of Adjustment	Returned Items	Returned Items	72

 Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

tab 12 -- 2007_retail_api1a_rec_attachment.doc

RXQ.3.6.6 Application Advice

RXQ.3.6.6: APPLICATION ADVICE

Technical Implementation Of Business Process

The Application Advice transaction is the communication between companies that advises trading partners of success or failure in certain business processes. The use of the Application Advice UET enables trading partners to automate processes for common exceptions, and for common notifications. The following retail energy business processes use the Application Advice:

Application Advice Use
Invalid Usage – This negative acknowledgement, sent by the party receiving usage, notifies the sender that usage was bad.
Invalid Invoice – This negative acknowledgement, sent by the party receiving an invoice, notifies the party that generated the invoice that it was bad.
Invoice Missed Bill Window – This negative acknowledgement, sent by the Billing Party, notifies the Non-Billing Party that the invoice was received after the bill window had expired.

The UET consists of the following logical groups of data:

- Envelope
- Billing Party
- Non-Billing Party
- Customer
- Advice Details, including rejection information where applicable.

Envelope information contains the **App Advice Action**, the **App Advice Date**, and the **App Advice ID**.

Billing Party group contains **Billing Party ID**, **Billing Party Name**, **Billing Party Technical Contact**.

Customer group contains **Customer ID**, **Old Customer ID**, **Customer Name**, **Non-Billing Party Account ID**.

Non-Billing Party group contains **Non-Billing Party Account ID**, **Non-Billing Party Name**, **Non-Billing Party Technical Contact**.

Application Advice Detail group contains **Bill Due Date**, **Cross Reference ID**, **Date Bill Rendered**, **Outstanding Balance**, **Rejection Level**, **Rejection Reason**, **Rejection Text**.

D R A F T IR/TEIS Working Paper

RXQ.3.6.6 Application Advice**Sample Paper Transaction**

Application Advice Header	
Transaction Date:	20040413
App Advice ID:	04132004TR4877
Action Required:	Do Not Resend
Trans Purpose:	
Billing Party Name:	Distribute-It Incorporated
Billing Party Entity ID:	123456789
Billing Party Technical Contact:	John Distribute
Billing Party Technical Contact Phone:	713.111.1111
Non-Billing Party (NBilling Party) Name:	Sell-It Incorporated
NBilling Party Entity ID:	546897321
Customer Name:	Joe Customer
Customer Acct ID:	12345767890
NBilling Party Customer Acct ID:	12345656788
Commodity Service Type:	Electric
Rejection Level:	Entire Transaction Rejected
Transaction Set Rejected:	810
Rejection Code:	MBW
Rejection Description:	Missed Bill Window

D R A F T IR/TEIS Working Paper

RXQ.3.6.6 Application Advice**Data Dictionary**

Data Elem. Name	Description	Use	Condition	Comments [Options]
App Advice ID	A unique transaction ID assigned by the originator of this transaction. This number must be unique over time.	M		
App Advice Date	Date that the data was processed by the sender's application system.	M		
App Advice Action	Indicates whether the receiver of the AA is expected to resend the transaction or not.	M		[Resend, Do Not Resend, Accept]
Receiver Entity ID	Receiver's Entity ID (e.g. DUNS Number)	M		
Receiver Entity Name	Receiver's Name	M		
Sender Entity ID	Sender Entity ID (e.g. DUNS Number)	M		
Sender Name	Sender Name	M		
Receiver Technical Contact	Receiver Contact information (Telephone, Email, Fax) to resolve this particular issue.	RBC	[M] if Billing Party sends transaction	
Sender Technical Contact	Sender Contact information (Telephone, Email, Fax) to resolve this particular issue	RBC	[M] if NBilling Party sends transaction	
Sender Technical Contact Email	Sender Contact E-mail	RBC		
Sender Technical Contact Fax	Sender Contact Fax	RBC		
Sender Technical Contact Phone	Sender Contact Telephone	RBC		
Customer Name	Customer Name	M		
Non-Billing Party Account ID	Account Number assigned by the Non-Billing Party	RBC		
Customer ID	Account Number or SDID; ID that uniquely defines the Customer in the marketplace.	M		
Old Customer ID	Previous Customer ID	RBC	Send if Customer ID changed in last 45 days	
Outstanding Balance	Total outstanding balance printed on bill for Non-Billing Party (for Acceptance of a BR Invoice)	RBC		
Date Bill Rendered	Date bill was rendered to the Customer (for Acceptance of a Bill-Ready Invoice)	RBC		
Date Bill Due	Date Customer payment is due (for Acceptance of a BR Invoice)	RBC		
Rejection Reason	Code indicating rejection reason	C	[M] if RejLev indicates reject	
Rejection Level	Code indicating rejection level (e.g. entire, partial, accepted).	M		[Entire Transaction Rejected, Part of Transaction Rejected, Entire Transaction Accepted, Item is Rejected]
Transaction Set	Transaction Set that is being responded to	M		[Usage, Invoice, Payment]
Cross Reference ID	Cross reference ID that links transaction to original Invoice or Payment transaction	M		
Rejection Text	Text explaining rejection reason	C	[M] if RejLev indicates reject	

Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

D R A F T IR/TEIS Working Paper

RXQ.3.6.6 Application Advice**Code Values Dictionary**

Data Element	Code Description	Code Definition	Code Value
App Advice Action	Accept	Accept	CF
App Advice Action	Do Not Resend	Do Not Resend	EV
App Advice Action	Resend	Resend	82
Rejection Level	Entire Transaction Accepted	Entire Transaction Accepted	TA
Rejection Level	Entire Transaction Rejected	Entire Transaction Rejected	TR
Rejection Level	Item is Rejected	Item is Rejected	IR
Rejection Level	Part of Transaction Rejected	Part of Transaction Rejected	TP
Transaction Set	Invoice	Invoice	810
Transaction Set	Payment	Payment	820
Transaction Set	Usage	Usage	867

Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

tab 12 -- 2007_retail_api1a_rec_attachment.doc

RXQ.3.6.6 Billing Services Termination

RXQ.3.6.7: TERMINATION OF BILLING SERVICES

Technical Implementation Of Business Process

Related Model Business Practices: RXQ.3.3.9.7

The Termination of Billing Services (TBS) transaction is used when the party providing billing services terminates those billing services for an account. The TBS transmits outstanding Non-Billing Party charges from the Billing Party to the Non-Billing Party.

The **Sender** is the Billing Party; the **Receiver** is the Non-Billing Party.

Each TBS transaction header contains

- **Billing Party ID**
- **Billing Party Name**
- **Customer ID**
- **Non-Billing Party ID**
- **Non-Billing Party Name**
- **Non-Billing Party Account ID**
- **Purpose**
- **Termination of Bill Services Unique ID**
- **Commodity Service Type**
- **Transaction Date**

Each TBS transaction detail contains

- **Write-off Amount**
- **Write-off Date.**

D R A F T IR/TEIS Working Paper

RXQ.3.6.6 Billing Services Termination**Sample Paper Transaction**

Termination of Billing Services Header	
Transaction Date:	20040413
TOBS ID:	04132004TR4877
Trans Purpose:	TOBS
Billing Party Name:	Distribute-It Incorporated
Billing Party Entity ID:	123456789
Non-Billing Party (NBilling Party) Name:	Sell-It Incorporated
NBilling Party Entity ID:	546897321
Customer ID:	12345767890
NBilling Party Customer Acct ID:	12345656788
Commodity Service Type:	Electric
Balance Returned:	\$100.00

D R A F T IR/TEIS Working Paper

RXQ.3.6.6 Billing Services Termination**Data Dictionary**

Data Elem. Name	Description	Use	Condition	Comments [Options]	Group
Transaction Purpose	Identifies the reason for sending this information	M		[Write-off]	0:Header
Termination of Bill Services Unique ID	Unique number identifying this transaction and created by the originator of this transaction	M			0:Header
Termination of Billing Services Date	Date this transaction was created by the sender's application system.	M			0:Header
Billing Party Entity ID	Billing Party Entity ID (e.g. DUNS Number)	M			1:Parties
Billing Party Entity Name	Billing Party's Name	M			1:Parties
Non-Billing Party Entity ID	Non-Billing Party Entity ID (e.g. DUNS Number)	M			1:Parties
Non-Billing Party Entity Name	Non-Billing Party's Name	M			1:Parties
Billing Party Contact	Billing Party Contact Name	O			1:Parties
Billing Party E-mail	Billing Party Contact email	O			1:Parties
Billing Party Fax	Billing Party Contact Fax	O			1:Parties
Billing Party Phone	Billing Party Contact Phone	O			1:Parties
Balance Returned	Balance amount returned	M			2:Detail
Write-off Date	Date charges are written off Billing Party books	M			2:Detail
Customer Phone 1	Customer First Phone Number	BC	[M] if the Billing Party has a phone number		2:Detail
Customer Phone 2	Customer Second Phone Number	BC	[M] if the Billing Party has a second phone number		2:Detail
Customer Info	Customer Additional Information	O			2:Detail
Customer Name	Customer Name	M			2:Detail
Non-Billing Party Account ID	Account number assigned by the Non-Billing Party	RBC		BR: sent if previously received by Non-Billing Party	2:Detail
Customer ID	Account number or SDID; ID that uniquely defines the Customer in the marketplace.	M			2:Detail
Commodity Service Type	Identifies type of energy commodity service	M		[Electric, Gas]	2:Detail

*D R A F T IR/TEIS Working Paper***RXQ.3.6.6 Billing Services Termination****Code Values Dictionary**

Data Element	Code Description	Code Definition	Code Value
Commodity Service Type	Electric	Electric	ELECTRIC
Commodity Service Type	Gas	Natural Gas	GAS
Purpose	Write-off	Used to notify the non-billing party that the billing party will no longer pursue collections for this customer	22

Appendices

APPENDICES

FREQUENTLY ANSWERED QUESTIONS (FAQS)

Can transaction numbers have punctuation?

ANSI X12 allows punctuation in transaction reference number data elements, however NAESB practices exclude punctuation in those data elements.

Which invoice data element is used in the Payment RMR02 data element?

The Invoice ID (BIG *02) should be in the RMR02 data element. The Customer ID is found in the REF segment in the RMR loop.

Why does NAESB use BIG07 =FB and PR instead of FE and ME?

NAESB has adopted the Electricity Reliability Council of Texas' BIG07 standards.

Why do practices use "telecommunication industry account"?

In many cases NAESB practices adopt codes used by other industries. NAESB has been unable to delete or change those codes in the transaction guideline generation tool (EDISIM).

Should the REF*BLT Billing Party data element be marked as business conditional, since some jurisdictions require it or is this not necessary?

No, NAESB model business practices require this data element.

When is the IT1 RATE loop used?

In Single Retail Bill Option only.

Is the Payment 820 cross-reference (REF*6O) to Usage required under all circumstances or only when making the non-billing party whole?

All circumstances

Is there a movement towards using the commodity (REF*QY) data element?

Yes, because of support for both electric and gas.

Why does the 248 Write Off use REF~X0 instead of REF~12 for the Customer ID?

REF*X0 is what is currently in production in a number of markets.

X12 Implementation Guidelines

X12 IMPLEMENTATION GUIDELINES

867 (RXQ.3.6.1)

867 NAESB RXQ.3.6.1 Usage for Billing

Functional Group ID=PT

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Product Transfer and Resale Report Transaction Set (867) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to: (1) report information about product that has been transferred from one location to another; (2) report sales of product from one or more locations to an end customer; or (3) report sales of a product from one or more locations to an end customer, and demand beyond actual sales (lost orders). Report may be issued by either buyer or seller.

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BPT	Beginning Segment for Product Transfer and Resale	M	1		
	050	DTM	Document Due Date (DTM~649)	C	1		
M	060	REF	Customer ID (REF~12/Q5)	M	1		
	060	REF	Non-Billing Party Account ID (REF~11)	C	1		
	060	REF	Old Customer ID (REF~45)	C	1		
	060	REF	Enrollment ID (REF~TN)	C	1		
M	060	REF	Party Sending Bill (REF~BLT)	M	1		
M	060	REF	Party Calculating Non-Billing Party Charges (REF~PC)	M	1		
	060	REF	Power Region (REF~SR)	C	1		
			LOOP ID - N1			1	
M	080	N1	Name: Distribution Company (N1~8S)	M	1		
			LOOP ID - N1			1	
	080	N1	Name: Clearinghouse (N1~AY)	C	1		
			LOOP ID - N1			1	
M	080	N1	Name: Supplier (N1~SJ)	M	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - PTD			1	
M	010	PTD	Monthly Billed Summary (PTD~BB)	M	1		
M	020	DTM	PTD~BB Service Period Start Date (DTM~150)	M	1		
M	020	DTM	PTD~BB Service Period End Date (DTM~151)	M	1		
			LOOP ID - QTY			1	
M	110	QTY	PTD~BB Billed kiloWatt Hours (QTY~D1)	M	1		

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M	110	QTY	LOOP ID - QTY		1
			PTD~BB Billed Demand (QTY~D1)	M	1
M	110	QTY	LOOP ID - QTY		1
			PTD~BB Measured Demand (QTY~QD)	M	1
M	010	PTD	LOOP ID - PTD		1
			Non-Interval Summary (PTD~SU)	M	1
			PTD~SU Service Period Start Date (DTM~150)	C	1
			PTD~SU Service Period End Date (DTM~151)	C	1
			PTD~SU Exchange Date (DTM~514)	C	1
M	030	REF	PTD~SU Meter Type (REF~MT)	M	1
M	110	QTY	LOOP ID - QTY		>1
			PTD~SU Quantity (QTY~QD)	M	1
M	010	PTD	LOOP ID - PTD		1
			Non-Interval Detail (PTD~PL)	M	1
			PTD~PL Service Period Start Date (DTM~150)	C	1
			PTD~PL Service Period End Date (DTM~151)	C	1
			PTD~PL Exchange Date (DTM~514)	C	1
M	030	REF	PTD~PL Number of Dials / Digits (REF~IX)	C	1
			PTD~PL Meter Role (REF~JH)	M	1
M	030	REF	PTD~PL Meter Type (REF~MT)	M	1
M	110	QTY	LOOP ID - QTY		>1
			PTD~PL Quantity (QTY~QD)	M	1
M	160	MEA	PTD~PL Meter Reads (MEA~AA)	M	1
M	160	MEA	PTD~PL Transformer Loss Factor (MEA~~CO)	M	1
M	160	MEA	PTD~PL Meter Multiplier (MEA~~MU)	M	1
M	160	MEA	PTD~PL Power Factor (MEA~~ZA)	M	1
M	010	PTD	LOOP ID - PTD		1
			Unmetered Services (PTD~BD)	M	1
			PTD~BD Service Period Start Date (DTM~150)	M	1
			PTD~BD Service Period End Date (DTM~151)	M	1
			PTD~BD Unmetered Service Type (REF~PRT)	M	1
M	110	QTY	LOOP ID - QTY		>1
			PTD~BD Quantity of Unmetered Services (QTY~QD)	M	1
M	010	PTD	LOOP ID - PTD		1
			Interval Summary (PTD~BO)	M	1
			PTD~BO Service Period Start Date (DTM~150)	C	1
			PTD~BO Service Period End Date (DTM~151)	C	1
			PTD~BO Exchange Date (DTM~514)	C	1
M	030	REF	PTD~BO Meter Role (REF~JH)	M	1
M	030	REF	PTD~BO Meter Type (REF~MT)	M	1
M	110	QTY	LOOP ID - QTY		>1
			PTD~BO Quantity	M	1
M	160	MEA	PTD~BO Meter Reads (MEA~AA)	M	1
M	160	MEA	PTD~BO Transformer Loss Factor (MEA~~CO)	M	1

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X12 Implementation Guidelines

M	160	MEA	PTD~BO Meter Multiplier (MEA~~MU)	M	1
M	160	MEA	PTD~BO Power Factor (MEA~~ZA)	M	1
LOOP ID - PTD					1
M	010	PTD	Interval Detail (PTD~PM)	M	1
	020	DTM	PTD~PM Service Period Start Date (DTM~150)	C	1
	020	DTM	PTD~PM Service Period End Date (DTM~151)	C	1
	020	DTM	PTD~PM Exchange Date (DTM~514)	C	1
M	030	REF	PTD~PM Channel Number (REF~6W)	M	1
M	030	REF	PTD~PM Meter Type (REF~MT)	M	1
M	030	REF	PTD~PM Meter Role (REF~JH)	M	1
LOOP ID - QTY					>1
M	110	QTY	PTD~PM Quantity	M	1
M	210	DTM	PTD~PM Interval End Time (DTM~194)	M	1

Summary:

	Pos.	Seg.		Req.		Loop	Notes and
	No.	ID	Name	Des.	Max.Use	Repeat	Comments
M	030	SE	Transaction Set Trailer	M	1		

X12 Implementation Guidelines**Segment:** **ST** Transaction Set Header**Position:** 010**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To indicate the start of a transaction set and to assign a control number**Syntax Notes:****Semantic Notes:** **1** The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).**Comments:****Notes:**

REQUIRED

ST~867~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set 867 Product Transfer and Resale Report	
Must Use	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

X12 Implementation Guidelines

Segment: **BPT** Beginning Segment for Product Transfer and Resale

Position: 020

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of the Product Transfer and Resale Report Transaction Set and transmit identifying data

Syntax Notes: 1 If either BPT05 or BPT06 is present, then the other is required.

Semantic Notes: 1 BPT02 identifies the transfer/resale number.

2 BPT03 identifies the transfer/resale date.

3 BPT08 identifies the transfer/resale time.

4 BPT09 is used when it is necessary to reference a Previous Report Number.

Comments:

Notes:

This beginning segment for Usage reports:

-Original versus Cancel status(BPT01)

-Usage ID (BPT02) and cross-reference to original Usage ID if this is a cancellation (BPT09)

-Date of transaction (BPT03)

-Whether interval, non-interval or both are being reported (BPT04)

-If this is the final usage for the Customer (BPT07)

REQUIRED

BPT~00~200102010001~20010131~DD

BPT~00~200102010001~20010131~DD~~~F

BPT~01~200102020001~20010131~DD~~~~~2001020100001

Data Element Summary

	Ref.	Data			
	<u>Des.</u>	<u>Element</u>	<u>Name</u>		<u>Attributes</u>
Must Use	BPT01	353	Transaction Set Purpose Code		M ID 2/2
			Code identifying purpose of transaction set		
			00 Original		
				Contains original usage for the Customer. If usage is canceled and restated, the restatement is sent as an original.	
			01 Cancellation		
				Cancels usage previously reported for the Customer. This cancels the entire period of usage reported with Usage ID found in BPT09.	
Must Use	BPT02	127	Reference Identification		O AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
				A unique transaction identification number assigned by the originator of this transaction. ID must be unique over time, only contain uppercase letters (A to Z) and digits (0 to 9), dashes ('-'), or periods ('.'). All other punctuation (spaces, commas, etc.) must be excluded.	
Must Use	BPT03	373	Date		M DT 8/8
			Date expressed as CCYYMMDD		
				Date that the data was processed by the sender's application system	
Must Use	BPT04	755	Report Type Code		O ID 2/2

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X12 Implementation Guidelines

Code indicating the title or contents of a document, report or supporting item

C1	Cost Data Summary
	Interval Meters
DD	Distributor Inventory Report
	Non-interval metered and unmetered
DR	Datalog Report
	Both Interval and Non-interval Meters/Unmetered

Dep **BPT07** **306** **Action Code** **O** **ID 1/2**

Code indicating type of action

REQUIRED for Final Usage Statement

F	Final
	Final meter read data being sent for this Customer. The Customer account is closed by the Distribution Company or the Customer switched to a new Supplier.

Dep **BPT09** **127** **Reference Identification** **O** **AN 1/30**

Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

REQUIRED when BPT01=01 (cancel); this element contains the Usage ID from BPT02 of the transaction that is being cancelled

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X12 Implementation Guidelines

Segment: **DTM** Document Due Date (DTM-649)

Position: 050

Loop:

Level: Heading

Usage: Conditional

Max Use: 1

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes:

Date the Non-Billing Party must provide the 810 transaction back to the Billing Party. In Bill Ready billing, the meter read party sends usage to the Non-Billing Party, who calculates their own portion of the bill and sends an invoice to the Billing Party

Transactions received by the Billing Party after this DTM-649 date and time require the Billing Party notify the Non-Billing Party via the 824 (Application Advice) to either

-resend the transaction during the next billing window, or

-do nothing; the Billing Party will hold the transaction until the next billing window

REQUIRED for Bill Ready

DTM-649~20020131~1800

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time 649 Document Due	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	
Must Use	DTM03	337	Time	X TM 4/8
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	
			HHMM, where H = Hours (00-23) and M = Minutes (00-59) in prevailing time at the meter controls. X12 does not allow 2400 for time; use 2359 to indicate 'midnight'.	
Used	DTM04	623	Time Code	O ID 2/2
			Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow	
			AT Alaska Time	
			CT Central Time	
			ET Eastern Time	

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GM	Greenwich Mean Time
MT	Mountain Time
PT	Pacific Time
TT	Atlantic Time

X12 Implementation Guidelines

Segment:	REF Customer ID (REF~12/Q5)
Position:	060
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required. 2 If either C04003 or C04004 is present, then the other is required. 3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	
Notes:	ID that uniquely defines the Customer in marketplace. Applicable Regulatory Authority governing documents define whether REF~12 or REF~Q5 is REQUIRED. - REF~12 uses REF02 for ID; usually Distribution Company account number - REF~Q5 uses REF03 for ID; usually the ESI ID (ERCOT) REQUIRED REF~12~10111111234567890 REF~Q5~~10111111234567890ABCDEFGHIJKLMNOPS

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			12 Billing Account	
			Account number under which billing is rendered	
			Account number ID; sent in REF02	
			Q5 Property Control Number	
			Service Delivery ID (e.g. ESIID); sent in REF03	
Used	REF02	127	Customer Account ID; use when REF01=12	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
Must Use	REF03	352	Service Delivery ID; use when REF01=Q5	X AN 1/80
			A free-form description to clarify the related data elements and their content	

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X12 Implementation Guidelines**Segment:** **REF** Non-Billing Party Account ID (REF~11)**Position:** 060**Loop:****Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

ID that uniquely defines the Customer in Non-Billing Party systems. The Billing Party is required to store this ID and echo on transactions to the Non-Billing Party if this ID was previously provided to the Billing Party
REQUIRED when previously provided by Non-Billing Party

REF~11~10111111234567890

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			11 Account Number	
			Number identifies a telecommunications industry account	
Used	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

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X12 Implementation Guidelines**Segment:** **REF** Old Customer ID (REF~45)**Position:** 060**Loop:****Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:

Notes:

Cross-reference ID used to identify a Customer if the Customer has received a new Customer ID in last 45 days
 REQUIRED when Customer ID has changed in last 45 days
 REF~45~10111111234567890

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification 45 Old Account Number Identifies accounts being changed	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

X12 Implementation Guidelines**Segment:** **REF** Enrollment ID (REF~TN)**Position:** 060**Loop:****Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

- Syntax Notes:**
- 1** At least one of REF02 or REF03 is required.
 - 2** If either C04003 or C04004 is present, then the other is required.
 - 3** If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1** REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

Cross-reference ID to the value in BGN06 of the Enrollment or Drop Transactions sent from the Distribution Company to the Clearinghouse.

REQUIRED on Final Usage in Centralized Registration marketplaces

REF~TN~1234567820010620

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification TN Transaction Reference Number	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

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X12 Implementation Guidelines**Segment:** **REF** Party Sending Bill (REF~BLT)**Position:** 060**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify identifying information

- Syntax Notes:**
- 1** At least one of REF02 or REF03 is required.
 - 2** If either C04003 or C04004 is present, then the other is required.
 - 3** If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1** REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

Identifies party sending the bill to the Customer. Valid REF~BLT values are:
 -LDC: the Distribution Company sends the Bill to the Customer
 -ESP: Supplier sends bill
 -DUAL: each party sends a bill to the Customer
 REQUIRED

REF~BLT~ESP

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification BLT Billing Type	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

X12 Implementation Guidelines**Segment:** **REF** Party Calculating Non-Billing Party Charges (REF~PC)**Position:** 060**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

Identifies party calculating Non-Billing Party charges. Valid REF~PC values are:
 -LDC: Distribution Company calculates Non-Billing Party charges on the bill
 -ESP: the Supplier calculates the Non-Billing Party portion of the charges
 -DUAL: the Non-Billing Party calculates their own portion of the charges
 REQUIRED

REF~PC~DUAL

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification PC Production Code	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

X12 Implementation Guidelines**Segment:** **REF** Power Region (REF~SR)**Position:** 060**Loop:****Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

Power Region of the Customer ID
REQUIRED in Centralized Registration marketplaces

REF~SR~ERCOT
REF~SR~SERC
REF~SR~SPP
REF~SR~WSCC

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			SR Sales Responsibility	
			Power Region	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			ERCOT Electric Reliability Council of Texas	
			SERC Southwest Electric Reliability Council	
			SPP Southwest Power Pool	
			WSCC Western States Coordinating Council	

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X12 Implementation Guidelines**Segment:** **N1** **Name: Distribution Company (N1~8S)****Position:** 080**Loop:** N1 Mandatory**Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Distribution Company Name and Entity ID

REQUIRED

N1~8S~DISTRIBUTE-IT INC.~1~007909411~~41 (Distribution Company to the Clearinghouse)

N1~8S~DISTRIBUTE-IT INC.~1~007909411 (Clearinghouse to the Supplier)

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			8S Consumer Service Provider (CSP)	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Distribution Company Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Distribution Company Entity ID	
Dep	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			41 Submitter	

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X12 Implementation Guidelines**Segment:** **N1** Name: Clearinghouse (N1~AY)**Position:** 080**Loop:** N1 Conditional**Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Clearinghouse Name and Entity ID

REQUIRED when the Clearinghouse receives the usage

N1~AY~REGISTER-IT INC.~1~888777888~~40 (Distribution Company to the Clearinghouse)

N1~AY~REGISTER-IT INC.~1~888777888~~41 ((Clearinghouse to the Supplier)

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			AY Clearinghouse	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Clearinghouse Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Clearinghouse Entity ID	
Must Use	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			40 Receiver	
			41 Submitter	

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X12 Implementation Guidelines**Segment:** **N1** **Name: Supplier (N1~SJ)****Position:** 080**Loop:** N1 Mandatory**Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Supplier Name and Entity ID

REQUIRED

N1~SJ~SUPPLY LTD~9~007909422CRN1~~40

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			SJ Service Provider	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Supplier Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Supplier Entity ID	
Dep	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			40 Receiver	

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X12 Implementation Guidelines

Segment: **PTD** **Monthly Billed Summary (PTD~BB)**
Position: 010
Loop: PTD Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data
Syntax Notes: 1 If either PTD02 or PTD03 is present, then the other is required.
 2 If either PTD04 or PTD05 is present, then the other is required.
Semantic Notes:
Comments:
Notes:

Monthly Billed Summary PTD~BB set of information is obtained from the billing system to reflect the data that the Customer will see on the bill

PTD loops may be sent in any order
 REQUIRED. One Monthly Billed Summary PTD~BB set is required for every Customer.

PTD~BB

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
PTD01	521	Product Transfer Type Code	M ID 2/2
Must Use		Code identifying the type of product transfer	
		BB	Demand Information Only
			No physical transfer of material occurs; historical demand information is provided for record purposes only

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X12 Implementation Guidelines**Segment:** **DTM** PTD~BB Service Period Start Date (DTM~150)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Service Period Start Date

REQUIRED except in second of two meter exchange PTD loops

DTM~150~20050101

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time 150 Service Period Start	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

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X12 Implementation Guidelines**Segment:** **DTM** PTD~BB Service Period End Date (DTM~151)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Service Period End Date. Service Period Start Date for month 2 must equal the Service Period End Date for Month 1, otherwise a gap in data exists. Example:

Month 1 DTM~150~20010501 DTM~151~20010601

month 2 DTM~150~20010601 DTM~151~20010701

REQUIRED except in first of two meter exchange PTD loops

DTM~151~20050131

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			151 Service Period End	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

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X12 Implementation Guidelines

Segment: **QTY** PTD~BB Billed kiloWatt Hours (QTY~D1)

Position: 110

Loop: QTY Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To specify quantity information

Syntax Notes: 1 At least one of QTY02 or QTY04 is required.

2 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.

Comments:

Notes: Billed kiloWatt Hours as shown on the Customer's bill. May or may not be the same as measured kiloWatt hours.
REQUIRED

QTY~D1~22348~KH

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity D1 Billed	
Must Use	QTY02	380	Quantity	M R 1/15
			Numeric value of quantity	
Must Use	QTY03	C001	Composite Unit of Measure	M
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
			Note this is a composite data element, populate C00101	
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken KH kiloWatt Hour	

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X12 Implementation Guidelines

Segment: **QTY** **PTD~BB Billed Demand (QTY~D1)**

Position: 110

Loop: QTY Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To specify quantity information

Syntax Notes: 1 At least one of QTY02 or QTY04 is required.

2 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.

Comments:

Notes: REQUIRED if Customer ID has measured demand KW. This must be sent even if billed/derived demand is equal to measured demand.
QTY~D1~22~K1

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity	
			D1 Billed	
			Used when Quantity in QTY02 is a "Billed" quantity.	
Must Use	QTY02	380	Quantity	M R 1/15
			Numeric value of quantity	
Must Use	QTY03	C001	Composite Unit of Measure	M
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
			Note this is a composite data element, populate C00101	
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			K1 kiloWatt Demand	
			kW	

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X12 Implementation Guidelines

Segment: **QTY** PTD~BB Measured Demand (QTY~QD)

Position: 110

Loop: QTY Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To specify quantity information

Syntax Notes: 1 At least one of QTY02 or QTY04 is required.

2 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.

Comments:

Notes: REQUIRED if account measures kiloWatt demand (KW)
QTY~QD~14~K1

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity	
			KA Estimated	
			QD Quantity Delivered	
			Actual	
Must Use	QTY02	380	Quantity	M R 1/1
			Numeric value of quantity	
Must Use	QTY03	C001	Composite Unit of Measure	M
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
			Note this is a composite data element, populate C00101	
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			K1 kiloWatt Demand	

X12 Implementation Guidelines

Segment: **PTD** Non-Interval Summary (PTD~SU)
Position: 010
Loop: PTD Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data
Syntax Notes: 1 If either PTD02 or PTD03 is present, then the other is required.
 2 If either PTD04 or PTD05 is present, then the other is required.
Semantic Notes:
Comments:
Notes:

Non-Interval Summary PTD~SU All reports consumption and demand summarized by unit of measure. There will be one Non-interval detail PTD~SU loop for
 -each meter for each unit of measure

One PTD~SU loop is provided (if measured) for coincidental peak demand REQUIRED for each meter for each unit of measure.

PTD~SU

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code	M ID 2/2
			Code identifying the type of product transfer SU Summary	

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X12 Implementation Guidelines**Segment:** **DTM** PTD~SU Service Period Start Date (DTM~150)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Service Period Start Date

REQUIRED except in second of two meter exchange PTD loops

DTM~150~20010101

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time 150 Service Period Start	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

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X12 Implementation Guidelines**Segment:** **DTM** PTD~SU Service Period End Date (DTM~151)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Service Period End Date. Service Period Start Date for month 2 must equal the Service Period End Date for Month 1, otherwise a gap in data exists. Example:

Month 1 DTM~150~20010501 DTM~151~20010601

month 2 DTM~150~20010601 DTM~151~20010701

REQUIRED except in first of two meter exchange PTD loops

DTM~151~20010131

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			151 Service Period End	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

X12 Implementation Guidelines**Segment:** **DTM** PTD~SU Exchange Date (DTM~514)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Meter exchange date. There will be two PTD loops when a meter is exchanged.
 -The first PTD includes the Service Period Start Date and the Meter Exchange Date
 -The second PTD includes the Meter Exchange Date and the Service Period End Date
 REQUIRED when a meter is exchanged and the meter agent does not change.

First PTD:
 DTM~150~20010101
 DTM~514~20010114

Second PTD:
 DTM~514~20010114
 DTM~151~20010128

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			514 Transferred	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

X12 Implementation Guidelines

Segment:	REF PTD~SU Meter Type (REF~MT)
Position:	030
Loop:	PTD Mandatory
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required. 2 If either C04003 or C04004 is present, then the other is required. 3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	
Notes:	Indicates the type of usage that is reported in this PTD loop. Meter type is expressed as a five-character field xxyyy, where: -xx is the type of consumption and, -yyy is the metering interval reported by the metering agent Type of Consumption Valid Values: -K1: kiloWatt Demand (kW) -K2: kiloVolt Amperes Reactive Demand (kVAR) -K3: kiloVolt Amperes Reactive Hour (kVARH) -K4: kiloVolt Amperes (kVA) -KH: kiloWatt Hour (kWh) Metering Interval Reported for Billing Purposes (yyy) Valid Values: -nnn: Number of minutes from 001 to 999 -DAY: Daily - MON:Monthly - REQUIRED REF~MT~KHMON

Data Element Summary

	Ref.	Data	Name	Attributes
	Des.	Element		
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			MT Meter Ticket Number	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

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X12 Implementation Guidelines

Segment: **QTY** PTD~SU Quantity (QTY~QD)

Position: 110

Loop: QTY Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To specify quantity information

Syntax Notes: 1 At least one of QTY02 or QTY04 is required.

2 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.

Comments:

Notes:

Only one QTY loop is used when reporting time of use. Each individual time of use (i.e. On Peak kWh, Off Peak kWh, Intermediate Peak kWh, etc.) will be reported in separate MEAs under the QTY.

The QTY02 will equal the totalizer. If the totalizer is not measured, the QTY02 will equal the sum of the usage provided in the MEA03s.

REQUIRED: one QTY loop for each time of use (e.g. one for On Peak kWh, one for Off Peak, kWh, one for Total kWh, etc.)

QTY~QD~1000

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity	
			KA Estimated	
			Quantity is estimated; required when reporting missing or abundance of consumption	
			QD Quantity Delivered	
			Quantity is actual	
Must Use	QTY02	380	Quantity	X R 1/15
			Numeric value of quantity	
Used	QTY03	C001	Composite Unit of Measure	O
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			K3 kiloVolt Amperes Reactive Hour	
			KVARH	
			KH kiloWatt Hour	
			kWh	

X12 Implementation Guidelines

Segment: **PTD** Non-Interval Detail (PTD~PL)

Position: 010

Loop: PTD Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data

Syntax Notes: 1 If either PTD02 or PTD03 is present, then the other is required.

2 If either PTD04 or PTD05 is present, then the other is required.

Semantic Notes:

Comments:

Notes:

There will be one Non-interval detail PTD~PL loop for
 -each meter for each unit of measure
 -missing or abundance of consumption
 -meter exchange before: includes the Service Period Start Date and the Meter Exchange Date
 -meter exchange after: includes the Meter Exchange Date and the Service Period End Date.

For Additive/Subtractive Metering Only:

This loop is also used to for Additive/Subtractive Metering when the Master Meter is on one Customer ID and the additive and/or subtractive meters are on Customer IDs that are different than the master Meter. All additive usage is summed. All subtractive usage is summed. It is possible to receive two additive/subtractive loops - one with summed additive usage and one with summed subtractive usage. When reporting usage for the additive/Master and/or subtractive/Master usage, the meter number is not provided in the PTD04 and PTD05. The type of Master/Additive/Subtractive usage must be provided in the PTD06 by using code "AI" or code "AO".

For Missing or abundance of Consumption - Non Interval:

This loop is also used to report missing or abundance of consumption when the consumption (added or subtracted) provided has not been registered by the meter, for example: tampering, fast, slow and/or flat/bypass. The conditions exist only for non-interval meters on the same Customer ID. The meter number must be provided in the PTD04 and PTD05. The type of missing or abundance consumption must be provided in the PTD06. The receiver must add or subtract this consumption from the meter number provided in the PTD05. Net usage for the Customer ID is provided in the PTD~SU Loop.

REQUIRED for each meter for each unit of measure.

PTD~PL~~~MG~1234568MG

PTD~PL~~~~~AO (used to report subtractive metering off a master meter)

PTD~PL~~~MG~1234568MG~MD (used to report tampering)

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code	M ID 2/2
			Code identifying the type of product transfer	
			PL Property Level Movement/Sale	
			Non-Interval Detail	
Dep	PTD04	128	Reference Identification Qualifier	X ID 2/3
			Code qualifying the Reference Identification	

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			MG	Meter Number	
				Not used if the PTD06= "AO" or "AI"	
Dep	PTD05	127	Reference Identification	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
			Meter Number		
			Meter numbers will contain only uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded, and significant leading and trailing zeros that are part of the meter number must be present.		
			Not used if the PTD06= "AO" or "AI".		
Used	PTD06	486	Product Transfer Movement Type Code	O	ID 2/2
			To indicate the type of product transfer movement		
			RBC		
			To indicate the type of product transfer movement. This field is only used when reporting the type of Master/Additive usage, Master/Subtractive usage or missing or abundance of consumption adjustment. The receiver must add this consumption to the meter number provided in the PTD05.		
			AI	Adjustment In	
				Additive Metering	
				Additive Usage for Additive meters off the master meter where a different Customer ID has been assigned to the master and/or all applicable additive meters. When the PTD06 equals "AI", the REF~JH equals "A".	
			AO	Adjustment Out	
				Subtractive Metering	
				Subtractive Usage for Subtract meters off the master meter where a different Customer ID has been assigned to the master and/or all applicable subtractive meters. . When the PTD06 equals "AO", the REF~JH equals "S".	
			CD	Customer to Distributor	
				Added Flat /Bypass - Missing or abundance of Consumption	
				For adjusting consumption when the added consumption provided has not been registered by the meter. The condition exists only for non-interval meters on the same Customer ID. The receiver must add this consumption to the meter number provided in the PTD05. The receiver must add this consumption to the meter number provided in the PTD05. When the PTD06 equals "CD", the REF~JH equals "A".	
			DC	Distributor to Customer	
				Added Slow- Missing or abundance of Consumption	
				For adjusting consumption when the added	

X12 Implementation Guidelines

DM

consumption provided has not been registered by the meter. The conditions exists only for non-interval meters on the same Customer ID. The receiver must add this consumption to the meter number provided in the PTD05. When the PTD06 equals "DC", the REF~JH equals "A".

Distributor to Manufacturer

Subtracted Fast- Missing or abundance of Consumption

For adjusting consumption when the subtracted consumption provided has not been registered by the meter. The condition exists only for non-interval meters on the same Customer ID. The receiver must subtract this consumption to the meter number provided in the PTD05. When the PTD06 equals "DM", the REF~JH equals "S".

MD

Manufacturer to Distributor

Added Tampering- Missing or abundance of Consumption

For adjusting consumption when the added consumption provided has not been registered by the meter. The condition exists only for non-interval meters on the same Customer ID. The receiver must add this consumption to the meter number provided in the PTD05. When the PTD06 equals "MD", the REF~JH equals "A".

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X12 Implementation Guidelines**Segment:** **DTM** PTD~PL Service Period Start Date (DTM~150)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Service Period Start Date

REQUIRED except in second of two meter exchange PTD loops

DTM~150~20010101

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time 150 Service Period Start	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

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X12 Implementation Guidelines**Segment:** **DTM** PTD~PL Service Period End Date (DTM~151)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Service Period End Date. Service Period Start Date for month 2 must equal the Service Period End Date for Month 1, otherwise a gap in data exists. Example:

Month 1 DTM~150~20010501 DTM~151~20010601

month 2 DTM~150~20010601 DTM~151~20010701

REQUIRED except in first of two meter exchange PTD loops

DTM~151~20010131

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			151 Service Period End	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

X12 Implementation Guidelines**Segment:** **DTM** PTD~PL Exchange Date (DTM~514)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Meter exchange date. There will be two PTD loops when a meter is exchanged.
 -The first PTD includes the Service Period Start Date and the Meter Exchange Date
 -The second PTD includes the Meter Exchange Date and the Service Period End Date
 REQUIRED when a meter is exchanged and the meter agent does not change.

First PTD:
 DTM~150~20010101
 DTM~514~20010114

Second PTD:
 DTM~514~20010114
 DTM~151~20010128

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			514 Transferred	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

X12 Implementation Guidelines**Segment:** **REF** PTD~PL Number of Dials / Digits (REF~IX)**Position:** 030**Loop:** PTD Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

- Syntax Notes:**
- 1** At least one of REF02 or REF03 is required.
 - 2** If either C04003 or C04004 is present, then the other is required.
 - 3** If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1** REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

Number of dials on the meter displayed as a decimal where:
 -the number of dials is integer value (number to the left of the decimal point), and
 -the number of dials is the decimal value (number to the right of the decimal point)
 REQUIRED for meters with dials

REF~IX~6.0

REF~IX~5.1

REF~IX~4.2

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification IX Item Number	
Used	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

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X12 Implementation Guidelines**Segment:** **REF** PTD~PL Meter Role (REF~JH)**Position:** 030**Loop:** PTD Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: Role defines whether to add, subtract or do neither with the value and the summarized total
REQUIRED
REF~JH~A

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			JH Tag	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			A Additive	
				This consumption must be added to the summarized total
			I Ignore	
				This consumption did not contribute to the summarized total (do nothing)
			S Subtractive	
				This consumption must be subtracted from the summarized total

X12 Implementation Guidelines

Segment:	REF PTD~PL Meter Type (REF~MT)
Position:	030
Loop:	PTD Mandatory
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required. 2 If either C04003 or C04004 is present, then the other is required. 3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	
Notes:	Indicates the type of usage that is reported in this PTD loop. Meter type is expressed as a five-character field xxyyy, where: -xx is the type of consumption and, -yyy is the metering interval reported by the metering agent Type of Consumption Valid Values: -K1: kiloWatt Demand (kW) -K2: kiloVolt Amperes Reactive Demand (kVAR) -K3: kiloVolt Amperes Reactive Hour (kVARH) -K4: kiloVolt Amperes (kVA) -KH: kiloWatt Hour (kWh) Metering Interval Reported for Billing Purposes (yyy) Valid Values: -nnn: Number of minutes from 001 to 999 -DAY: Daily - MON:Monthly - REQUIRED REF~MT~KHMON

Data Element Summary

	Ref.	Data	Name	Attributes
	Des.	Element		
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			MT Meter Ticket Number	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

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X12 Implementation Guidelines**Segment:** **QTY** PTD~PL Quantity (QTY~QD)**Position:** 110**Loop:** QTY Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify quantity information**Syntax Notes:** 1 At least one of QTY02 or QTY04 is required.

2 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.**Comments:****Notes:**

Quantity is the total measured consumption for the billable period including all billable adjustments applicable, e.g., transformer loss factor and the meter multiplier. The quantity in the QTY02 has not been adjusted for any additive/Master Meter, subtractive/Master Meter or missing or abundance of consumption occurring in the PTD~PL when the PTD06 has a valid code.

MEA with an MEA07 = "51" (total) is required.

"KA" - Estimate must be used when reporting missing or abundance of consumption.

REQUIRED: one QTY loop for each time of use (e.g. one for On Peak kWh, one for Off Peak, kWh, one for Total kWh, etc.)

QTY~QD~1000

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity	
			Note: There may be instances where the Quantity Qualifier could be AO or QD while the MEA01 is not AA (Meter read-beginning actual/ending actual).	
		AO	Verified Receipts	
			Verified as actual value	
		KA	Estimated	
			Quantity is estimated; required when reporting missing or abundance of consumption	
		QD	Quantity Delivered	
			Quantity is actual	
Must Use	QTY02	380	Quantity	X R 1/15
			Numeric value of quantity	

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X12 Implementation Guidelines**Segment:** **MEA** PTD~PL Meter Reads (MEA~AA)**Position:** 160**Loop:** QTY Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)**Syntax Notes:** 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.

2 If MEA05 is present, then MEA04 is required.

3 If MEA06 is present, then MEA04 is required.

4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.

5 Only one of MEA08 or MEA03 may be present.

Semantic Notes: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.**Comments:** 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.**Notes:** REQUIRED unless reporting Additive/Subtractive Metering Usage or Adjusted (missing or abundance) Consumption. (if the PTD06 equals "AI" , "AO","CD","DC","DM", or "MD")

MEA with an MEA07 = "51" (total) is required unless reporting Additive/Subtractive Metering Usage (the PTD06 equals "AI" or "AO","CD", "DC","DM", or "MD")

MEA~AA~PRQ~1000~KH~1000~1100~51

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA01	737	Measurement Reference ID Code	O ID 2/2
			Code identifying the broad category to which a measurement applies	
			AA Meter reading-beginning actual/ending actual	
			AE Meter reading-beginning actual/ending estimated	
			EA Meter reading-beginning estimated/ending actual	
			EE Meter reading-beginning estimated/ending estimated	
Must Use	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			PRQ Product Reportable Quantity	
			Consumption	
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	
			Total consumption after meter multiplier and transformer loss factor are applied.	
Must Use	MEA04	C001	Composite Unit of Measure	X
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
			Please note that this is a composite data element, populate C00101.	
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2

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Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

K1 kiloWatt Demand

kW

K2 kiloVolt Amperes Reactive Demand

kVAR

K3 kiloVolt Amperes Reactive Hour

kVARH

K4 kiloVolt Amperes

kVA

KH kiloWatt Hour

kWh

Dep	MEA05	740	Range Minimum	X R 1/20
The value specifying the minimum of the measurement range				
The Beginning read is required when C00101, element 355 Unit of Measure is equal to				
"K3" - kVARH (kiloVolt Amperes Reactive Hour),				
"K4" - kVA (kiloVolt Amperes)				
"KH" - kWh (kiloWatt Hour).				
The Beginning read is not used for				
"K1" - kW (kiloWatt Demand)				
"K2" - kVAR (kiloVolt Amperes Reactive Demand).				
Must Use	MEA06	741	Range Maximum	X R 1/20
The value specifying the maximum of the measurement range				
Ending read when C00101, element 355 Unit of Measure is equal to				
"K3" - kVARH (kiloVolt Amperes Reactive Hour)				
"K4" - kVA (kiloVolt Amperes)				
"KH" - kWh (kiloWatt Hour)				
Single read when				
"K1" - kW (kiloWatt Demand)				
"K2" - kVAR (kiloVolt Amperes Reactive Demand)				
Must Use	MEA07	935	Measurement Significance Code	O ID 2/2
Code used to benchmark, qualify or further define a measurement value				
41 Off Peak				
42 On Peak				
43 Intermediate				
Mid-Peak				
51 Total				
Totalizer/Total/Max (Demand)				
71 Low				
Summer Super On-Peak				

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X12 Implementation Guidelines**Segment:** **MEA** PTD~PL Transformer Loss Factor (MEA~~CO)**Position:** 160**Loop:** QTY Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)**Syntax Notes:** **1** At least one of MEA03 MEA05 MEA06 or MEA08 is required.**2** If MEA05 is present, then MEA04 is required.**3** If MEA06 is present, then MEA04 is required.**4** If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.**5** Only one of MEA08 or MEA03 may be present.**Semantic Notes:** **1** MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.**Comments:** **1** When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.**Notes:** Transformer Loss Factor not measured by the meter.

Where the delivery point is prior to the transformation such that the Customer is responsible for losses and the meter is after the transformer and therefore does not record losses, the transformer loss factor will be greater than unity. E.g. 1.006, to reflect a positive adjustment to the meter readiness.

Where the delivery point is after the transformation such that the Customer is not responsible for transformer losses, and the meter is prior to the transformer and therefore does reflect transformer losses, the transformer loss factor will be less than unity. E.g. 0.995, to reflect a negative adjustment to the meter reads.

The value in the field will always be a positive value
REQUIRED for ELECTRIC when the transformer loss is not measured by the meter

MEA~~CO~1.015 (format when the factor is positive)

MEA~~CO~.985 (format when the factor is negative)

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			CO Core Loss	
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **MEA** PTD~PL Meter Multiplier (MEA~~MU)**Position:** 160**Loop:** QTY Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)**Syntax Notes:** 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.

2 If MEA05 is present, then MEA04 is required.

3 If MEA06 is present, then MEA04 is required.

4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.

5 Only one of MEA08 or MEA03 may be present.

Semantic Notes: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.**Comments:** 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.**Notes:** (Ending read - Beginning read) * Meter Multiplier = Billed Usage

If no meter multiplier, then populate with "1"

Format of the multiplier could be in the form of a fraction (e.g. 48.78432)

REQUIRED

MEA~~MU~1

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			MU Multiplier	
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **MEA** **PTD~PL Power Factor (MEA~~ZA)****Position:** 160**Loop:** QTY Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)**Syntax Notes:** **1** At least one of MEA03 MEA05 MEA06 or MEA08 is required.**2** If MEA05 is present, then MEA04 is required.**3** If MEA06 is present, then MEA04 is required.**4** If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.**5** Only one of MEA08 or MEA03 may be present.**Semantic Notes:** **1** MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.**Comments:** **1** When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.**Notes:** Relationship between Watts and Volt - amperes necessary to supply electric load
REQUIRED if measured

MEA~~ZA~.95

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			ZA Power Factor	
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	

X12 Implementation Guidelines

Segment: **PTD** **Unmetered Services (PTD~BD)**
Position: 010
Loop: PTD Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data
Syntax Notes: 1 If either PTD02 or PTD03 is present, then the other is required.
 2 If either PTD04 or PTD05 is present, then the other is required.
Semantic Notes:
Comments:
Notes:

PTD = BD (Unmetered Services)

One PTD loop is required per device type per Customer account id. Total consumption for all unmetered services is at the unmetered device detail level. One loop is required for each unmetered device type per each unique Wattage and/or lumen reported. Even though some consumption may be estimated, the consumption is reported as actual quantity delivered for unmetered services. The detail is required for Unmetered Services.

REQUIRED for each unmetered service type

PTD~BD

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code	M ID 2/2
			Code identifying the type of product transfer	
			BD	Issue - Other Department
				Unmetered Services Detail

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **DTM** PTD~BD Service Period Start Date (DTM~150)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Service Period Start Date. Service Period Start Date for month 2 must equal the Service Period End Date for Month 1, otherwise a gap in data exists. Example:

Month 1 DTM~150~20010501 DTM~151~20010601

month 2 DTM~150~20010601 DTM~151~20010701

REQUIRED except in second of two meter exchange PTD loops

DTM~150~20010101

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			150 Service Period Start	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **DTM** PTD~BD Service Period End Date (DTM~151)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Service Period End Date. Service Period Start Date for month 2 must equal the Service Period End Date for Month 1, otherwise a gap in data exists. Example:

Month 1 DTM~150~20010501 DTM~151~20010601

month 2 DTM~150~20010601 DTM~151~20010701

REQUIRED except in first of two meter exchange PTD loops

DTM~151~20010131

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			151 Service Period End	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **REF** PTD~BD Unmetered Service Type (REF~PRT)**Position:** 030**Loop:** PTD Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify identifying information**Syntax Notes:** 1 At least one of REF02 or REF03 is required.

2 If either C04003 or C04004 is present, then the other is required.

3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.**Comments:****Notes:**

Provides additional information for the specified unmetered service. Includes type of device which this measurement loop references, additional text information which may be useful to the Supplier (e.g. a specific Wattage of a light, additional text information for further clarification, etc.)
REQUIRED if there are unmetered services on Customer account

REF~PRT~MV~750

REF~PRT~SD~400 Company Owned

REF~PRT~SD~400 Customer Owned

REF~PRT~MV~Third party maintained facilities

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			PRT Product Type	
			Defined Unmetered Service Type	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			RBC - see governing documents for valid unmetered type codes.	
			AN Antenna	
			AR Argon	
			BB Bill Boards	
			BS Bus Shelters	
			CU Cat Unit	
			ED Electronic Device	
			FL Fluorescent	
			HA Historical/Antique	
			IN Incandescent	
			LV Levys	
			MH Metal Halide	
			MV Mercury Vapor	
			OT Other Un-Metered	
			PA Power Analog node	
			PB Phone Booth	
			PO Phone Outlet	
			PS Pump Station	
			RR Rail Road Crossings	

X12 Implementation Guidelines

SD	Sodium
TL	Traffic Lights
TR	Tranceiver
WM	Wallpacked Mercury Vapor
WS	Warning Sirens

Dep	REF03	352	Description	X AN 1/80
A free-form description to clarify the related data elements and their content				
Used to provide additional clarification information to the Non-Billing Party for the unmetered service when necessary. Used to provide the specific Wattage/lumens for a light				

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines

Segment: **QTY** PTD~BD Quantity of Unmetered Services (QTY~QD)

Position: 110

Loop: QTY Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To specify quantity information

Syntax Notes: 1 At least one of QTY02 or QTY04 is required.

2 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.

Comments:

Notes:

Quantity is the total unmetered consumption per device type for the billable period. There is no PTD06 = "AI","A0","CD","DC","DM" or "MD" Adjusted Consumption in this loop. Billable quantity in the monthly usage may not match the invoiced quantity in the monthly invoice because of Distribution Company's tariff adjustments to the monthly invoice data.

REQUIRED: one QTY loop for each consumption quantity per device.

QTY~QD~2000~EA^^20^KH^^100

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity QD Quantity Delivered	
Must Use	QTY02	380	Quantity	X R 1/15
			Numeric value of quantity Total consumption of unmetered device type	
Must Use	QTY03	C001	Composite Unit of Measure	O
			To identify a composite unit of measure (See Figures Appendix for examples of use) Note this is a composite data element, populate C00101	
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken EA Each	
Must Use	C00103	649	Multiplier	O R 1/10
			Value to be used as a multiplier to obtain a new value Number of unmetered devices for this specific Unmetered Service Type (as defined in the REF~PRT segment).	
Must Use	C00104	355	Unit or Basis for Measurement Code	O ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken KH kiloWatt Hour	
Must Use	C00106	649	Multiplier	O R 1/10
			Value to be used as a multiplier to obtain a new value	

X12 Implementation Guidelines

Segment: **PTD** Interval Summary (PTD~BO)
Position: 010
Loop: PTD Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data
Syntax Notes: 1 If either PTD02 or PTD03 is present, then the other is required.
 2 If either PTD04 or PTD05 is present, then the other is required.
Semantic Notes:
Comments:
Notes:

Summary of monthly interval consumption at each meter. There will be separate PTD~BO loops to reflect summed adjusted consumption.

Individual intervals are not reported in the PTD~BO loop. The PTD~BO loop will never report KW or KVAR.

For Additive/Subtractive Metering Only:

This loop is also used for Additive/Subtractive Metering when the Master Meter is on one Customer ID and the additive and/or subtractive meters are on Customer ID that are different than the master Meter. All additive and subtractive usage is summed. It is possible to receive two additive/subtractive loops - one with summed additive usage and one with summed subtractive usage. When reporting usage for the additive/Master and/or subtractive/Master usage, the meter number is not provided in the PTD04 and PTD05. The type of Master/Subtractive and/or Master/ Additive usage must be provided in the PTD06 by using code "AI" or code "AO". Distribution Companies provide for the Master/Subtractive or Master/Additive net intervals in the PTD~PP when the PTD~BO element PTD06 equals "AI" or "AO". No netted usage is reported in this Loop. The receiver must net the PTD~BO Loops to determine Master Meter usage.

Missing or abundance of Consumption:

Not reported for Interval Meters.

REQUIRED for each meter for each unit of measure.

PTD~BO~~~MG~1234568MG

PTD~BO~~~~~AI (used to report Additive/Master metering usage)

PTD~BO~~~~~AO (used to report Subtractive/Master metering usage)

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code	M ID 2/2
			Code identifying the type of product transfer	
			BO Designated Items	
			Consumption across intervals and across the same unit of measure summarized at the meter level	
Dep	PTD04	128	Reference Identification Qualifier	X ID 2/3
			Code qualifying the Reference Identification	
			MG Meter Number	
			Not used if the PTD06 = "AO" or "AI"	
Dep	PTD05	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

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X12 Implementation Guidelines**Meter Number**

Meter numbers will contain only uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded, and significant leading and trailing zeros that are part of the meter number must be present.

Not used if the PTD06 = "AO" or "AI".

Used**PTD06****486****Product Transfer Movement Type Code****O ID 2/2**

To indicate the type of product transfer movement

This field is only used when reporting the type of Master/Additive or Master/Subtractive usage. This indicates to the receiver that they will find the netted interval usage for the Master Meter the PTD~PP.

AI**Adjustment In****Additive Metering**

Additive Usage for Additive meters off the master meter where a different Customer ID has been assigned to the master and/or all applicable additive meters. When the PTD06 equals "AI", the REF~JH equals "A".

AO**Adjustment Out****Subtractive Metering**

Subtractive Usage for Subtract meters off the master meter where a different Customer ID has been assigned to the master and/or all applicable subtractive meters. . When the PTD06 equals "AO", the REF~JH equals "S".

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X12 Implementation Guidelines**Segment:** **DTM** PTD~BO Service Period Start Date (DTM~150)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Service Period Start Date. Service Period Start Date for month 2 must equal the Service Period End Date for Month 1, otherwise a gap in data exists. Example:

Month 1 DTM~150~20010501 DTM~151~20010601

month 2 DTM~150~20010601 DTM~151~20010701

REQUIRED except in second of two meter exchange PTD loops

DTM~150~20010101

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			150 Service Period Start	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

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X12 Implementation Guidelines**Segment:** **DTM** PTD~BO Service Period End Date (DTM~151)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Service Period End Date. Service Period Start Date for month 2 must equal the Service Period End Date for Month 1, otherwise a gap in data exists. Example:

Month 1 DTM~150~20010501 DTM~151~20010601

month 2 DTM~150~20010601 DTM~151~20010701

REQUIRED except in first of two meter exchange PTD loops

DTM~151~20010131

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			151 Service Period End	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

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X12 Implementation Guidelines**Segment:** **DTM** PTD~BO Exchange Date (DTM~514)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Meter exchange date. There will be two PTD loops when a meter is exchanged.
 -The first PTD includes the Service Period Start Date and the Meter Exchange Date
 -The second PTD includes the Meter Exchange Date and the Service Period End Date
 REQUIRED when a meter is exchanged and the meter agent does not change.

DTM~514~19990201 - 1st PTD

DTM~150~19990214

DTM~514~19990214 - 2nd PTD

DTM~151~19990228

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			514 Transferred	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

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X12 Implementation Guidelines**Segment:** **REF** PTD~BO Meter Role (REF~JH)**Position:** 030**Loop:** PTD Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: Role defines whether to add, subtract or do neither with the value and the summarized total
REQUIRED
REF~JH~A

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			JH Tag	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			A Additive	
				This consumption contributed to the summarized total (do nothing)
			I Ignore	
				This consumption did not contribute to the summarized total (do nothing)
			S Subtractive	
				This consumption must be subtracted from the summarized total

X12 Implementation Guidelines**Segment:** **REF** PTD~BO Meter Type (REF~MT)**Position:** 030**Loop:** PTD Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

Indicates the type of usage that is reported in this PTD loop. Meter type is expressed as a five-character field xxyyy, where:

-xx is the type of consumption and,

-yyy is the metering interval reported by the metering agent

Type of Consumption Valid Values:

-K1: kiloWatt Demand (kW)

-K2: kiloVolt Amperes Reactive Demand (kVAR)

-K3: kiloVolt Amperes Reactive Hour (kVARH)

-K4: kiloVolt Amperes (kVA)

-KH: kiloWatt Hour (kWh)

Metering Interval Reported for Billing Purposes (yyy) Valid Values:

-nnn: Number of minutes from 001 to 999

-DAY: Daily

MON:Monthly

REQUIRED

REF~MT~KHMON

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification MT Meter Ticket Number	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

X12 Implementation Guidelines**Segment:** **QTY** PTD~BO Quantity**Position:** 110**Loop:** QTY Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify quantity information**Syntax Notes:** 1 At least one of QTY02 or QTY04 is required.

2 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.**Comments:****Notes:**

Quantity is the total measured consumption for the billable period including all billable adjustments applicable, e.g., transformer loss factor and the meter multiplier. The quantity in the QTY02 has not been adjusted for any master/additive/ subtractive meter usage.

Quantity is sent with a minimum of two digits and a maximum of four digits to the right of the decimal point, e.g., 525.15; 567.1375, etc., while adhering to the ANSI rules for providing Real numbers. For instance, if the quantity reported is:

525	then the QTY02 is reported as	525
525.1275	then the QTY02 is reported as	525.1275
525.12	then the QTY02 is reported as	525.12
525.10	then the QTY02 is reported as	525.1
0	then the QTY02 is reported as	0

Leading zeros are suppressed and trailing zeros are truncated.

REQUIRED

QTY~QD~746

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity	
			KA Estimated	
			Quantity is estimated	
			QD Quantity Delivered	
			Quantity is actual	
Must Use	QTY02	380	Quantity	X R 1/15
			Numeric value of quantity	

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X12 Implementation Guidelines

Segment: **MEA** PTD~BO Meter Reads (MEA~AA)**Position:** 160**Loop:** QTY Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)**Syntax Notes:** 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.

2 If MEA05 is present, then MEA04 is required.

3 If MEA06 is present, then MEA04 is required.

4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.

5 Only one of MEA08 or MEA03 may be present.

Semantic Notes: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.**Comments:** 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.**Notes:** Total (MEA with an MEA07 = "51") is required unless reporting Additive/Subtractive Metering Usage (the PTD06 equals "AI" or "AO").
REQUIRED unless reporting Additive/Subtractive Metering Usage. (if the PTD06 equals "AI" or "AO").

MEA~AF~~~KH~9500~10231~51

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA01	737	Measurement Reference ID Code	O ID 2/2
			Code identifying the broad category to which a measurement applies	
			AF Actual Total	
Must Use	MEA04	C001	Composite Unit of Measure	X
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
			This is a composite data element, please populate C00101	
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			K3 kiloVolt Amperes Reactive Hour	
			kVARH	
			KH kiloWatt Hour	
			kWh	
Dep	MEA05	740	Range Minimum	X R 1/20
			The value specifying the minimum of the measurement range	
			Beginning Read; Required when C00101 equals "KH" - kWh (kiloWatt Hour).	
Must Use	MEA06	741	Range Maximum	X R 1/20
			The value specifying the maximum of the measurement range	
			Ending Read.	
Must Use	MEA07	935	Measurement Significance Code	O ID 2/2

X12 Implementation Guidelines

Code used to benchmark, qualify or further define a measurement value

51	Total
	Totalizer/Total/Max (Demand)

X12 Implementation Guidelines**Segment:** **MEA** PTD~BO Transformer Loss Factor (MEA~~CO)**Position:** 160**Loop:** QTY Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)**Syntax Notes:** 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.

2 If MEA05 is present, then MEA04 is required.

3 If MEA06 is present, then MEA04 is required.

4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.

5 Only one of MEA08 or MEA03 may be present.

Semantic Notes: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.**Comments:** 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.**Notes:** Transformer Loss Factor not measured by the meter.

Where the delivery point is prior to the transformation such that the Customer is responsible for losses and the meter is after the transformer and therefore does not record losses, the transformer loss factor will be greater than unity. E.g. 1.006, to reflect a positive adjustment to the meter readiness.

Where the delivery point is after the transformation such that the Customer is not responsible for transformer losses, and the meter is prior to the transformer and therefore does reflect transformer losses, the transformer loss factor will be less than unity. E.g. 0.995, to reflect a negative adjustment to the meter reads.

The value in the field will always be a positive value
REQUIRED for ELECTRIC when the transformer loss is not measured by the meter

MEA~~CO~1.015 (format when the factor is positive)

MEA~~CO~.985 (format when the factor is negative)

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			CO Core Loss	
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	

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X12 Implementation Guidelines**Segment:** **MEA** PTD~BO Meter Multiplier (MEA~~MU)**Position:** 160**Loop:** QTY Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)**Syntax Notes:** 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.

2 If MEA05 is present, then MEA04 is required.

3 If MEA06 is present, then MEA04 is required.

4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.

5 Only one of MEA08 or MEA03 may be present.

Semantic Notes: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.**Comments:** 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.**Notes:** (Ending read - Beginning read) * Meter Multiplier = Billed Usage

If no meter multiplier, then populate with "1"

Format of the multiplier could be in the form of a fraction (e.g. 48.78432)

Meter Multipliers for IDR Meters can be quite large. Format allows for eight digits to the left of the decimal and five digits to the right of the decimal, e.g., 9999999.99999.

REQUIRED for all IDR Meters when meter reads are reported. Not provided for additive/subtractive meters when they are on a different SD ID than the Master Meter because meter reads are not reported.

MEA~~MU~20000000.12345

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			MU Multiplier	
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	

X12 Implementation Guidelines**Segment:** **MEA** PTD~BO Power Factor (MEA~~ZA)**Position:** 160**Loop:** QTY Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)**Syntax Notes:** **1** At least one of MEA03 MEA05 MEA06 or MEA08 is required.**2** If MEA05 is present, then MEA04 is required.**3** If MEA06 is present, then MEA04 is required.**4** If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.**5** Only one of MEA08 or MEA03 may be present.**Semantic Notes:** **1** MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.**Comments:** **1** When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.**Notes:** Relationship between Watts and Volt - amperes necessary to supply electric load
REQUIRED if measured

MEA~~ZA~.95

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			ZA Power Factor	
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	

X12 Implementation Guidelines

Segment: **PTD** Interval Detail (PTD~PM)
Position: 010
Loop: PTD Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data
Syntax Notes: 1 If either PTD02 or PTD03 is present, then the other is required.
 2 If either PTD04 or PTD05 is present, then the other is required.
Semantic Notes:
Comments:
Notes:

PTD = PM (Interval Detail)
 REQUIRED when sending interval details. One PTD~PM loop is required for each meter channel for each unit of measure. Demand is not reported in the PTD~PM loop. This is the lowest level of detail.
 PTD~PM~~~MG~1234568MG

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code	M ID 2/2
			Code identifying the type of product transfer	
			PM Physical Meter Information	
			Interval Detail	
Must Use	PTD04	128	Reference Identification Qualifier	X ID 2/3
			Code qualifying the Reference Identification	
			MG Meter Number	
Must Use	PTD05	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Meter Number	
			Meter numbers will contain only uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded, and significant leading and trailing zeros that are part of the meter number must be present.	

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X12 Implementation Guidelines**Segment:** **DTM** PTD~PM Service Period Start Date (DTM~150)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Service Period Start Date. Service Period Start Date for month 2 must equal the Service Period End Date for Month 1, otherwise a gap in data exists. Example:

Month 1 DTM~150~20010501 DTM~151~20010601

month 2 DTM~150~20010601 DTM~151~20010701

REQUIRED except in second of two meter exchange PTD loops

DTM~150~20010101

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			150 Service Period Start	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

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X12 Implementation Guidelines**Segment:** **DTM** PTD~PM Service Period End Date (DTM~151)**Position:** 020**Loop:** PTD Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:**

Service Period End Date. Service Period Start Date for month 2 must equal the Service Period End Date for Month 1, otherwise a gap in data exists. Example:

Month 1 DTM~150~20010501 DTM~151~20010601

month 2 DTM~150~20010601 DTM~151~20010701

REQUIRED except in first of two meter exchange PTD loops

DTM~151~20010131

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			151 Service Period End	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

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X12 Implementation Guidelines

Segment: **DTM** PTD~PM Exchange Date (DTM~514)

Position: 020

Loop: PTD Mandatory

Level: Detail

Usage: Conditional

Max Use: 1

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes:

Meter exchange date. There will be two PTD loops when a meter is exchanged.
-The first PTD includes the Service Period Start Date and the Meter Exchange Date
-The second PTD includes the Meter Exchange Date and the Service Period End Date
REQUIRED when a meter is exchanged and the meter agent does not change.

DTM~514~19990201 - 1st PTD

DTM~150~19990214

DTM~514~19990214 - 2nd PTD

DTM~151~19990228

Data Element Summary

	Ref. <u>Des.</u>	Data <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time 514 Transferred	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	
Must Use	DTM03	337	Time	X TM 4/8
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	
			HHMM, where H = Hours (00 to 23) and M = Minutes (00 to 59). For this transaction, since X12 does not allow 2400 for time, 2359 will be used to indicate midnight. For example, midnight between October 15th and October 16th will be reflected as 2359 of October 15th.	
Used	DTM04	623	Time Code	O ID 2/2
			Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow	
			AT Alaska Time	
			CT Central Time	
			ET Eastern Time	
			GM Greenwich Mean Time	

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X12 Implementation Guidelines

MT	Mountain Time
PT	Pacific Time
TT	Atlantic Time

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X12 Implementation Guidelines**Segment:** **REF** PTD~PM Channel Number (REF~6W)**Position:** 030**Loop:** PTD Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify identifying information

- Syntax Notes:**
- 1** At least one of REF02 or REF03 is required.
 - 2** If either C04003 or C04004 is present, then the other is required.
 - 3** If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1** REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

Channel Number

REQUIRED

REF~6W~2

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification 6W Sequence Number	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

X12 Implementation Guidelines

Segment:	REF PTD~PM Meter Type (REF~MT)
Position:	030
Loop:	PTD Mandatory
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required. 2 If either C04003 or C04004 is present, then the other is required. 3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	
Notes:	Indicates the type of usage that is reported in this PTD loop. Meter type is expressed as a five-character field xxyyy, where: -xx is the type of consumption and, -yyy is the metering interval reported by the metering agent Type of Consumption Valid Values: -K1: kiloWatt Demand (kW) -K2: kiloVolt Amperes Reactive Demand (kVAR) -K3: kiloVolt Amperes Reactive Hour (kVARH) -K4: kiloVolt Amperes (kVA) -KH: kiloWatt Hour (kWh) Metering Interval Reported for Billing Purposes (yyy) Valid Values: -nnn: Number of minutes from 001 to 999 -DAY: Daily - MON:Monthly - REQUIRED REF~MT~KHMON

Data Element Summary

	Ref.	Data	Name	Attributes
	Des.	Element		
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			MT Meter Ticket Number	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

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X12 Implementation Guidelines**Segment:** **REF** PTD~PM Meter Role (REF~JH)**Position:** 030**Loop:** PTD Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify identifying information

- Syntax Notes:**
- 1** At least one of REF02 or REF03 is required.
 - 2** If either C04003 or C04004 is present, then the other is required.
 - 3** If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1** REF04 contains data relating to the value cited in REF02.

Comments:

Notes:

Role defines whether to add, subtract or do neither with the value and the summarized total
REQUIRED
REF~JH~A

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			JH Tag	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			A Additive	
				This consumption must be added to the summarized total
			I Ignore	
				This consumption did not contribute to the summarized total (do nothing)
			S Subtractive	
				This consumption must be subtracted from the summarized total

X12 Implementation Guidelines**Segment:** **QTY** PTD~PM Quantity**Position:** 110**Loop:** QTY Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify quantity information**Syntax Notes:** 1 At least one of QTY02 or QTY04 is required.

2 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.**Comments:****Notes:**

Quantity is the total measured interval consumption for the billable period including all billable adjustments applicable, e.g., transformer loss factor and the meter multiplier. The quantity in the QTY02 has not been adjusted for any additive and/or subtractive usage.

Quantity is sent with a minimum of two digits and a maximum of four digits to the right of the decimal point, e.g., 525.15; 567.1375, etc., while adhering to the ANSI rules for providing Real numbers. For instance, if the quantity reported is:

525	then the QTY02 is reported as	525
525.1275	then the QTY02 is reported as	525.1275
525.12	then the QTY02 is reported as	525.12
525.10	then the QTY02 is reported as	525.1
0	then the QTY02 is reported as	0

Leading zeros are suppressed and trailing zeros are truncated. Please refer to ANSI ASC X12 Version 004010 for further information on ANSI data elements, segments and loop usage and requirements.

REQUIRED

QTY~QD~22348

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity	
			KA Estimated	
			QD Quantity Delivered	
			Quantity is estimated	
			Quantity is actual	
Must Use	QTY02	380	Quantity	X R 1/15
			Numeric value of quantity	

X12 Implementation Guidelines

Segment: **DTM** PTD~PM Interval End Time (DTM~194)

Position: 210

Loop: QTY Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: HHMM timestamp to define interval

REQUIRED

DTM~194~20010115~1500~ET

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time 194 Period End	
			The date/time of the end of the interval	
Must Use	DTM02	373	Date	M DT 8/8
			Date expressed as CCYYMMDD	
Must Use	DTM03	337	Time	M TM 4/8
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	
			HHMM, where H = Hours (00 to 23) and M = Minutes (00 to 59). Since X12 does not allow 2400 for time, 2359 will be used to indicate 'midnight'	
Must Use	DTM04	623	Time Code	M ID 2/2
			Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow	
			The time code defines the time zone, including daylight savings time	
			AD Alaska Daylight Time	
			AS Alaska Standard Time	
			AT Alaska Time	
			CD Central Daylight Time	
			CS Central Standard Time	
			CT Central Time	
			ED Eastern Daylight Time	
			ES Eastern Standard Time	
			ET Eastern Time	

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GM	Greenwich Mean Time
MD	Mountain Daylight Time
MS	Mountain Standard Time
MT	Mountain Time
PD	Pacific Daylight Time
PS	Pacific Standard Time
PT	Pacific Time
TD	Atlantic Daylight Time
TS	Atlantic Standard Time
TT	Atlantic Time
UT	Universal Time Coordinate

X12 Implementation Guidelines

Segment: **SE** Transaction Set Trailer
Position: 030
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:**Semantic Notes:**

Comments: 1 SE is the last segment of each transaction set.

Notes: REQUIRED

SE~42~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

X12 Implementation Guidelines**810BR (RXQ.3.6.2)****810 NAESB RXQ.3.6.2 Invoice: Bill Ready & Single Retail Bill Option****Functional Group ID=IN****Introduction:**

This NAESB guideline contains the format and establishes the data contents of the Bill Ready (BR) and Single Retail Bill Option (SRBO) Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment. The Bill Ready and SRBO transaction set is used to communicate invoice details between Suppliers and Distribution Companies in a competitive retail marketplace where one party is acting as the 'Billing Party' and the second party is acting as the 'Non-Billing Party'. The BR/SRBO Invoice enables the Non-Billing Party to communicate charges and information that should be placed on the bill generated by the Billing Party.

Heading:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	010	ST	Transaction Set Header	M	1		
M	020	BIG	Beginning Segment for Invoice	M	1		
	030	NTE	Non-Billing Party Required Messages (NTE~ADD)	O	2		
	030	NTE	Non-Billing Party Regulatory Messages (NTE~OTH)	O	2		
	050	REF	Non-Billing Party Account ID (REF~11)	C	1		
	050	REF	Original Invoice ID (REF~OI)	C	1		
M	050	REF	Customer ID (REF~12/Q5)	M	1		
	050	REF	Old Customer ID (REF~45)	C	1		
			LOOP ID - N1			1	
M	070	N1	Name: Distribution Company (N1~8S)	M	1		
			LOOP ID - N1			1	
M	070	N1	Name: Supplier (N1~SJ)	M	1		
	130	ITD	Terms of Sale/Deferred Terms of Sale	C	1		

Detail:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - IT1			1	
M	010	IT1	Customer/Account-Level Charges (IT109=ACCOUNT)	M	1		
M	150	DTM	Service Period Start Date (DTM~150)	M	1		
M	150	DTM	Service Period End Date (DTM~151)	M	1		
			LOOP ID - SLN			1000	
M	200	SLN	Subline Item Detail	M	1		
M	230	SAC	Invoice Charge or Allowance (SAC)	M	25		
	237	TXI	Tax Information	C	10		
			LOOP ID - IT1			200000	
M	010	IT1	Rate-Level Charges (IT109=RATE)	M	1		
	120	REF	Distribution Company Rate Class	C	1		

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	120	REF	(REF~NH) Distribution Company Rate Subclass C	1
M	150	DTM	(REF~PR) Service Period Start Date (DTM~150) M	1
M	150	DTM	Service Period End Date (DTM~151) M	1
			LOOP ID - SLN	1000
M	200	SLN	Subline Item Detail M	1
M	230	SAC	Invoice Charge or Allowance (SAC) M	25
	237	TXI	Tax Information C	10

Summary:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	010	TDS	Total Monetary Value Summary	M	1		
M	070	CTT	Transaction Totals	M	1		n1
M	080	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. Number of line items (CTT01) is the accumulation of the number of IT1 segments. If used, hash total (CTT02) is the sum of the value of quantities invoiced (IT102) for each IT1 segment.

X12 Implementation Guidelines**Segment:** **ST** Transaction Set Header**Position:** 010**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To indicate the start of a transaction set and to assign a control number**Syntax Notes:****Semantic Notes:** **1** The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).**Comments:****Notes:**

REQUIRED

ST~810~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set 810 Invoice	
Must Use	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

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X12 Implementation Guidelines

Segment: **BIG** Beginning Segment for Invoice

Position: 020

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates

Syntax Notes:**Semantic Notes:**

- 1 BIG01 is the invoice issue date.
- 2 BIG03 is the date assigned by the purchaser to purchase order.
- 3 BIG10 indicates the consolidated invoice number. When BIG07 contains code CI, BIG10 is not used.

Comments: 1 BIG07 is used only to further define the type of invoice when needed.

Notes: REQUIRED

BIG~20010201~123567890120010201~~~2048392934504~~PR~00

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BIG01	373	Date	M DT 8/8
			Date expressed as CCYYMMDD	
			Date that the data was processed by the sender's application system.	
Must Use	BIG02	76	Invoice Number	M AN 1/22
			Identifying number assigned by issuer	
			A unique transaction identification number assigned by the originator of this transaction. This number must be unique over time. This number will be returned in the RMR02 of the 820 and/or the OTI03 of the 824.	
			Transaction reference numbers will only contain uppercase letters (A to Z) and digits (0 to 9), dashes ('-'), or periods ('.'). All other punctuation (spaces, commas, etc.) must be excluded.	
Dep	BIG05	328	Release Number	O AN 1/30
			Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	
			Cross-reference number originally transmitted in the Usage BPT02 must be sent in the BIG05 of the 810 and in the RMR loop REF~6O of the 820.	
			For a cancelled invoice the cross-reference will be made to the original meter read BPT02, not the cancelled meter read BPT02 transaction.	
Must Use	BIG07	640	Transaction Type Code	M ID 2/2
			Code specifying the type of transaction	
			FB Final Bill	
			Final invoice sent for this Customer from the Non-Billing Party.	
			ME Memorandum	
			Monthly invoice	
Must Use	BIG08	353	Transaction Set Purpose Code	M ID 2/2
			Code identifying purpose of transaction set	

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00	Original
01	Cancellation
	Cancel the entire invoice/transaction cross-referenced in REF~OI

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X12 Implementation Guidelines**Segment:** **NTE** Non-Billing Party Required Messages (NTE~ADD)**Position:** 030**Loop:****Level:** Heading**Usage:** Optional**Max Use:** 2**Purpose:** To transmit information in a free-form format, if necessary, for comment or special instruction**Syntax Notes:****Semantic Notes:****Comments:** 1 The NTE segment permits free-form information/data which, under ANSI X12 standard implementations, is not machine processable. The use of the NTE segment should therefore be avoided, if at all possible, in an automated environment.**Notes:** Messages and notices from Non-Billing Party
OPTIONALNTE~ADD~NBP MESSAGES
NTE~ADD~LINE TWO OF MESSAGES**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	NTE01	363	Note Reference Code	O ID 3/3
			Code identifying the functional area or purpose for which the note applies	
			ADD Additional Information	
Must Use	NTE02	352	Description	M AN 1/80
			A free-form description to clarify the related data elements and their content	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **NTE** Non-Billing Party Regulatory Messages (NTE~OTH)**Position:** 030**Loop:****Level:** Heading**Usage:** Optional**Max Use:** 2**Purpose:** To transmit information in a free-form format, if necessary, for comment or special instruction**Syntax Notes:****Semantic Notes:****Comments:** 1 The NTE segment permits free-form information/data which, under ANSI X12 standard implementations, is not machine processable. The use of the NTE segment should therefore be avoided, if at all possible, in an automated environment.**Notes:** Regulatory messages and notices from Non-Billing Party.
OPTIONALNTE~OTH~REGULATORY REQUIRED MESSAGES OR NOTICES
NTE~OTH~LINE TWO OF REGULATORY MESSAGES**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	NTE01	363	Note Reference Code	O ID 3/3
			Code identifying the functional area or purpose for which the note applies	
			OTH Other Instructions	
Must Use	NTE02	352	Description	M AN 1/80
			A free-form description to clarify the related data elements and their content	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **REF** Non-Billing Party Account ID (REF~11)**Position:** 050**Loop:****Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

ID that uniquely defines the Customer in Non-Billing Party systems. The Billing Party is required to store this ID and echo on transactions to the Non-Billing Party if this ID was previously provided to the Billing Party

OPTIONAL

REF~11~123456789019990102

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			11 Account Number	
			Number identifies a telecommunications industry account	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

X12 Implementation Guidelines**Segment:** **REF** Original Invoice ID (REF~OI)**Position:** 050**Loop:****Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

Cross-reference to Invoice ID from original invoice; used for cancel
REQUIRED on a cancel invoice transaction (BIG08=01)

REF~OI~123456789019990102

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification OI Original Invoice Number	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

X12 Implementation Guidelines

Segment: **REF** Customer ID (REF~12/Q5)**Position:** 050**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

ID that uniquely defines the Customer in marketplace. Applicable Regulatory Authority governing documents define whether REF~12 or REF~Q5 is required.

- REF~12 uses REF02 for ID; usually Distribution Company Account Number

- REF~Q5 uses REF03 for ID; usually the ESI ID (ERCOT)

REQUIRED

REF~12~1011111123456780

REF~Q5~~10111111234567890ABCDEFGHIJKL

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			12 Billing Account	
			Account number under which billing is rendered	
			Account number ID; sent in REF02	
			Q5 Property Control Number	
			Service Delivery ID (e.g. ESIID); sent in REF03	
Used	REF02	127	Customer Account ID; use when REF01=12	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
Used	REF03	352	Service Delivery ID; use when REF01=Q5	X AN 1/80
			A free-form description to clarify the related data elements and their content	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **REF** Old Customer ID (REF~45)**Position:** 050**Loop:****Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:

Notes:

Cross-reference ID used to identify a Customer if the Customer has received a new Customer ID in last 45 days
 REQUIRED when Customer ID has changed in last 45 days

REF~45~1011111123456780

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			45 Old Account Number	
			Identifies accounts being changed	
Used	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **N1** **Name: Distribution Company (N1~8S)****Position:** 070**Loop:** N1 Mandatory**Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Distribution Company Name and Entity ID

REQUIRED

N1~8S~DISTRIBUTE-IT INC.~1~007909411~~41

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			8S Consumer Service Provider (CSP)	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Distribution Company Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Distribution Company Entity ID	
Must Use	N106	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			40 Receiver	
			41 Submitter	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **N1** Name: Supplier (N1~SJ)**Position:** 070**Loop:** N1 Mandatory**Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Supplier Name and Entity ID

REQUIRED

N1~SJ~SUPPLY-IT INC.~9~007909422CRN1~~40

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			SJ Service Provider	
			Supplier	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Supplier Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Supplier Entity ID	
Must Use	N106	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			40 Receiver	
			41 Submitter	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **ITD** Terms of Sale/Deferred Terms of Sale**Position:** 130**Loop:****Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To specify terms of sale**Syntax Notes:** **1** If ITD03 is present, then at least one of ITD04 ITD05 or ITD13 is required.**2** If ITD08 is present, then at least one of ITD04 ITD05 or ITD13 is required.**3** If ITD09 is present, then at least one of ITD10 or ITD11 is required.**Semantic Notes:** **1** ITD15 is the percentage applied to a base amount used to determine a late payment charge.**Comments:** **1** If the code in ITD01 is "04", then ITD07 or ITD09 is required and either ITD10 or ITD11 is required; if the code in ITD01 is "05", then ITD06 or ITD07 is required.**Notes:** Date payment is due to the Non-Billing Party in a Single Retail Bill Option marketplace (e.g. ERCOT)
REQUIRED for Single Retail Bill Option

ITD~~~~~20010215

Data Element Summary

Must Use	Ref. Des.	Data Element	Name	Attributes
	ITD06	446	Terms Net Due Date	O DT 8/8
			Date when total invoice amount becomes due expressed in format CCYYMMDD	
			Payment due date	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **IT1** Customer/Account-Level Charges (IT109=ACCOUNT)**Position:** 010**Loop:** IT1 Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify the basic and most frequently used line item data for the invoice and related transactions

Syntax Notes:

- 1 If any of IT102 IT103 or IT104 is present, then all are required.
- 2 If either IT106 or IT107 is present, then the other is required.
- 3 If either IT108 or IT109 is present, then the other is required.
- 4 If either IT110 or IT111 is present, then the other is required.
- 5 If either IT112 or IT113 is present, then the other is required.
- 6 If either IT114 or IT115 is present, then the other is required.
- 7 If either IT116 or IT117 is present, then the other is required.
- 8 If either IT118 or IT119 is present, then the other is required.
- 9 If either IT120 or IT121 is present, then the other is required.
- 10 If either IT122 or IT123 is present, then the other is required.
- 11 If either IT124 or IT125 is present, then the other is required.

Semantic Notes: 1 IT101 is the purchase order line item identification.**Comments:** 1 Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.

2 IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: The Account IT1 loop (IT109=ACCOUNT) is used for charges at the Customer level. Only one IT1 loop is provided for the entire account: there may be *ONLY ONE* IT1 ACCOUNT loop per NAESB 810 transaction.
REQUIRED

IT1~1~~~~SV~ELECTRIC~C3~ACCOUNT
IT1~1~~~~SV~GAS~C3~ACCOUNT

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	IT101	350	Assigned Identification	M AN 1/20
			Alphanumeric characters assigned for differentiation within a transaction set	
Must Use	IT106	235	Product/Service ID Qualifier	M ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
			SV Service Rendered	
Must Use	IT107	234	Product/Service ID	M AN 1/48
			Identifying number for a product or service	
			Only one commodity (Electric or Gas) for each 810 transaction	
			ELECTRIC	
			GAS	
Must Use	IT108	235	Product/Service ID Qualifier	M ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
			C3 Classification	
Must	IT109	234	Product/Service ID	M AN 1/48

X12 Implementation Guidelines

Use

Identifying number for a product or service
ACCOUNT Charges/Taxes at an Account level

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **DTM** Service Period Start Date (DTM~150)**Position:** 150**Loop:** IT1 Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:** Service Period Start Date. The full service period should match the applicable
PTD loops from the 867
REQUIRED

DTM~150~20010106

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			150 Service Period Start	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **DTM** Service Period End Date (DTM~151)**Position:** 150**Loop:** IT1 Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:** Service Period End Date. The full service period should match the applicable
PTD loops from the 867
REQUIRED

DTM~151~20010206

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			151 Service Period End	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

X12 Implementation Guidelines**Segment:** **SLN** Subline Item Detail**Position:** 200**Loop:** SLN Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify product subline detail item data**Syntax Notes:** 1 If either SLN04 or SLN05 is present, then the other is required.

2 If SLN07 is present, then SLN06 is required.

3 If SLN08 is present, then SLN06 is required.

4 If either SLN09 or SLN10 is present, then the other is required.

5 If either SLN11 or SLN12 is present, then the other is required.

6 If either SLN13 or SLN14 is present, then the other is required.

7 If either SLN15 or SLN16 is present, then the other is required.

8 If either SLN17 or SLN18 is present, then the other is required.

9 If either SLN19 or SLN20 is present, then the other is required.

10 If either SLN21 or SLN22 is present, then the other is required.

11 If either SLN23 or SLN24 is present, then the other is required.

12 If either SLN25 or SLN26 is present, then the other is required.

13 If either SLN27 or SLN28 is present, then the other is required.

Semantic Notes: 1 SLN01 is the identifying number for the subline item.

2 SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.

3 SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.

4 SLN08 is a code indicating the relationship of the price or amount to the associated segment.

Comments: 1 See the Data Element Dictionary for a complete list of IDs.

2 SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.

3 SLN09 through SLN28 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: SLN is used to group charges together

REQUIRED

SLN~1~~A

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SLN01	350	Assigned Identification	M AN 1/20
			Alphanumeric characters assigned for differentiation within a transaction set	
			Used as a loop counter	
Must Use	SLN03	662	Relationship Code	M ID 1/1
			Code indicating the relationship between entities	
			A Add	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **SAC** Invoice Charge or Allowance (SAC)**Position:** 230**Loop:** SLN Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 25**Purpose:** To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

- Syntax Notes:**
- 1 At least one of SAC02 or SAC03 is required.
 - 2 If either SAC03 or SAC04 is present, then the other is required.
 - 3 If either SAC06 or SAC07 is present, then the other is required.
 - 4 If either SAC09 or SAC10 is present, then the other is required.
 - 5 If SAC11 is present, then SAC10 is required.
 - 6 If SAC13 is present, then at least one of SAC02 or SAC04 is required.
 - 7 If SAC14 is present, then SAC13 is required.
 - 8 If SAC16 is present, then SAC15 is required.

- Semantic Notes:**
- 1 If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
 - 2 SAC05 is the total amount for the service, promotion, allowance, or charge.
If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
 - 3 SAC08 is the allowance or charge rate per unit.
 - 4 SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
 - 5 SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
 - 6 SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
 - 7 SAC16 is used to identify the language being used in SAC15.

- Comments:**
- 1 SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
 - 2 In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

Notes: Invoice line item charge or allowance.

REQUIRED

SAC~C~~EU~DIS001~2400~~~.016~KH~1500~~~~~DUOS

SAC~C~~EU~LPC001~500~~~100.00~EA~.05

SAC~C~~EU~INT001~500~~~100.00~EA~.05

SAC~C~~EU~INT003~500~~~100.00~EA~.05

SAC~C~~EU~MSC003~2500~~~1~EA~25.00~~~~~METER

SEAL

REPLACEMENT CHARGE

Data Element Summary

Ref.	Data		
Des.	Element	Name	Attributes
Must Use	SAC01 248	Allowance or Charge Indicator	M ID 1/1

Code which indicates an allowance or charge for the service specified

A Allowance

C Charge

N No Allowance or Charge

Ignore the amount in the SAC05 when summing the invoice total

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X12 Implementation Guidelines

Must Use	SAC03	559	Agency Qualifier Code	X	ID 2/2
			Code identifying the agency assigning the code values		
			EU Electric Utilities		
			GU Natural Gas Utilities		
Must Use	SAC04	1301	Agency Service, Promotion, Allowance, or Charge Code	X	AN 1/10
			Agency maintained code identifying the service, promotion, allowance, or charge		
			Refer to governing documents of marketplace for a complete list of valid codes		
Must Use	SAC05	610	Amount	O	N2 1/15
			Monetary amount		
			This field must be signed if it is negative. The SAC08 multiplied by the SAC10 must always equal the SAC05		
Must Use	SAC08	118	Rate	O	R 1/9
			Rate expressed in the standard monetary denomination for the currency specified		
			This field must be signed if it is negative. The SAC08 multiplied by the SAC10 must always equal the SAC05.		
Must Use	SAC09	355	Unit or Basis for Measurement Code	X	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			Refer to governing documents of marketplace		
		4A	Bobbin		
			A cylinder or spindle on which yarn or thread is wound		
			ERCOT 4CP kiloWatt Demand		
		4B	Cap		
			Designates that the cap of a container is manufactured to dimensions that enable it to be used as a measuring device when mixing the contents of the container with another substance		
			ERCOT 4CP KVA Demand		
		4C	Centistokes		
			1 * 10/-6 square meters/second		
			ERCOT 4CP Power Factor Adjusted		
		4D	Curie		
			A unit of radioactivity equal to 3.7 * 10/10 disintegrations per second		
			ERCOT 4CP KVAR Demand		
		99	Watt		
		AF	Centigram		
			A unit of metric weight equal to 0.01 gram or 0.000035 ounce		
		DA	Days		
		DO	Dollars, U.S.		
		EA	Each		
		HH	Hundred Cubic Feet		
			ccf		
		K1	kiloWatt Demand		
		K2	kiloVolt Amperes Reactive Demand		

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines

K3	kiloVolt Amperes Reactive Hour
K4	kiloVolt Amperes
K5	kiloVolt Amperes Reactive
K7	kiloWatt
KH	kiloWatt Hour
MO	Months
NA	Milligrams per kilogram
	ERCOT NCP kiloWatt Demand
NB	Barge
	ERCOT NCP KVA Demand
NC	Car
	ERCOT NCP Power Factor Adjusted
ND	Net Barrels
	ERCOT NCP KVAR Demand
RA	Rack
	ERCOT Ratchet kiloWatt Demand
RB	Radian
	ERCOT Ratchet KVA Demand
RC	Rod (area) - 16.25 Square Yards
	ERCOT Ratchet Power Factor Adjusted
RD	Rod (length) - 5.5 Yards
	ERCOT Ratchet KVAR Demand
TD	Therms
TZ	Thousand Cubic Feet

Must Use	SAC10	380	Quantity	X R 1/15
			Numeric value of quantity	
			Consumption or Quantity	
			This field must be signed if it is negative. The SAC08 multiplied by the SAC10 must always equal the SAC05.	
Used	SAC11	380	Quantity	O R 1/15
			Numeric value of quantity	
Used	SAC13	127	Print sequencing number	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Used to assign a print sequencing number to determine the order that the line item will appear on the bill.	
Dep	SAC15	352	Description	X AN 1/80
			A free-form description to clarify the related data elements and their content	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **TXI** Tax Information**Position:** 237**Loop:** SLN Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 10**Purpose:** To specify tax information**Syntax Notes:** 1 At least one of TXI02 TXI03 or TXI06 is required.

2 If either TXI04 or TXI05 is present, then the other is required.

3 If TXI08 is present, then TXI03 is required.

Semantic Notes: 1 TXI02 is the monetary amount of the tax.

2 TXI03 is the tax percent expressed as a decimal.

3 TXI07 is a code indicating the relationship of the price or amount to the associated segment.

Comments:**Notes:** REQUIRED if taxes are applicable to the preceding SAC charge.

TXI~FR~2.5~~~~~A

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	TXI01	963	Tax Type Code	M ID 2/2
			Code specifying the type of tax	
			CA City Tax	
			Service Tax imposed by City	
			CT County Tax	
			FR Franchise Tax	
			GR Gross Receipts Tax	
			LO Local Tax (Not Sales Tax)	
			Service tax imposed on a local level	
			LS State and Local Sales Tax	
			ST State Sales Tax	
Must Use	TXI02	782	Monetary Amount	X R 1/18
			Monetary amount	
			Calculated Tax Amount. If negative, this amount must be preceded by a negative sign.	
Used	TXI04	955	Tax Jurisdiction Code Qualifier	X ID 2/2
			Code identifying the source of the data used in tax jurisdiction code	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
Used	TXI05	956	Tax Jurisdiction Code	X AN 1/10
			Code identifying the taxing jurisdiction	
Must Use	TXI07	662	Relationship Code	O ID 1/1
			Code indicating the relationship between entities	
			A Add	
			The amount in the TXI02 is included when summing the invoice total.	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines

Segment: **IT1** Rate-Level Charges (IT109=RATE)
Position: 010
Loop: IT1 Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify the basic and most frequently used line item data for the invoice and related transactions

Syntax Notes:

- 1 If any of IT102 IT103 or IT104 is present, then all are required.
- 2 If either IT106 or IT107 is present, then the other is required.
- 3 If either IT108 or IT109 is present, then the other is required.
- 4 If either IT110 or IT111 is present, then the other is required.
- 5 If either IT112 or IT113 is present, then the other is required.
- 6 If either IT114 or IT115 is present, then the other is required.
- 7 If either IT116 or IT117 is present, then the other is required.
- 8 If either IT118 or IT119 is present, then the other is required.
- 9 If either IT120 or IT121 is present, then the other is required.
- 10 If either IT122 or IT123 is present, then the other is required.
- 11 If either IT124 or IT125 is present, then the other is required.

Semantic Notes: 1 IT101 is the purchase order line item identification.
Comments: 1 Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
 2 IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: The Rate IT1 loop is used for rate-level charges. Multiple Rate IT1 Loops may be sent for each 810, and are differentiated by a combination of the IT109 element and the associated REF and DTM segments.
 REQUIRED

IT1~1~~~~SV~ELECTRIC~C3~ACCOUNT
 IT1~1~~~~SV~GAS~C3~ACCOUNT

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	IT101	350	Assigned Identification	M AN 1/20
			Alphanumeric characters assigned for differentiation within a transaction set	
Must Use	IT106	235	Product/Service ID Qualifier	M ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
			SV Service Rendered	
Must Use	IT107	234	Product/Service ID	M AN 1/48
			Identifying number for a product or service	
			Only one commodity (Electric or Gas) for each 810 transaction	
			ELECTRIC	
			GAS	
Must Use	IT108	235	Product/Service ID Qualifier	M ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
			C3 Classification	
Must	IT109	234	Product/Service ID	M AN 1/48

X12 Implementation Guidelines

Use

Identifying number for a product or service	
ACCOUNT	Charges/Taxes at an Account level
	Customer
RATE	Charges/Taxes at a Rate Level

X12 Implementation Guidelines**Segment:** **REF** Distribution Company Rate Class (REF~NH)**Position:** 120**Loop:** IT1 Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

- Syntax Notes:**
- 1** At least one of REF02 or REF03 is required.
 - 2** If either C04003 or C04004 is present, then the other is required.
 - 3** If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1** REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

Distribution Company Rate Class
 REQUIRED for Rate-level charges in Single Retail Bill Option
 REF~NH~RS1

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification NH Rate Card Number	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **REF** Distribution Company Rate Subclass (REF~PR)**Position:** 120**Loop:** IT1 Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

- Syntax Notes:**
- 1** At least one of REF02 or REF03 is required.
 - 2** If either C04003 or C04004 is present, then the other is required.
 - 3** If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1** REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

Distribution Company Rate Subclass
 REQUIRED for Rate-level charges in Single Retail Bill Option
 REF~PR~RSHT

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification Refer to 004010 Data Element Dictionary for acceptable code values.	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Distribution Company Rate Subclass	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **DTM** Service Period Start Date (DTM~150)**Position:** 150**Loop:** IT1 Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:** Service Period Start Date. The full service period should match the applicable
PTD loops from the 867
REQUIRED

DTM~150~20010106

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			150 Service Period Start	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **DTM** Service Period End Date (DTM~151)**Position:** 150**Loop:** IT1 Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:** Service Period End Date. The full service period should match the applicable
PTD loops from the 867
REQUIRED

DTM~151~20010206

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			151 Service Period End	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

X12 Implementation Guidelines**Segment:** **SLN** Subline Item Detail**Position:** 200**Loop:** SLN Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify product subline detail item data**Syntax Notes:** 1 If either SLN04 or SLN05 is present, then the other is required.

2 If SLN07 is present, then SLN06 is required.

3 If SLN08 is present, then SLN06 is required.

4 If either SLN09 or SLN10 is present, then the other is required.

5 If either SLN11 or SLN12 is present, then the other is required.

6 If either SLN13 or SLN14 is present, then the other is required.

7 If either SLN15 or SLN16 is present, then the other is required.

8 If either SLN17 or SLN18 is present, then the other is required.

9 If either SLN19 or SLN20 is present, then the other is required.

10 If either SLN21 or SLN22 is present, then the other is required.

11 If either SLN23 or SLN24 is present, then the other is required.

12 If either SLN25 or SLN26 is present, then the other is required.

13 If either SLN27 or SLN28 is present, then the other is required.

Semantic Notes: 1 SLN01 is the identifying number for the subline item.

2 SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.

3 SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.

4 SLN08 is a code indicating the relationship of the price or amount to the associated segment.

Comments: 1 See the Data Element Dictionary for a complete list of IDs.

2 SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.

3 SLN09 through SLN28 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: SLN is used to group charges together

REQUIRED

SLN~1~~A

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SLN01	350	Assigned Identification	M AN 1/20
			Alphanumeric characters assigned for differentiation within a transaction set	
			Used as a loop counter	
Must Use	SLN03	662	Relationship Code	M ID 1/1
			Code indicating the relationship between entities	
			A Add	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **SAC** Invoice Charge or Allowance (SAC)**Position:** 230**Loop:** SLN Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 25**Purpose:** To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

- Syntax Notes:**
- 1 At least one of SAC02 or SAC03 is required.
 - 2 If either SAC03 or SAC04 is present, then the other is required.
 - 3 If either SAC06 or SAC07 is present, then the other is required.
 - 4 If either SAC09 or SAC10 is present, then the other is required.
 - 5 If SAC11 is present, then SAC10 is required.
 - 6 If SAC13 is present, then at least one of SAC02 or SAC04 is required.
 - 7 If SAC14 is present, then SAC13 is required.
 - 8 If SAC16 is present, then SAC15 is required.

- Semantic Notes:**
- 1 If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
 - 2 SAC05 is the total amount for the service, promotion, allowance, or charge. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
 - 3 SAC08 is the allowance or charge rate per unit.
 - 4 SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
 - 5 SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
 - 6 SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
 - 7 SAC16 is used to identify the language being used in SAC15.

- Comments:**
- 1 SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
 - 2 In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

Notes: Invoice line item charge or allowance.

REQUIRED

SAC~C~~EU~DIS001~2400~~~.016~KH~1500~~~~~DUOS

SAC~C~~EU~LPC001~500~~~100.00~EA~.05

SAC~C~~EU~INT001~500~~~100.00~EA~.05

SAC~C~~EU~INT003~500~~~100.00~EA~.05

SAC~C~~EU~MSC003~2500~~~1~EA~25.00~~~~~METER

SEAL

REPLACEMENT CHARGE

Data Element Summary

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SAC01 248	Allowance or Charge Indicator	M ID 1/1

Code which indicates an allowance or charge for the service specified

A Allowance

C Charge

N No Allowance or Charge

Ignore the amount in the SAC05 when summing the invoice total

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines

Must Use	SAC03	559	Agency Qualifier Code	X	ID 2/2
			Code identifying the agency assigning the code values		
			EU Electric Utilities		
			GU Natural Gas Utilities		
Must Use	SAC04	1301	Agency Service, Promotion, Allowance, or Charge Code	X	AN 1/10
			Agency maintained code identifying the service, promotion, allowance, or charge		
			Refer to governing documents of marketplace for a complete list of valid codes		
Must Use	SAC05	610	Amount	O	N2 1/15
			Monetary amount		
			This field must be signed if it is negative. The SAC08 multiplied by the SAC10 must always equal the SAC05		
Must Use	SAC08	118	Rate	O	R 1/9
			Rate expressed in the standard monetary denomination for the currency specified		
			This field must be signed if it is negative. The SAC08 multiplied by the SAC10 must always equal the SAC05.		
Must Use	SAC09	355	Unit or Basis for Measurement Code	X	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			Refer to governing documents of marketplace		
		4A	Bobbin		
			A cylinder or spindle on which yarn or thread is wound		
			ERCOT 4CP kiloWatt Demand		
		4B	Cap		
			Designates that the cap of a container is manufactured to dimensions that enable it to be used as a measuring device when mixing the contents of the container with another substance		
			ERCOT 4CP KVA Demand		
		4C	Centistokes		
			1 * 10/-6 square meters/second		
			ERCOT 4CP Power Factor Adjusted		
		4D	Curie		
			A unit of radioactivity equal to 3.7 * 10/10 disintegrations per second		
			ERCOT 4CP KVAR Demand		
		99	Watt		
		AF	Centigram		
			A unit of metric weight equal to 0.01 gram or 0.000035 ounce		
		DA	Days		
		DO	Dollars, U.S.		
		EA	Each		
		HH	Hundred Cubic Feet		
			ccf		
		K1	kiloWatt Demand		
		K2	kiloVolt Amperes Reactive Demand		

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines

K3	kiloVolt Amperes Reactive Hour
K4	kiloVolt Amperes
K5	kiloVolt Amperes Reactive
K7	kiloWatt
KH	kiloWatt Hour
MO	Months
NA	Milligrams per kilogram
	ERCOT NCP kiloWatt Demand
NB	Barge
	ERCOT NCP KVA Demand
NC	Car
	ERCOT NCP Power Factor Adjusted
ND	Net Barrels
	ERCOT NCP KVAR Demand
RA	Rack
	ERCOT Ratchet kiloWatt Demand
RB	Radian
	ERCOT Ratchet KVA Demand
RC	Rod (area) - 16.25 Square Yards
	ERCOT Ratchet Power Factor Adjusted
RD	Rod (length) - 5.5 Yards
	ERCOT Ratchet KVAR Demand
TD	Therms
TZ	Thousand Cubic Feet

Must Use	SAC10	380	Quantity	X R 1/15
			Numeric value of quantity	
			Consumption or Quantity	
			This field must be signed if it is negative. The SAC08 multiplied by the SAC10 must always equal the SAC05.	
Used	SAC11	380	Quantity	O R 1/15
			Numeric value of quantity	
Used	SAC13	127	Print Sequencing Number	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Used to assign a print sequencing number to determine the order that the line item will appear on the bill.	
Dep	SAC15	352	Description	X AN 1/80
			A free-form description to clarify the related data elements and their content	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **TXI** Tax Information**Position:** 237**Loop:** SLN Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 10**Purpose:** To specify tax information**Syntax Notes:** 1 At least one of TXI02 TXI03 or TXI06 is required.

2 If either TXI04 or TXI05 is present, then the other is required.

3 If TXI08 is present, then TXI03 is required.

Semantic Notes: 1 TXI02 is the monetary amount of the tax.

2 TXI03 is the tax percent expressed as a decimal.

3 TXI07 is a code indicating the relationship of the price or amount to the associated segment.

Comments:**Notes:** REQUIRED if taxes are applicable to the preceding SAC charge.

TXI~FR~2.5~~~~~A

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	TXI01	963	Tax Type Code	M ID 2/2
			Code specifying the type of tax	
			CA City Tax	
			Service Tax imposed by City	
			CT County Tax	
			FR Franchise Tax	
			GR Gross Receipts Tax	
			LO Local Tax (Not Sales Tax)	
			Service tax imposed on a local level	
			LS State and Local Sales Tax	
			ST State Sales Tax	
Must Use	TXI02	782	Monetary Amount	X R 1/18
			Monetary amount	
			Calculated Tax Amount. If negative, this amount must be preceded by a negative sign.	
Used	TXI04	955	Tax Jurisdiction Code Qualifier	X ID 2/2
			Code identifying the source of the data used in tax jurisdiction code	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
Used	TXI05	956	Tax Jurisdiction Code	X AN 1/10
			Code identifying the taxing jurisdiction	
Must Use	TXI07	662	Relationship Code	O ID 1/1
			Code indicating the relationship between entities	
			A Add	
			The amount in the TXI02 is included when summing the invoice total.	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **TDS** Total Monetary Value Summary**Position:** 010**Loop:****Level:** Summary**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify the total invoice discounts and amounts**Syntax Notes:****Semantic Notes:**

- 1 TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable).
- 2 TDS02 indicates the amount upon which the terms discount amount is calculated.
- 3 TDS03 is the amount of invoice due if paid by terms discount due date (total invoice or installment amount less cash discount).
- 4 TDS04 indicates the total amount of terms discount.

Comments: 1 TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01.

Notes: Total amount due for this invoice, equals the algebraic sum of the amounts in the TXI02 and SAC05 segments with the exception of any charges that are designated to be ignored in the calculation in the TXI07 or SAC01.
REQUIRED

TDS~19875 (\$198.75 since the decimal is implied)

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	TDS01	610	Amount	M N2 1/15
			Monetary amount	
			If negative, this amount must be preceded by a negative sign. Note this is an implied decimal field: do not send the decimal point	

X12 Implementation Guidelines

Segment: **CTT** Transaction Totals

Position: 070

Loop:

Level: Summary

Usage: Mandatory

Max Use: 1

Purpose: To transmit a hash total for a specific element in the transaction set

Syntax Notes: 1 If either CTT03 or CTT04 is present, then the other is required.

2 If either CTT05 or CTT06 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

Notes: REQUIRED

CTT~1

Data Element Summary

Must Use	Ref.	Data	Name	Attributes
	<u>Des.</u>	<u>Element</u>		
	CTT01	354	Number of Line Items	M N0 1/6
			Total number of line items in the transaction set	
			The number of IT1 segments.	

X12 Implementation Guidelines

Segment: **SE** Transaction Set Trailer
Position: 080
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:**Semantic Notes:**

Comments: 1 SE is the last segment of each transaction set.

Notes: REQUIRED

SE~35~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

X12 Implementation Guidelines

810RR (RXQ.3.6.3)

810 NAESB RXQ.3.6.3 Invoice: Rate Ready

Functional Group ID=IN

Introduction:

This NAESB guideline contains the format and establishes the data contents of the Rate Ready (RR) Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment. The Rate Ready transaction set is used to communicate invoice details between Suppliers and Distribution Companies in a competitive retail marketplace where one party is acting as the 'Billing Party' and the second party is acting as the 'Non-Billing Party'. The RR Invoice enables the Billing Party to communicate charges and information that it has calculated and placed on the bill on behalf of the Non-Billing Party

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BIG	Beginning Segment for Invoice	M	1		
	050	REF	Non-Billing Party Account ID (REF~11)	C	1		
	050	REF	Original Invoice ID (REF~OI)	C	1		
M	050	REF	Customer ID (REF~12/Q5)	M	1		
	050	REF	Old Customer ID (REF~45)	C	1		
			LOOP ID - N1			1	
	070	N1	Name: Distribution Company (N1~8S)	O	1		
			LOOP ID - N1			1	
	070	N1	Name: Supplier (N1~SJ)	O	1		
M	130	ITD	Terms of Sale/Deferred Terms of Sale	M	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - IT1			200000	
M	010	IT1	Account Level Charges (IT109=ACCOUNT)	M	1		
M	150	DTM	Service Period Start Date (DTM~150)	M	1		
M	150	DTM	Service Period End Date (DTM~151)	M	1		
			LOOP ID - SLN			1000	
M	200	SLN	Subline Item Detail	M	1		
M	230	SAC	Invoice Charge or Allowance (SAC)	M	25		
	237	TXI	Tax Information	C	10		

Summary:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	TDS	Total Monetary Value Summary	M	1		
M/U	070	CTT	Transaction Totals	O	1		n1
M	080	SE	Transaction Set Trailer	M	1		

X12 Implementation Guidelines**Transaction Set Notes**

1. Number of line items (CTT01) is the accumulation of the number of IT1 segments. If used, hash total (CTT02) is the sum of the value of quantities invoiced (IT102) for each IT1 segment.

X12 Implementation Guidelines**Segment:** **ST** Transaction Set Header**Position:** 010**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To indicate the start of a transaction set and to assign a control number**Syntax Notes:****Semantic Notes:** 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).**Comments:****Notes:**

REQUIRED

ST~810~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set 810 Invoice	
Must Use	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **BIG** Beginning Segment for Invoice**Position:** 020**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates**Syntax Notes:****Semantic Notes:**

- 1 BIG01 is the invoice issue date.
- 2 BIG03 is the date assigned by the purchaser to purchase order.
- 3 BIG10 indicates the consolidated invoice number. When BIG07 contains code CI, BIG10 is not used.

Comments: 1 BIG07 is used only to further define the type of invoice when needed.**Notes:** REQUIRED

BIG~20010201~123567890120010201~~~2048392934504~~PR~00

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BIG01	373	Date	M DT 8/8
			Date expressed as CCYYMMDD	
			Date that the data was processed by the sender's application system	
Must Use	BIG02	76	Invoice Number	M AN 1/22
			Identifying number assigned by issuer	
			A unique transaction identification number assigned by the originator of this transaction. This number must be unique over time. This number will be returned in the RMR02 of the 820 and/or the OTI03 of the 824.	
			Transaction Reference Number only contains uppercase letters (A to Z) and digits (0 to 9), dashes ('-'), or periods ('.'). All other punctuation (spaces, commas, etc.) must be excluded.	
Dep	BIG05	328	Release Number	O AN 1/30
			Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	
			Cross-reference number originally transmitted in the Usage BPT02 must be sent in the BIG05 of the 810 and in the RMR loop REF~6O of the 820.	
			For a cancelled invoice the cross-reference will be made to the original meter read BPT02, not the cancelled meter read BPT02 transaction.	
Must Use	BIG07	640	Transaction Type Code	M ID 2/2
			Code specifying the type of transaction	
			FB Final Bill	
			Final invoice sent for this Customer from the Non-Billing Party.	
			ME Memorandum	
			Monthly invoice	
Must Use	BIG08	353	Transaction Set Purpose Code	M ID 2/2
			Code identifying purpose of transaction set	

X12 Implementation Guidelines

00	Original
01	Cancellation
	Cancels the entire invoice/transaction cross-referenced in REF~OI

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X12 Implementation Guidelines**Segment:** **REF** Non-Billing Party Account ID (REF~11)**Position:** 050**Loop:****Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information**Syntax Notes:** **1** At least one of REF02 or REF03 is required.**2** If either C04003 or C04004 is present, then the other is required.**3** If either C04005 or C04006 is present, then the other is required.**Semantic Notes:** **1** REF04 contains data relating to the value cited in REF02.**Comments:****Notes:**

ID that uniquely defines the Customer in Non-Billing Party systems. The Billing Party is required to store this ID and echo on transactions to the Non-Billing Party if this ID was previously provided to the Billing Party
REQUIRED when previously provided by Non-Billing Party

REF~11~123456789019990102

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			11 Account Number	
			Number identifies a telecommunications industry account	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

X12 Implementation Guidelines**Segment:** **REF** Original Invoice ID (REF~OI)**Position:** 050**Loop:****Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

Cross-reference to Invoice ID from original invoice; used for cancel
REQUIRED on a cancel invoice transaction (BIG08=01)

REF~OI~123456789019990102

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification OI Original Invoice Number	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines

Segment: **REF** Customer ID (REF~12/Q5)

Position: 050

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes:

ID that uniquely defines the Customer in marketplace. Applicable Regulatory Authority governing documents define whether REF~12 or REF~Q5 is required.

- REF~12 uses REF02 for ID; usually Distribution Company account number

- REF~Q5 uses REF03 for ID; usually the ESI ID (ERCOT)

REQUIRED

REF~12~1011111123456780

REF~Q5~~10111111234567890ABCDEFGHIJKL

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			12 Billing Account	
			Account number under which billing is rendered	
			Account number ID; sent in REF02	
			Q5 Property Control Number	
			Service Delivery ID (e.g. ESIID); sent in REF03	
Used	REF02	127	Customer Account ID; use when REF01=12	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
Used	REF03	352	Service Delivery ID; use when REF01=Q5	X AN 1/80
			A free-form description to clarify the related data elements and their content	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **REF** Old Customer ID (REF~45)**Position:** 050**Loop:****Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:

Notes:

Cross-reference ID used to identify a Customer if the Customer has received a new Customer ID in last 45 days
 REQUIRED when Customer ID has changed in last 45 days

REF~45~1011111123456780

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			12 Billing Account	
			Account number under which billing is rendered	
			Q5 Property Control Number	
Used	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **N1** **Name: Distribution Company (N1~8S)****Position:** 070**Loop:** N1 Optional**Level:** Heading**Usage:** Optional**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: REQUIRED

N1~8S~DISTRIBUTE-IT INC.~1~007909411~~41

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			8S Consumer Service Provider (CSP)	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Distribution Company Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Distribution Company Entity ID	
Must Use	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			40 Receiver	
			41 Submitter	

DRAFT IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **N1** **Name: Supplier (N1~SJ)****Position:** 070**Loop:** N1 Optional**Level:** Heading**Usage:** Optional**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Supplier Name and Entity ID

REQUIRED

N1~SJ~SUPPLY-IT INC.~9~007909422CRN1~~40

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			SJ Service Provider	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Supplier Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Supplier Entity ID	
Must Use	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			40 Receiver	
			41 Submitter	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **ITD** Terms of Sale/Deferred Terms of Sale**Position:** 130**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify terms of sale**Syntax Notes:** **1** If ITD03 is present, then at least one of ITD04 ITD05 or ITD13 is required.**2** If ITD08 is present, then at least one of ITD04 ITD05 or ITD13 is required.**3** If ITD09 is present, then at least one of ITD10 or ITD11 is required.**Semantic Notes:** **1** ITD15 is the percentage applied to a base amount used to determine a late payment charge.**Comments:** **1** If the code in ITD01 is "04", then ITD07 or ITD09 is required and either ITD10 or ITD11 is required; if the code in ITD01 is "05", then ITD06 or ITD07 is required.**Notes:** Date payment is due from Customer

REQUIRED

ITD~~~~~20010215

Data Element Summary

Must Use	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
	ITD06	446	Terms Net Due Date	O DT 8/8
			Date when total invoice amount becomes due expressed in format CCYYMMDD	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines

Segment: **IT1** Account Level Charges (IT109=ACCOUNT)
Position: 010
Loop: IT1 Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify the basic and most frequently used line item data for the invoice and related transactions

Syntax Notes:

- 1 If any of IT102 IT103 or IT104 is present, then all are required.
- 2 If either IT106 or IT107 is present, then the other is required.
- 3 If either IT108 or IT109 is present, then the other is required.
- 4 If either IT110 or IT111 is present, then the other is required.
- 5 If either IT112 or IT113 is present, then the other is required.
- 6 If either IT114 or IT115 is present, then the other is required.
- 7 If either IT116 or IT117 is present, then the other is required.
- 8 If either IT118 or IT119 is present, then the other is required.
- 9 If either IT120 or IT121 is present, then the other is required.
- 10 If either IT122 or IT123 is present, then the other is required.
- 11 If either IT124 or IT125 is present, then the other is required.

Semantic Notes: 1 IT101 is the purchase order line item identification.
Comments: 1 Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
 2 IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: Rate Ready only allows charges at a Customer level. Only one commodity is allowed per Invoice.
 REQUIRED

IT1~1~~~~~SV~ELECTRIC~C3~ACCOUNT

Data Element Summary

	Ref.	Data		Attributes
	Des.	Element	Name	
Must Use	IT101	350	Assigned Identification	O AN 1/20
			Alphanumeric characters assigned for differentiation within a transaction set	
Must Use	IT106	235	Product/Service ID Qualifier	X ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
			SV Service Rendered	
Must Use	IT107	234	Product/Service ID	X AN 1/48
			Identifying number for a product or service	
			Only one commodity (electric or gas) for each 810 transaction.	
			ELECTRIC	
			GAS	
Must Use	IT108	235	Product/Service ID Qualifier	X ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
			C3 Classification	
Must Use	IT109	234	Product/Service ID	X AN 1/48
			Identifying number for a product or service	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines

ACCOUNT Charges/Taxes at an Account level

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **DTM** Service Period Start Date (DTM~150)**Position:** 150**Loop:** IT1 Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:** The full service period should match the applicable PTD loops from the Usage 867.

REQUIRED

DTM~150~20010106

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			150 Service Period Start	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **DTM** Service Period End Date (DTM~151)**Position:** 150**Loop:** IT1 Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:** The full service period should match the applicable PTD loops from the Usage 867.

REQUIRED

DTM~151~20010204

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			151 Service Period End	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

X12 Implementation Guidelines**Segment:** **SLN** Subline Item Detail**Position:** 200**Loop:** SLN Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify product subline detail item data**Syntax Notes:** 1 If either SLN04 or SLN05 is present, then the other is required.

2 If SLN07 is present, then SLN06 is required.

3 If SLN08 is present, then SLN06 is required.

4 If either SLN09 or SLN10 is present, then the other is required.

5 If either SLN11 or SLN12 is present, then the other is required.

6 If either SLN13 or SLN14 is present, then the other is required.

7 If either SLN15 or SLN16 is present, then the other is required.

8 If either SLN17 or SLN18 is present, then the other is required.

9 If either SLN19 or SLN20 is present, then the other is required.

10 If either SLN21 or SLN22 is present, then the other is required.

11 If either SLN23 or SLN24 is present, then the other is required.

12 If either SLN25 or SLN26 is present, then the other is required.

13 If either SLN27 or SLN28 is present, then the other is required.

Semantic Notes: 1 SLN01 is the identifying number for the subline item.

2 SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.

3 SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.

4 SLN08 is a code indicating the relationship of the price or amount to the associated segment.

Comments: 1 See the Data Element Dictionary for a complete list of IDs.

2 SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.

3 SLN09 through SLN28 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: The SLN will be used to group charges together.

REQUIRED

SLN~1~~A

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SLN01	350	Assigned Identification	M AN 1/20
			Alphanumeric characters assigned for differentiation within a transaction set	
			Used as a loop counter	
Must Use	SLN03	662	Relationship Code	M ID 1/1
			Code indicating the relationship between entities	
			A Add	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **SAC** Invoice Charge or Allowance (SAC)**Position:** 230**Loop:** SLN Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 25**Purpose:** To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

- Syntax Notes:**
- 1 At least one of SAC02 or SAC03 is required.
 - 2 If either SAC03 or SAC04 is present, then the other is required.
 - 3 If either SAC06 or SAC07 is present, then the other is required.
 - 4 If either SAC09 or SAC10 is present, then the other is required.
 - 5 If SAC11 is present, then SAC10 is required.
 - 6 If SAC13 is present, then at least one of SAC02 or SAC04 is required.
 - 7 If SAC14 is present, then SAC13 is required.
 - 8 If SAC16 is present, then SAC15 is required.

- Semantic Notes:**
- 1 If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
 - 2 SAC05 is the total amount for the service, promotion, allowance, or charge. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
 - 3 SAC08 is the allowance or charge rate per unit.
 - 4 SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
 - 5 SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
 - 6 SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
 - 7 SAC16 is used to identify the language being used in SAC15.

- Comments:**
- 1 SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
 - 2 In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

Notes: Invoice line item charge or allowance.

REQUIRED

SAC~C~~EU~DIS001~2400~~~.016~KH~1500~~~~~DUOS

SAC~C~~EU~LPC001~500~~~100.00~EA~.05

SAC~C~~EU~INT001~500~~~100.00~EA~.05

SAC~C~~EU~INT003~500~~~100.00~EA~.05

SAC~C~~EU~MSC003~2500~~~1~EA~25.00~~~~~METER

SEAL

REPLACEMENT CHARGE

Data Element Summary

Ref.	Data		
Des.	Element	Name	Attributes
SAC01	248	Allowance or Charge Indicator	M ID 1/1
Must Use		Code which indicates an allowance or charge for the service specified	
		C Charge	
		N No Allowance or Charge	
		Ignore this SAC05 amount when summing the invoice total	

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X12 Implementation Guidelines

Must Use	SAC03	559	Agency Qualifier Code	X	ID 2/2
			Code identifying the agency assigning the code values		
			EU Electric Utilities		
					Use regardless of Electric or Gas charges since SAC04 values are from governing documents
			GU Natural Gas Utilities		
Must Use	SAC04	1301	Agency Service, Promotion, Allowance, or Charge Code	X	AN 1/10
			Agency maintained code identifying the service, promotion, allowance, or charge		
					Refer to governing documents for marketplace for list of valid codes
Must Use	SAC05	610	Amount	M	N2 1/15
			Monetary amount		
					This field must be signed if it is negative. The SAC08 multiplied by the SAC10 must always equal the SAC05
Used	SAC08	118	Rate	O	R 1/9
			Rate expressed in the standard monetary denomination for the currency specified		
					This field must be signed if it is negative. The SAC08 multiplied by the SAC10 must always equal the SAC05.
Must Use	SAC09	355	Unit or Basis for Measurement Code	X	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
					Refer to governing documents for marketplace for list of valid codes
			4A Bobbin		
					A cylinder or spindle on which yarn or thread is wound
					ERCOT 4CP kiloWatt Demand
			4B Cap		
					Designates that the cap of a container is manufactured to dimensions that enable it to be used as a measuring device when mixing the contents of the container with another substance
					ERCOT 4CP KVA Demand
			4C Centistokes		
					1 * 10 ⁻⁶ square meters/second
					ERCOT 4CP Power Factor Adjusted
			4D Curie		
					A unit of radioactivity equal to 3.7 * 10 ¹⁰ disintegrations per second
					ERCOT 4CP KVAR Demand
			99 Watt		
			AF Centigram		
					A unit of metric weight equal to 0.01 gram or 0.000035 ounce
			DA Days		
			DO Dollars, U.S.		
			EA Each		
			HH Hundred Cubic Feet		
					ccf
			K1 kiloWatt Demand		
			K2 kiloVolt Amperes Reactive Demand		

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X12 Implementation Guidelines

K3	kiloVolt Amperes Reactive Hour
K4	kiloVolt Amperes
K5	kiloVolt Amperes Reactive
K7	kiloWatt
KH	kiloWatt Hour
MO	Months
NA	Milligrams per kilogram
	ERCOT NCP kiloWatt Demand
NB	Barge
	ERCOT NCP KVA Demand
NC	Car
	ERCOT NCP Power Factor Adjusted
ND	Net Barrels
	ERCOT NCP KVAR Demand
RA	Rack
	ERCOT Ratchet kiloWatt Demand
RB	Radian
	ERCOT Ratchet KVA Demand
RC	Rod (area) - 16.25 Square Yards
	ERCOT Ratchet Power Factor Adjusted
RD	Rod (length) - 5.5 Yards
	ERCOT Ratchet KVAR Demand
TD	Therms
TZ	Thousand Cubic Feet

Must **SAC10** **380** **Quantity** **X** **R 1/15**
Use

Numeric value of quantity

Consumption or Quantity. This field must be signed if it is negative.
 SAC08 x SAC10 always equals SAC05.

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **TXI** Tax Information**Position:** 237**Loop:** SLN Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 10**Purpose:** To specify tax information**Syntax Notes:** **1** At least one of TXI02 TXI03 or TXI06 is required.**2** If either TXI04 or TXI05 is present, then the other is required.**3** If TXI08 is present, then TXI03 is required.**Semantic Notes:** **1** TXI02 is the monetary amount of the tax.**2** TXI03 is the tax percent expressed as a decimal.**3** TXI07 is a code indicating the relationship of the price or amount to the associated segment.**Comments:****Notes:**

Tax information should be provided when the Billing Party is calculating charges and taxes for the Non-Billing Party.

REQUIRED when the Billing Party calculates taxes for the Non-Billing Party

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	TXI01	963	Tax Type Code	M ID 2/2
			Code specifying the type of tax	
			CA City Tax	
			Service Tax imposed by City	
			CT County Tax	
			FR Franchise Tax	
			GR Gross Receipts Tax	
			LO Local Tax (Not Sales Tax)	
			Service tax imposed on a local level	
			LS State and Local Sales Tax	
			ST State Sales Tax	
Must Use	TXI02	782	Monetary Amount	X R 1/18
			Monetary amount	
Used	TXI04	955	Tax Jurisdiction Code Qualifier	X ID 2/2
			Code identifying the source of the data used in tax jurisdiction code	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
Used	TXI05	956	Tax Jurisdiction Code	X AN 1/10
			Code identifying the taxing jurisdiction	
Must Use	TXI07	662	Relationship Code	O ID 1/1
			Code indicating the relationship between entities	
			A Add	

X12 Implementation Guidelines**Segment:** **TDS** Total Monetary Value Summary**Position:** 010**Loop:****Level:** Summary**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify the total invoice discounts and amounts**Syntax Notes:****Semantic Notes:**

- 1 TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable).
- 2 TDS02 indicates the amount upon which the terms discount amount is calculated.
- 3 TDS03 is the amount of invoice due if paid by terms discount due date (total invoice or installment amount less cash discount).
- 4 TDS04 indicates the total amount of terms discount.

Comments: 1 TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01.

Notes: TDS01 is the total amount due for this invoice and must equal the algebraic sum of the amounts in the TXI02 and SAC05 segments with the exception of any charges that are designated to be ignored in the calculation in the TXI07 or SAC01. If this amount is negative, send the minus sign.
REQUIRED

TDS~19875 (Represents \$198.75 since the decimal is implied)

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
TDS01	610	Amount	M N2 1/15

Must
Use

Monetary amount

If negative, this amount must be preceded by a negative sign. Implied decimal field: DO NOT send the decimal point

X12 Implementation Guidelines

Segment: **CTT** Transaction Totals

Position: 070

Loop:

Level: Summary

Usage: Optional (Must Use)

Max Use: 1

Purpose: To transmit a hash total for a specific element in the transaction set

Syntax Notes: 1 If either CTT03 or CTT04 is present, then the other is required.

2 If either CTT05 or CTT06 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

Notes: REQUIRED

CTT~1

Data Element Summary

Must Use	Ref. Des.	Data Element	Name	Attributes
	CTT01	354	Number of Line Items	M N0 1/6
Total number of line items in the transaction set				
The number of IT1 segments.				

X12 Implementation Guidelines

Segment: **SE** Transaction Set Trailer
Position: 080
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:**Semantic Notes:**

Comments: 1 SE is the last segment of each transaction set.

Notes: REQUIRED

SE~35~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

X12 Implementation Guidelines**820 (RXQ.3.6.4)****820 NAESB RXQ.3.6.4 Payment Order/Remittance Advice**Functional Group ID=**RA****Introduction:**

This Draft Standard for Trial Use contains the format and establishes the data contents of the Payment Order/Remittance Advice Transaction Set (820) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to make a payment, send a remittance advice, or make a payment and send a remittance advice. This transaction set can be an order to a financial institution to make a payment to a payee. It can also be a remittance advice identifying the detail needed to perform cash application to the payee's accounts receivable system. The remittance advice can go directly from payer to payee, through a financial institution, or through a third party agent.

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BPR	Beginning Segment for Payment Order/Remittance Advice	M	1		
	035	TRN	Trace	C	1		c1
			LOOP ID - N1			>1	
M	070	N1	Name: Payee	M	1		c2
			LOOP ID - N1			>1	
M	070	N1	Name: Payer	M	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - ENT			>1	
M	010	ENT	Entity	M	1		n1, c3
			LOOP ID - RMR			>1	
M	150	RMR	Remittance Advice Accounts Receivable Open Item Reference	M	1		c4
	170	REF	Usage ID (REF~60)	C	1		
M	170	REF	Customer ID (REF~12/Q5)	M	1		
	170	REF	Non-Billing Party Account ID (REF~11)	C	1		
	170	REF	Old Customer ID (REF~45)	C	1		
M	170	REF	Commodity Service Type (REF~QY)	M	1		
M	180	DTM	Date Posted (DTM~809)	M	1		

Summary:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

X12 Implementation Guidelines

1. The ENT loop is for vendor or consumer third party consolidated payments.

Transaction Set Comments

1. The TRN segment is used to uniquely identify a payment order/remittance advice.
2. The N1 loop allows for name/address information for the payer and payee which would be utilized to address remittance(s) for delivery.
3. ENT09 may contain the payee's accounts receivable customer number.
4. Loop RMR is for open items being referenced or for payment on account.

X12 Implementation Guidelines**Segment:** **ST** Transaction Set Header**Position:** 010**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To indicate the start of a transaction set and to assign a control number**Syntax Notes:****Semantic Notes:** 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).**Comments:****Notes:**

REQUIRED

ST~820~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set 820 Payment Order/Remittance Advice	
Must Use	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

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X12 Implementation Guidelines**Segment:** **BPR** Beginning Segment for Payment Order/Remittance Advice**Position:** 020**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To indicate the beginning of a Payment Order/Remittance Advice Transaction Set and total payment amount, or to enable related transfer of funds and/or information from payer to payee to occur**Syntax Notes:** 1 If either BPR06 or BPR07 is present, then the other is required.

2 If BPR08 is present, then BPR09 is required.

3 If either BPR12 or BPR13 is present, then the other is required.

4 If BPR14 is present, then BPR15 is required.

5 If either BPR18 or BPR19 is present, then the other is required.

6 If BPR20 is present, then BPR21 is required.

Semantic Notes: 1 BPR02 specifies the payment amount.

2 When using this transaction set to initiate a payment, all or some of BPR06 through BPR16 may be required, depending on the conventions of the specific financial channel being used.

BPR06 and BPR07 relate to the originating depository financial institution (ODFI).

3 BPR08 is a code identifying the type of bank account or other financial asset.

4 BPR09 is the account of the company originating the payment. This account may be debited or credited depending on the type of payment order.

5 BPR12 and BPR13 relate to the receiving depository financial institution (RDFI).

6 BPR14 is a code identifying the type of bank account or other financial asset.

7 BPR15 is the account number of the receiving company to be debited or credited with the payment order.

8 BPR16 is the date the originating company intends for the transaction to be settled (i.e., Payment Effective Date).

9 BPR17 is a code identifying the business reason for this payment.

10 BPR18, BPR19, BPR20 and BPR21, if used, identify a third bank identification number and account to be used for return items only.

11 BPR20 is a code identifying the type of bank account or other financial asset.

Comments:**Notes:**

820 remittance advice is sent daily and includes all applicable adjustments as long as adjustments are not larger than payments.

If adjustments are larger (creating a negative remittance advice), the sender will hold the remittance advice for one business day.

If negative remittance cannot be offset in one business day, the payer contacts the payee to determine the best remedy.

REQUIRED

BPR~I~1000.00~C~FWT~~~~~20010731

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BPR01	305	Transaction Handling Code	M ID 1/2
			Code designating the action to be taken by all parties	
			I Remittance Information Only	
Must Use	BPR02	782	Monetary Amount	M R 1/18
			Monetary amount	
			The total positive amount (including zero) being sent to Payee.	

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X12 Implementation Guidelines

			Monetary Amount must equal the sum of all Detail Position 150 RMR04 elements.	
Must Use	BPR03	478	Credit/Debit Flag Code	M ID 1/1
			Code indicating whether amount is positive or negative C Credit	
Must Use	BPR04	591	Payment Method Code	M ID 3/3
			Code identifying the method for transmitting the payment ACH Automated Clearing House (ACH) CHK Check	
Must Use	BPR05	812	Payment Format Code	M ID 1/10
			Code identifying the payment format to be used	
			CCP Cash Concentration/Disbursement plus Addenda (CCD+) (ACH) CTX Corporate Trade Exchange (CTX) (ACH)	
Must Use	BPR16	373	Funds Transfer Date	O DT 8/8
			Date [CCYYMMDD] when Payee intends for the transaction to be settled	
			The date the originating company intends for the transaction to be settled (i.e., Payment Effective Date).	

X12 Implementation Guidelines**Segment:** **TRN** Trace**Position:** 035**Loop:****Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To uniquely identify a transaction to an application**Syntax Notes:****Semantic Notes:**

- 1 TRN02 provides unique identification for the transaction.
- 2 TRN03 identifies an organization.
- 3 TRN04 identifies a further subdivision within the organization.

Comments:**Notes:**

Unique ID identifying this transaction, created by the originator, enabling cross-reference to ACH or wire payments.

REQUIRED when this 820 is for remittance information only

TRN~3~UCP103941

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	TRN01	481	Trace Type Code	M ID 1/2
			Code identifying which transaction is being referenced	
			1 Current Transaction Trace Numbers	
			3 Financial Reassociation Trace Number	
Must Use	TRN02	127	Payment Reference ID	M AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Transaction Reference numbers contain only uppercase letters (A to Z) and digits (0 to 9), dashes ('-'), or periods ('.'). All other punctuation (spaces, commas, etc.) must be excluded.	

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X12 Implementation Guidelines**Segment:** **N1** **Name:** Payee**Position:** 070**Loop:** N1 Mandatory**Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Receiver of the payment/remittance advice

REQUIRED

N1~PE~PAYEE COMPANY~1~007191969

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			PE Payee	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Payee Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Payee Entity ID	

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X12 Implementation Guidelines**Segment:** **N1** **Name:** Payer**Position:** 070**Loop:** N1 Mandatory**Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Initiator of the payment/remittance advice

REQUIRED

N1~PR~PAYER CO~9~0079111957CRN1

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			PR Payer	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Payer Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Payer D-U-N-S Number or D-U-N-S + 4 Number	

X12 Implementation Guidelines**Segment:** **ENT** Entity**Position:** 010**Loop:** ENT Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To designate the entities which are parties to a transaction and specify a reference meaningful to those entities**Syntax Notes:** 1 If any of ENT02 ENT03 or ENT04 is present, then all are required.

2 If any of ENT05 ENT06 or ENT07 is present, then all are required.

3 If either ENT08 or ENT09 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment allows for the grouping of data by entity/entities at or within a master/masters. A master (e.g., an organization) can be comprised of numerous subgroups (e.g., entities). This master may send grouped data to another master (e.g., an organization) which is comprised of one or more entities. Groupings are as follows:

(1) Single/Single: Only ENT01 is necessary, because there is a single entity (the sending master) communicating with a single entity (the receiving master).

(2) Single/Multiple: ENT05, ENT06, and ENT07 would be used to identify the entities within the receiving master. The sending master is a single entity, so no other data elements need be used.

(3) Multiple/Single: ENT02, ENT03, and ENT04 would be used to identify the entities within the sending master. The receiving master is a single entity, so no other data elements need be used.

(4) Multiple/Multiple: ENT02, ENT03, and ENT04 would be used to identify the entities within the sending master. ENT05, ENT06, and ENT07 would be used to identify the entities within the receiving master.

This segment also allows for the transmission of a unique reference number that is meaningful between the entities.

Notes: Only one ENT loop per 820

REQUIRED

ENT~1

Data Element Summary

Must Use	Ref.	Data			Attributes
	<u>Des.</u>	<u>Element</u>	<u>Name</u>		
	ENT01	554	Assigned Number		O N0 1/6
			Number assigned for differentiation within a transaction set		

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X12 Implementation Guidelines**Segment:** **RMR** Remittance Advice Accounts Receivable Open Item Reference**Position:** 150**Loop:** RMR Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify the accounts receivable open item(s) to be included in the cash application and to convey the appropriate detail**Syntax Notes:** 1 If either RMR01 or RMR02 is present, then the other is required.

2 If either RMR07 or RMR08 is present, then the other is required.

Semantic Notes: 1 If RMR03 is present, it specifies how the cash is to be applied.

2 RMR04 is the amount paid.

3 RMR05 is the amount of invoice (including charges, less allowance) before terms discount (if discount is applicable) or debit amount or credit amount of referenced items.

4 RMR06 is the amount of discount taken.

5 RMR08, if present, represents an interest penalty payment, amount late interest paid, or amount anticipation.

Comments: 1 Parties using this segment should agree on the content of RMR01 and RMR02 prior to initiating communication.

2 If RMR03 is not present, this is a payment for an open item. If paying an open item, RMR02 must be present. If not paying a specific open item, RMR04 must be present.

3 RMR05 may be needed by some payees to distinguish between duplicate reference numbers.

Notes: A separate RMR loop & segment is required for each Customer ID payment remittance reported
REQUIRED

RMR~IK~123455~~1000.00 (using Invoice ID in RMR02)

RMR~IK~6789012345~~~1000.00 (using Customer Account ID in RMR02)

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	RMR01	128	Reference Identification Qualifier	X ID 2/3
			Code qualifying the Reference Identification	
			IK Invoice Number	
			Single Retail Bill Option use only; invoice ID from the BIG02 of the 810 Invoice	
Must Use	RMR02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Single Retail Bill Option use only; Invoice Number	
Used	RMR03	482	Payment Action Code	O ID 2/2
			Code specifying the accounts receivable open item(s), if any, to be included in the cash application.	
			AJ Adjustment	
			AJ limited to:	
			a) Payment was made to the wrong vendor;	
			b) Duplicate Payment; or	
			c) Cancel/rebill created a credit	
			PO Payment on Account	
Must Use	RMR04	782	Net Amount Paid	O R 1/18

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X12 Implementation Guidelines

Monetary amount

Payment or adjustment amount - the sum of all Detail Position 150 RMR04 elements must equal the amount in Header Position 020 BPR02. Please see the Notes section in the BPR Segment for instructions on how to handle a negative remittance.

Used	RMR05	782	Discount Amount	O R 1/18
			Monetary amount	
Used	RMR06	782	Original Invoice Amount	O R 1/18
			Monetary amount	
Used	RMR07	426	Adjustment Reason Code	X ID 2/2
			Code indicating reason for debit or credit memo or adjustment to invoice, debit or credit memo, or payment	
			26 Invoice Cancelled	
			72 Authorized Return	
			CS Adjustment	
			IF Insufficient Funds	
Used	RMR08	782	Adjustment Amount	X R 1/18
			Monetary amount	
			Signed if negative, amount in RMR04 will always be the same as the amount in RMR08. The adjustment amount is only populated if there is an adjustment to be made.	

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X12 Implementation Guidelines

Segment: **REF** Usage ID (REF~6O)

Position: 170

Loop: RMR Mandatory

Level: Detail

Usage: Conditional

Max Use: 1

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: Usage ID establishes a cross-reference to Usage (867 BPT02)
REQUIRED

REF~6O~2348400586

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification 6O Cross Reference Number	
Must Use	REF02	127	Usage ID	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Usage ID only contains uppercase letters (A to Z) and digits (0 to 9). Punctuation (spaces, dashes, etc.) must be EXCLUDED.	

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X12 Implementation Guidelines

Segment: **REF** Customer ID (REF~12/Q5)**Position:** 170**Loop:** RMR Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: ID that uniquely defines the Customer in marketplace. Applicable Regulatory Authority governing documents define whether REF~12 or REF~Q5 is required.

- REF~12 uses REF02 for ID; usually Distribution Company account number
 - REF~Q5 uses REF03 for ID; usually the ESI ID (ERCOT)
 REQUIRED

REF~12~1234567890

REF~Q5~~10111111234567890ABCDEFGHIJKLMNOPS

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			12 Billing Account	
			Account number under which billing is rendered	
			Account number ID; sent in REF02	
			Q5 Property Control Number	
			Service Delivery ID (e.g. ESIID); sent in REF03	
Used	REF02	127	Customer Account ID; use when REF01=12	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
Must Use	REF03	352	Customer SDID; use when REF01=Q5	X AN 1/80
			A free-form description to clarify the related data elements and their content	

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X12 Implementation Guidelines**Segment:** **REF** Non-Billing Party Account ID (REF~11)**Position:** 170**Loop:** RMR Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:

Notes: ID that uniquely defines the Customer in Non-Billing Party systems. The Billing Party is required to store this ID and echo on transactions to the Non-Billing Party if this ID was previously provided to the Billing Party
REQUIRED when provided by the Non-Billing Party

REF~11~3940193248

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			11 Account Number	
			Number identifies a telecommunications industry account	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

X12 Implementation Guidelines**Segment:** **REF** Old Customer ID (REF~45)**Position:** 170**Loop:** RMR Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:

Notes:

Cross-reference ID used to identify a Customer if the Customer has received a new Customer ID in last 45 days
 REQUIRED if the Customer ID has changed within the last 45 days

REF~45~1105687500

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification 45 Old Account Number Identifies accounts being changed	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Customer ID only contains uppercase letters (A to Z) and digits (0 to 9). Punctuation (spaces, dashes, etc.) must be excluded, and leading and trailing zeros that are part of the ID must be present.	

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X12 Implementation Guidelines**Segment:** **REF** **Commodity Service Type (REF~QY)****Position:** 170**Loop:** RMR Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:**Notes:** Identifies type of commodity service (electric or natural gas)

REQUIRED

REF~QY~ELECTRIC

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			QY Service Performed Code	
			Number indicating the type of service performed to repair a product	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Identifies service type: 'ELECTRIC' or 'GAS' are only valid values.	
			ELECTRIC Electric Commodity Service	
			GAS Natural Gas Commodity Service	

X12 Implementation Guidelines**Segment:** **DTM** **Date Posted (DTM~809)****Position:** 180**Loop:** RMR Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify pertinent dates and times**Syntax Notes:** **1** At least one of DTM02 DTM03 or DTM05 is required.**2** If DTM04 is present, then DTM03 is required.**3** If either DTM05 or DTM06 is present, then the other is required.**Semantic Notes:****Comments:****Notes:** Date payment was posted to Billing Parties AR System
REQUIRED

DTM~809~20051111

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time 809 Posted	
Used	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

X12 Implementation Guidelines

Segment: **SE** Transaction Set Trailer
Position: 010
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:**Semantic Notes:**

Comments: 1 SE is the last segment of each transaction set.

Notes: REQUIRED

SE~28~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

X12 Implementation Guidelines

568 (RXQ.3.6.5)

568 NAESB RXQ.3.6.5 Payment Notification

Functional Group ID=**D5****Introduction:**

This Draft Standard for Trial Use contains the format and establishes the data contents of the Contract Payment Management Report Transaction Set (568) for use within the context of an Electronic Data Interchange (EDI) environment. This transaction set can be used to enable the transmission of a management report to provide the details of payments and collections made against funds obligated on contracts, orders, and other services.

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BGN	Beginning Segment	M	1		n1
M	030	AMT	Monetary Amount: Total Received (AMT~AT)	M	2		n2
			LOOP ID - N1			10	
M	040	N1	Name: Distribution Company (N1~8S)	M	1		n3
			LOOP ID - N1			10	
M	040	N1	Name: Supplier (N1~SJ)	M	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - CS			>1	
M	010	CS	Contract Summary	M	1		n4
	020	N9	Non-Billing Party Account ID (N9~11)	C	3		n5
	020	N9	Old Customer ID (N9~45)	C	3		
			LOOP ID - REF			>1	
M	060	REF	Commodity Service Type (REF~QY)	M	1		n6
			LOOP ID - LX			>1	
M	080	LX	Assigned Number	M	1		
M	090	N9	Transaction Tracking ID (N9~TN)	M	1		n7
M	100	AMT	Monetary Amount	M	>1		n8
			LOOP ID - N1			1	
M	140	N1	Name: Customer (N1~8R)	M	1		n9

Summary:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	020	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. The BGN segment identifies the transaction set purpose code, a unique number used to identify this transmission, and the date and time of transaction set creation.

X12 Implementation Guidelines

2. The AMT segment identifies the collected amount and the disbursed amount to the extent that either amount applies to the transaction set.
3. The N1 loop identifies the name and address information for the transmitting and receiving parties.
4. The CS segment identifies the contract, modification, call, and order number of the procurement instrument, and the voucher number of the payment being reported on in this contract payment management report.
5. The N9 segment identifies the number of the original voucher on which a payment was made if the voucher being reported on in this transmission is a change, correction, or adjustment to that previous voucher.
6. The REF segment identifies a reference number associated with the following appropriation data.
7. The N9 segment identifies a contract line item, exhibit line item, or subclassification of either against which specific data is being reported.
8. The AMT segment identifies the gross, net, deducted, or collected amounts and the net variance amount applicable to the line item being reported.
9. The N1 loop identifies address information for a quantity delivered in a specific shipment, to a specific ship-to address.

X12 Implementation Guidelines**Segment:** **ST** Transaction Set Header**Position:** 010**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To indicate the start of a transaction set and to assign a control number**Syntax Notes:****Semantic Notes:** 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).**Comments:****Notes:**

REQUIRED

ST~568~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set Refer to 004010 Data Element Dictionary for acceptable code values.	
Must Use	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

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X12 Implementation Guidelines**Segment:** **BGN** Beginning Segment**Position:** 020**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To indicate the beginning of a transaction set**Syntax Notes:** 1 If BGN05 is present, then BGN04 is required.**Semantic Notes:** 1 BGN02 is the transaction set reference number.

2 BGN03 is the transaction set date.

3 BGN04 is the transaction set time.

4 BGN05 is the transaction set time qualifier.

5 BGN06 is the transaction set reference number of a previously sent transaction affected by the current transaction.

Comments:**Notes:** REQUIRED

BGN~00~94852-34985-9~20051118

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BGN01	353	Transaction Set Purpose Code	M ID 2/2
			Code identifying purpose of transaction set 00 Original	
Must Use	BGN02	127	Payment Notification ID	M AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Unique Number identifying this transaction assigned by the sender of the transaction. This number should be unique over all time.	
Must Use	BGN03	373	Payment Notification Date	M DT 8/8
			Date expressed as CCYYMMDD The transaction creation date - the date that the data was processed by the sender's application system.	

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X12 Implementation Guidelines**Segment:** **AMT** Monetary Amount: Total Received (AMT~AT)**Position:** 030**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 2**Purpose:** To indicate the total monetary amount**Syntax Notes:****Semantic Notes:****Comments:****Notes:**

REQUIRED

AMT~AT~1500.00

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	AMT01	522	Amount Qualifier Code	M ID 1/3
			Code to qualify amount	
			AT	Total Received
			The AMT02 element is the sum of all CS11s in this transaction set.	
Must Use	AMT02	782	Monetary Amount	M R 1/18
			Monetary amount	

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X12 Implementation Guidelines**Segment:** **N1** **Name: Distribution Company (N1~8S)****Position:** 040**Loop:** N1 Mandatory**Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Distribution Company Name and Entity ID

REQUIRED

N1~8S~DISTRIBUTE-IT INC.~1~007909411~~41

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			8S Consumer Service Provider (CSP)	
Used	N102	93	Name	X AN 1/60
			Free-form name	
			Distribution Company Name	
Used	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Used	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Distribution Company Entity ID	
Used	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			40 Receiver	
			Entity to accept transmission	
			The receiver is the Non-Billing Party	
			41 Submitter	
			Entity transmitting transaction set	
			The sender is the Billing Party	

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X12 Implementation Guidelines

Segment: **N1** Name: Supplier (N1~SJ)**Position:** 040**Loop:** N1 Mandatory**Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Supplier Name and Entity ID

REQUIRED

N1~SJ~SUPPLY-IT INC.~9~007909422CRN1~~40

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			SJ Service Provider	
			Identifies name and address information as pertaining to a service provider for which billing is being rendered	
Used	N102	93	Name	X AN 1/60
			Free-form name	
			Supplier Name	
Used	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
		1	D-U-N-S Number, Dun & Bradstreet	
		9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Used	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Supplier Entity ID	
Used	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
		40	Receiver	
			Entity to accept transmission	
			The receiver is the Non-Billing Party	
		41	Submitter	
			Entity transmitting transaction set	
			The sender is the Billing Party	

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X12 Implementation Guidelines

Segment:	CS Contract Summary
Position:	010
Loop:	CS Mandatory
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To provide information about a contract
Syntax Notes:	1 If either CS04 or CS05 is present, then the other is required.
Semantic Notes:	1 CS09 is the permissible overage as a percentage of the total contract line item number (CLIN) quantity. 2 CS10 is the permissible shortage as a percentage of the total contract line item number (CLIN) quantity. 3 CS11 is the permissible overage dollar value specified by the contract above which discrepancy action is taken. 4 CS14 is the Unit of Measure stipulated in the contract. 5 CS15 is the contract line item number (CLIN) unit price specified in the contract. 6 CS17 conveys the Critical Application Indicator. A "Y" indicates that a Critical Application Indicator is specified in the contract; an "N" indicates that no Critical Application Indicator is specified in the contract. 7 CS18 conveys the Special Requirements Indicator. A "Y" indicates that a Special Requirements Indicator (requiring special testing and or evaluation) is specified in the contract; an "N" indicates that no Special Requirements Indicator is specified in the contract.
Comments:	1 CS04 may be used to identify the Contract Line Item Number (CLIN) or Extended (or Exhibit) Line Item Number (ELIN). 2 CS07 and CS13 can be used to indicate two different types of special services required.
Notes:	The CS segment defines the Customer ID and the total amount allocated/adjusted. Each CS loop will only contain one LX loop (payment detail). If there are multiple payments on a specific account, there will be multiple CS loops for that account. REQUIRED CS~~~~12~12345678988~~~~~50.00

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Used	CS04	128	Reference Identification Qualifier Code qualifying the Reference Identification 12 Billing Account Account number under which billing is rendered	X ID 2/3
Must Use	CS05	127	Customer ID Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier ID that uniquely defines the Customer in the marketplace.	M AN 1/30
Used	CS11	782	Monetary Amount Monetary amount Total monetary amount allocated for the Customer account by the Billing Party on behalf of the Non-Billing Party or adjustment amount allocated by the Billing Party on behalf of the Non-Billing Party. The CS11 will equal the sum of all AMT02 elements of this Customer ID	O R 1/18

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X12 Implementation Guidelines**Segment:** **N9 Non-Billing Party Account ID (N9~11)****Position:** 020**Loop:** CS Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 3**Purpose:** To transmit identifying information as specified by the Reference Identification Qualifier

- Syntax Notes:**
- 1 At least one of N902 or N903 is required.
 - 2 If N906 is present, then N905 is required.
 - 3 If either C04003 or C04004 is present, then the other is required.
 - 4 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 N906 reflects the time zone which the time reflects.
 - 2 N907 contains data relating to the value cited in N902.

Comments:

Notes: ID that uniquely defines the Customer in Non-Billing Party systems. The Billing Party is required to store this ID and echo on transactions to the Non-Billing Party if this ID was previously provided to the Billing Party
REQUIRED when previously provided by Non-Billing Party

N9~11~333444555666

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N901	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			11 Account Number	
			Number identifies a telecommunications industry account	
Used	N902	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

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X12 Implementation Guidelines**Segment:** **N9** Old Customer ID (N9~45)**Position:** 020**Loop:** CS Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 3**Purpose:** To transmit identifying information as specified by the Reference Identification Qualifier

- Syntax Notes:**
- 1** At least one of N902 or N903 is required.
 - 2** If N906 is present, then N905 is required.
 - 3** If either C04003 or C04004 is present, then the other is required.
 - 4** If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1** N906 reflects the time zone which the time reflects.
 - 2** N907 contains data relating to the value cited in N902.

Comments:

Notes: Cross-reference ID used to identify a Customer if the Customer has received a new Customer ID in last 45 days
 REQUIRED if Customer ID has changed in last 45 days
 N9~45~212345438756

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N901	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification 45 Old Account Number Identifies accounts being changed	
Used	N902	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

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X12 Implementation Guidelines**Segment:** **REF** **Commodity Service Type (REF~QY)****Position:** 060**Loop:** REF Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify identifying information**Syntax Notes:** 1 At least one of REF02 or REF03 is required.

2 If either C04003 or C04004 is present, then the other is required.

3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.**Comments:****Notes:** Code that defines the commodity

REQUIRED

REF~QY~ELECTRIC

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			QY	Service Performed Code
				Number indicating the type of service performed to repair a product
				Commodity Service Type
Used	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			ELECTRIC	Electric Service
			GAS	Natural Gas Service

X12 Implementation Guidelines

Segment:	LX	Assigned Number
Position:	080	
Loop:	LX	Mandatory
Level:	Detail	
Usage:	Mandatory	
Max Use:	1	
Purpose:	To reference a line number in a transaction set	
Syntax Notes:		
Semantic Notes:		
Comments:		
Notes:	Use multiple CS loops for multiple payments/adjustments on a Customer ID. The AMT02 element in this loop for the Customer ID should match the CS11 value. REQUIRED	
	LX~1	

Data Element Summary

	Ref.	Data		
	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	LX01	554	Assigned Number	M N0 1/6
			Number assigned for differentiation within a transaction set	

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X12 Implementation Guidelines**Segment:** **N9** Transaction Tracking ID (N9~TN)**Position:** 090**Loop:** LX Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To transmit identifying information as specified by the Reference Identification Qualifier

Syntax Notes:

- 1 At least one of N902 or N903 is required.
- 2 If N906 is present, then N905 is required.
- 3 If either C04003 or C04004 is present, then the other is required.
- 4 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 N906 reflects the time zone which the time reflects.
- 2 N907 contains data relating to the value cited in N902.

Comments:

Notes: ID used to uniquely identify this collection/adjustment
REQUIRED

N9~TN~123223327~~19990225

N9~TN~123223532~CS~19990225 (Adjustment)

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N901	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification TN Transaction Reference Number	
Used	N902	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Transaction Tracking Number	
Used	N903	369	Free-form Description	X AN 1/45
			Free-form descriptive text Adjustment Reason Code. Only used if AMT01 (within the LX) is equal to "BM"	
			72 Returned Items CS Adjustment IF Insufficient Funds	
Used	N904	373	Date	O DT 8/8
			Date expressed as CCYYMMDD Date the payment or adjustment was posted by the Billing Party	

X12 Implementation Guidelines

Segment: **AMT** Monetary Amount
Position: 100
Loop: LX Mandatory
Level: Detail
Usage: Mandatory
Max Use: >1
Purpose: To indicate the total monetary amount

Syntax Notes:**Semantic Notes:****Comments:****Notes:**

Collected or adjustment amount allocated to the Non-Billing Party for this Customer.

REQUIRED

AMT~KL~25.00

AMT~BM~-130.00

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	AMT01	522	Amount Qualifier Code	M ID 1/3

Code to qualify amount

BM Adjustments

KL Collected Amount

Must Use	AMT02	782	Monetary Amount	M R 1/18

Monetary amount

Leading negative sign must be sent if this is a negative number, e.g. in the case of a bounced check to indicate the original check amount is being reversed. If the amount is positive, no sign is sent.

The sum of all AMT02 elements under this Customer ID is provided in the CS11

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X12 Implementation Guidelines**Segment:** **N1** Name: Customer (N1~8R)**Position:** 140**Loop:** N1 Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** **1** At least one of N102 or N103 is required.**2** If either N103 or N104 is present, then the other is required.**Semantic Notes:****Comments:** **1** This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.**2** N105 and N106 further define the type of entity in N101.**Notes:** Name of Customer

REQUIRED

N1~8R~JOHN ENERGY USER

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			8R Consumer Service Provider (CSP) Customer	
Must Use	N102	93	Name	M AN 1/60
			Free-form name	

X12 Implementation Guidelines

Segment: **SE** Transaction Set Trailer
Position: 020
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:**Semantic Notes:**

Comments: 1 SE is the last segment of each transaction set.

Notes: REQUIRED

SE~28~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

X12 Implementation Guidelines**824 (RXQ.3.6.6)****824 NAESB RXQ.3.6.6 Application Advice****Functional Group ID=AG****Introduction:**

This Draft Standard for Trial Use contains the format and establishes the data contents of the Application Advice Transaction Set (824) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide the ability to report the results of an application system's data content edits of transaction sets. The results of editing transaction sets can be reported at the functional group and transaction set level, in either coded or free-form format. It is designed to accommodate the business need of reporting the acceptance, rejection or acceptance with change of any transaction set. The Application Advice should not be used in place of a transaction set designed as a specific response to another transaction set (e.g., purchase order acknowledgment sent in response to a purchase order).

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BGN	Beginning Segment	M	1		
			LOOP ID - N1			>1	
M	030	N1	Name: Distribution Company (N1~8S)	M	1		
	080	PER	Administrative Communications Contact	C	3		
			LOOP ID - N1			>1	
	030	N1	Name: Clearinghouse (N1~AY)	C	1		
	080	PER	Administrative Communications Contact	C	3		
			LOOP ID - N1			>1	
M	030	N1	Name: Supplier (N1~SJ)	M	1		
	080	PER	Administrative Communications Contact	C	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - OTI			>1	
M	010	OTI	Original Transaction Identification	M	1		n1
M	020	REF	Customer ID (REF~12/Q5)	M	12		n2
	020	REF	Old Customer ID (REF~45)	C	12		
	020	REF	Non-Billing Party Account ID (REF~11)	C	12		
			LOOP ID - TED			>1	
M	070	TED	Technical Error Description	M	1		
	080	NTE	Note/Special Instruction	C	100		
M	090	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. The OTI loop is intended to provide a unique identification of the transaction set that is the subject of this application acknowledgment.

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2. The REF segment allows for the provision of secondary reference identification or numbers required to uniquely identify the original transaction set. The primary reference identification or number should be provided in elements OT102-03.

X12 Implementation Guidelines**Segment:** **ST** Transaction Set Header**Position:** 010**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To indicate the start of a transaction set and to assign a control number**Syntax Notes:****Semantic Notes:** 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).**Comments:****Notes:**

REQUIRED

ST~824~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set 824 Application Advice	
Must Use	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

X12 Implementation Guidelines**Segment:** **BGN** Beginning Segment**Position:** 020**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To indicate the beginning of a transaction set**Syntax Notes:** 1 If BGN05 is present, then BGN04 is required.**Semantic Notes:** 1 BGN02 is the transaction set reference number.

2 BGN03 is the transaction set date.

3 BGN04 is the transaction set time.

4 BGN05 is the transaction set time qualifier.

5 BGN06 is the transaction set reference number of a previously sent transaction affected by the current transaction.

Comments:**Notes:** REQUIRED

BGN~11~2001071111230001~20010711~~~~~82

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BGN01	353	Transaction Set Purpose Code	M ID 2/2
			Code identifying purpose of transaction set 11 Response	
Must Use	BGN02	127	Reference Identification	M AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier A unique transaction identification number assigned by the originator of this transaction. This number must be unique over time. Transaction Reference numbers will only contain uppercase letters (A to Z) and digits (0 to 9), dashes ('-'), or periods ('.'). All other punctuation (spaces, commas, etc.) must be excluded.	
Must Use	BGN03	373	Date	M DT 8/8
			Date expressed as CCYYMMDD The transaction creation date - the date that the data was processed by the sender's application system.	
Must Use	BGN08	306	Action Code	M ID 1/2
			Code indicating type of action 82 Follow Up Indicates that the receiver of the transaction must correct and resend the transaction. EV Evaluate Indicates that the receiver of the transaction must evaluate the error, but the transaction should NOT be resent.	

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X12 Implementation Guidelines**Segment:** **N1** **Name: Distribution Company (N1~8S)****Position:** 030**Loop:** N1 Mandatory**Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Distribution Company Name and Entity ID

REQUIRED

N1~8S~DISTRIBUTE-IT INC.~1~007909999~40

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			8S Consumer Service Provider (CSP)	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Distribution Company Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Distribution Company Entity ID	
Dep	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			40 Receiver	
			41 Submitter	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **PER Administrative Communications Contact****Position:** 080**Loop:** N1 Mandatory**Level:** Heading**Usage:** Conditional**Max Use:** 3**Purpose:** To identify a person or office to whom administrative communications should be directed**Syntax Notes:** 1 If either PER03 or PER04 is present, then the other is required.

2 If either PER05 or PER06 is present, then the other is required.

3 If either PER07 or PER08 is present, then the other is required.

Semantic Notes:**Comments:****Notes:**

OPTIONAL

PER~IC~CONTACT~TE~8005551212~EM~CONTACT@COMPANY.COM

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PER01	366	Contact Function Code	M ID 2/2
			Code identifying the major duty or responsibility of the person or group named IC Information Contact Distribution Company contact to resolve this particular issue	
Must Use	PER02	93	Name	O AN 1/60
			Free-form name	
Must Use	PER03	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number EM Electronic Mail TE Telephone	
Must Use	PER04	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable	
Dep	PER05	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number Condition: Required if providing a second contact number EM Electronic Mail TE Telephone	
Dep	PER06	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable Condition: Required if providing a second contact number	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **N1** **Name: Clearinghouse (N1~AY)****Position:** 030**Loop:** N1 Conditional**Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Clearinghouse Name and Entity ID

REQUIRED when Clearinghouse submits or receives transaction.

N1~AY~REGISTER-IT INC.~1~183529049~~40

N1~AY~REGISTER-IT INC.~1~183529049~~OA

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			AY Clearinghouse	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Clearinghouse Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Clearinghouse Entity ID	
Must Use	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			40 Receiver	
			41 Submitter	
			OA Electronic Return Originator	
			Required when the original 824 is being forwarded by the Clearinghouse. The N106 code will be changed by Clearinghouse only.	

DRAFT IR/TEIS Working Paper

X12 Implementation Guidelines

Segment: **PER** Administrative Communications Contact

Position: 080

Loop: N1 Conditional

Level: Heading

Usage: Conditional

Max Use: 3

Purpose: To identify a person or office to whom administrative communications should be directed

Syntax Notes: 1 If either PER03 or PER04 is present, then the other is required.

2 If either PER05 or PER06 is present, then the other is required.

3 If either PER07 or PER08 is present, then the other is required.

Semantic Notes:

Comments:

Notes:

REQUIRED when Clearinghouse initiates the 824

PER~IC~CONTACT~TE~8005551212~EM~contact@register-it.com

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	PER01	366	Contact Function Code	M ID 2/2
			Code identifying the major duty or responsibility of the person or group named IC Information Contact Clearinghouse contact to resolve this particular issue	
Must Use	PER02	93	Name	O AN 1/60
			Free-form name	
Must Use	PER03	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number EM Electronic Mail TE Telephone	
Must Use	PER04	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable	
Dep	PER05	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number Condition: Required if providing a second contact number EM Electronic Mail FX Facsimile TE Telephone	
Dep	PER06	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable Condition: Required if providing a second contact number	
Dep	PER07	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number Condition: Required if providing a third contact numbers EM Electronic Mail FX Facsimile TE Telephone	
Dep	PER08	364	Communication Number	X AN 1/80

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X12 Implementation Guidelines

Complete communications number including country or area code when applicable

Condition: Required if providing a third contact numbers

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X12 Implementation Guidelines**Segment:** **N1** **Name: Supplier (N1~SJ)****Position:** 030**Loop:** N1 Mandatory**Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Supplier Name and Entity ID

REQUIRED

N1~SJ~SUPPLY-IT INC.~1~183529049~~41

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			SJ Service Provider	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Supplier Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Supplier Entity ID	
Dep	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			40 Receiver	
			41 Submitter	

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X12 Implementation Guidelines

Segment: **PER Administrative Communications Contact****Position:** 080**Loop:** N1 Mandatory**Level:** Heading**Usage:** Conditional**Max Use:** 1**Purpose:** To identify a person or office to whom administrative communications should be directed**Syntax Notes:** 1 If either PER03 or PER04 is present, then the other is required.

2 If either PER05 or PER06 is present, then the other is required.

3 If either PER07 or PER08 is present, then the other is required.

Semantic Notes:**Comments:****Notes:** PER~IC~CONTACT~TE~8005551212~EM~CONTACT@COMPANY.COM

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PER01	366	Contact Function Code	M ID 2/2
			Code identifying the major duty or responsibility of the person or group named	
			IC Information Contact	
			Clearinghouse Contact to resolve this particular issue	
Must Use	PER02	93	Name	O AN 1/60
			Free-form name	
Must Use	PER03	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number	
			EM Electronic Mail	
			TE Telephone	
Must Use	PER04	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable	
Dep	PER05	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number	
			Condition: Required if providing a second contact number	
			EM Electronic Mail	
			FX Facsimile	
			TE Telephone	
Dep	PER06	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable	
			Condition: Required if providing a second contact number	
Dep	PER07	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number	
			Condition: Required if providing a third contact numbers	
			EM Electronic Mail	
			FX Facsimile	
			TE Telephone	
Dep	PER08	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines

applicable

Condition: Required if providing a third contact numbers

X12 Implementation Guidelines

Segment: **OTI** Original Transaction Identification

Position: 010

Loop: OTI Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To identify the edited transaction set and the level at which the results of the edit are reported, and to indicate the accepted, rejected, or accepted-with-change edit result

Syntax Notes: 1 If OTI09 is present, then OTI08 is required.

Semantic Notes: 1 OTI03 is the primary reference identification or number used to uniquely identify the original transaction set.

2 OTI06 is the group date.

3 OTI07 is the group time.

4 If OTI11 is present, it will contain the version/release under which the original electronic transaction was translated by the receiver.

5 OTI12 is the purpose of the original transaction set, and is used to assist in its unique identification.

6 OTI13 is the type of the original transaction set, and is used to assist in its unique identification.

7 OTI14 is the application type of the original transaction set, and is used to assist in its unique identification.

8 OTI15 is the type of action indicated or requested by the original transaction set, and is used to assist in its unique identification.

9 OTI16 is the action requested by the original transaction set, and is used to assist in its unique identification.

10 OTI17 is the status reason of the original transaction set, and is used to assist in its unique identification.

Comments: 1 OTI02 contains the qualifier identifying the business transaction from the original business application, and OTI03 will contain the original business application identification.

2 If used, OTI04 through OTI08 will contain values from the original electronic functional group generated by the sender.

3 If used, OTI09 through OTI10 will contain values from the original electronic transaction set generated by the sender.

Notes: OTI03 serves as a cross-reference to the transaction being responded to. This data element is populated from:

-248=BHT03

-568=BGN02

-810=BIG02

-867=BPT02

-820=TRN02

REQUIRED

OTI~TR~TN~2001010100001~~~~~810

OTI~TR~TN~2001010100001~~~~~867

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	OTI01	110	Application Acknowledgment Code	M ID 1/2
			Code indicating the application system edit results of the business data	
			TE Transaction Set Accept with Error	
			Used when BGN08 = EV	
			TR Transaction Set Reject	
			Used when BGN08 = 82	
Must	OTI02	128	Reference Identification Qualifier	M ID 2/3

X12 Implementation Guidelines

Use			Code qualifying the Reference Identification		
			TN Transaction Reference Number		
Must Use	OTI03	127	Reference Identification	M	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
Must Use	OTI10	143	Transaction Set Identifier Code	O	ID 3/3
			Code uniquely identifying a Transaction Set		
			EDI Transaction Set number transaction is in response to		
			248 Account Assignment/Inquiry and Service/Status		
			568 Contract Payment Management Report		
			810 Invoice		
			820 Payment Order/Remittance Advice		
			867 Product Transfer and Resale Report		

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X12 Implementation Guidelines

Segment: **REF** Customer ID (REF~12/Q5)**Position:** 020**Loop:** OTI Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 12**Purpose:** To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

ID that uniquely defines the Customer in marketplace. Applicable Regulatory Authority governing documents define whether REF~12 or REF~Q5 is required.

- REF~12 uses REF02 for ID; usually Distribution Company account number

- REF~Q5 uses REF03 for ID; usually the ESI ID (ERCOT)

REQUIRED

REF~12~1011111123456780

REF~Q5~~10111111234567890ABCDEFGHIJKL

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
		12	Billing Account	
			Account number under which billing is rendered	
			Account number that identifies the unique Customer in the marketplace; sent in REF02	
		Q5	Property Control Number	
			SD ID (e.g. ESI ID) that identifies the unique Customer in the marketplace; sent in REF03	
Must Use	REF02	127	Account ID	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Invoice Number	
Used	REF03	352	SD ID	X AN 1/80
			A free-form description to clarify the related data elements and their content	

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X12 Implementation Guidelines**Segment:** **REF** Old Customer ID (REF~45)**Position:** 020**Loop:** OTI Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 12**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:

Notes:

Cross-reference ID used to identify a Customer if the Customer has received a new Customer ID in last 45 days
 REQUIRED when Customer ID has changed within last 45 days

REF~45~10111111234

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification 45 Old Account Number Identifies accounts being changed	
Used	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

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X12 Implementation Guidelines**Segment:** **REF** Non-Billing Party Account ID (REF~11)**Position:** 020**Loop:** OTI Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 12**Purpose:** To specify identifying information

- Syntax Notes:**
- 1** At least one of REF02 or REF03 is required.
 - 2** If either C04003 or C04004 is present, then the other is required.
 - 3** If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1** REF04 contains data relating to the value cited in REF02.

Comments:**Notes:**

ID that uniquely defines the Customer in Non-Billing Party systems. The Billing Party is required to store this ID and echo on transactions to the Non-Billing Party if this ID was previously provided to the Billing Party
REQUIRED if provided by the Non-Billing Party

REF~11~~1011111123

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			11 Account Number	
			Number identifies a telecommunications industry account	
Used	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Non-Billing Party Account ID	

X12 Implementation Guidelines

Segment: **TED** Technical Error Description

Position: 070

Loop: TED Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To identify the error and, if feasible, the erroneous segment, or data element, or both

Syntax Notes:

Semantic Notes:

Comments: 1 If used, TED02 will contain a generic description of the data in error (e.g., part number, date, reference number, etc.).

Notes: More than one rejection reason code may be sent by repeating the TED Loop.
REQUIRED

TED~848~A76

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	TED01	647	Application Error Condition Code	M ID 1/3
			Code indicating application error condition	
			848 Incorrect Data	
Must Use	TED02	3	Free Form Message	M AN 1/60
			Free-form text	
		008	Customer ID Exists But Not Active	
		A13	Other	
			Explanation required in NTE~ADD.	
		A76	Customer ID Invalid or Not Found	
		A83	Invalid or Unauthorized Action	
			Information provided is not supported	
		A84	Invalid Relationship	
			No established trading partner relationship with the sender.	
		ABN	Duplicate Request Received	
		ADM	Amount Does Not Match	
			The amount within the 810 Cancellation/Reversal does not match the original 810	
		API	Required Information Missing	
			Explanation required in NTE~ADD. May not be used in place of other, more specific error codes.	
		CRI	Cross Reference Number Invalid	
			Cross reference number provided on the 810 or 867 Cancel does not match the cross reference number on an open 867.	
		D76	Entity ID Invalid or Not Found	
		DDM	Dates Do Not Match	
			Valid for 810, 867	
			-810: The Service Period Begin and End Dates do not match the same dates on an open 867.	
			-867: The Service Period Dates do not match. The Service Period End Date from the previous period does not match with the beginning date of current	

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X12 Implementation Guidelines

	service period. There is a gap in service periods. For example, last read was August 27, and the first read was August 30.
DIV	Date Invalid
	Use NTE~ADD to further describe the invalid date
EXP	Billing Period Mismatch
	810 Received for billing period older than that supported by the Billing Party's system
FRF	Bill Type Mismatch
	Billing Party and Non-Billing Party do not have same bill type (e.g. an 810 was received by the Billing Party for a Customer that is listed as a DUAL bill option in the Billing Party's system. BGN08 must be EV for this rejection reason.
FRG	Bill Calculator Mismatch
	An invoice was received for a Customer with the Bill Calculator (REF*PC) data element different than what is listed in the receiver's system. BGN08 must be EV for this rejection reason
I76	Invoice Number Invalid or Missing
IIS	Invalid Interval Status
	Interval Detail usage data is sent when Interval Summary Usage Data was requested or vice versa.
INT	Interval Data Invalid or Not Found
	Valid for 867
MRI	Incorrect Meter Role for ID Type
NCP	No Cancellation Processed
	A second transaction is received for a given scenario (e.g. 810, 867) before or not with the cancellation of the first transaction. Replaces 'ABO' error.
OBW	Outside Bill Window
	Invoice received outside bill window
SUM	Sum of Details Does Not Equal Total
TCN	Total Charges Negative
	Total Charges Negative (for Billing Parties that do not allow negative charges)
TOU	Incorrect TOU Period
TXI	Invalid Tax Information

X12 Implementation Guidelines

Segment: **NTE** Note/Special Instruction
Position: 080
Loop: TED Mandatory
Level: Detail
Usage: Conditional
Max Use: 100
Purpose: To transmit information in a free-form format, if necessary, for comment or special instruction

Syntax Notes:

Semantic Notes:

Comments: 1 The NTE segment permits free-form information/data which, under ANSI X12 standard implementations, is not machine processable. The use of the NTE segment should therefore be avoided, if at all possible, in an automated environment.

Notes: Used to further describe the rejection reason code sent in TED02.

REQUIRED when TED02 = A13, API, or DIV

NTE~ADD~ACCOUNT NOT FOUND

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	NTE01	363	Note Reference Code	O ID 3/3
			Code identifying the functional area or purpose for which the note applies	
			ADD Additional Information	
Must Use	NTE02	352	Rejection Reason Text	M AN 1/80
			A free-form description to clarify the related data elements and their content	

X12 Implementation Guidelines

Segment: **SE** Transaction Set Trailer
Position: 090
Loop:
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:**Semantic Notes:**

Comments: 1 SE is the last segment of each transaction set.

Notes: REQUIRED

SE~9~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

X12 Implementation Guidelines

248 (RXQ.3.6.7)

248 NAESB RXQ.3 Termination of Billing Services

Functional Group ID=**SU****Introduction:**

This Draft Standard for Trial Use contains the format and establishes the data contents of the Account Assignment/Inquiry and Service/Status Transaction Set (248) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used for two-way, multi-transactional purposes of assigning accounts for collection, reporting status inquiries and inquiry responses and to update accounts between entities.

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BHT	Beginning of Hierarchical Transaction	M	1		
LOOP ID - NM1						1	
M	030	NM1	Distribution Company Name and Entity ID	M	1		n1
LOOP ID - NM1						1	
M	030	NM1	Name: Supplier (N1~SJ)	M	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
LOOP ID - HL						>1	
M	010	HL	Hierarchical Level	M	1		n2
M	020	NM1	Customer Name (NM1~D4)	M	1		n3
M	060	REF	Customer ID (REF~12)	M	1		
	060	REF	Non-Billing Party Account ID (REF~11)	C	1		
	060	REF	Write-off Account ID (REF~X0)	C	1		
	060	REF	Old Customer ID (REF~45)	C	1		
	070	PER	Administrative Communications Contact	C	1		
M	110	BAL	Balance Returned (BAL~CD)	M	1		
LOOP ID - DTP						1	
M	120	DTP	Date of Termination of Billing Services (DTM~630)	M	1		
M	180	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. The NM1 loop will contain only information pertaining to the Credit Grantor and the Agency.
2. The HL loop will contain parent-child (subordinate) data relationships pertaining to the debtor and/or any association to the debtor.
3. The NM1 segment will contain only information pertaining to the debtor and/or any subordinate association to the debtor.

X12 Implementation Guidelines**Segment:** **ST** Transaction Set Header**Position:** 010**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To indicate the start of a transaction set and to assign a control number**Syntax Notes:****Semantic Notes:** 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).**Comments:****Notes:**

REQUIRED

ST~248~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set Refer to 004010 Data Element Dictionary for acceptable code values.	
Must Use	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

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X12 Implementation Guidelines**Segment:** **BHT** Beginning of Hierarchical Transaction**Position:** 020**Loop:****Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To define the business hierarchical structure of the transaction set and identify the business application purpose and reference data, i.e., number, date, and time**Syntax Notes:****Semantic Notes:**

- 1 BHT03 is the number assigned by the originator to identify the transaction within the originator's business application system.
- 2 BHT04 is the date the transaction was created within the business application system.
- 3 BHT05 is the time the transaction was created within the business application system.

Comments:**Notes:**

REQUIRED

BHT~0057~22~1234567890~20051127

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BHT01	1005	Hierarchical Structure Code	M ID 4/4
			Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set	
			0057 Supergroup, subgroup, member	
			Customer	
Must Use	BHT02	353	Transaction Set Purpose Code	M ID 2/2
			Code identifying purpose of transaction set	
			01 Cancellation	
			Reinstate; used to reinstate a balance when Billing Party resumes collection activities for the Customer.	
			22 Information Copy	
			Write Off; used when the Billing Party stops pursuing collections for this Customer	
Used	BHT03	127	Reference Identification	O AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Unique Number identifying this transaction assigned by the sender of the transaction. This number should be unique over all time.	
Used	BHT04	373	Date	O DT 8/8
			Date expressed as CCYYMMDD	
			Date that the data was processed by the originator's application system	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines

Segment: **NM1** Distribution Company Name and Entity ID

Position: 030

Loop: NM1 Mandatory

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To supply the full name of an individual or organizational entity

Syntax Notes: 1 If either NM108 or NM109 is present, then the other is required.

2 If NM111 is present, then NM110 is required.

Semantic Notes: 1 NM102 qualifies NM103.

Comments: 1 NM110 and NM111 further define the type of entity in NM101.

Notes: REQUIRED

NM1~8S~3~DISTRIBUTE-IT INC.~~~~~1~999999999~40

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	NM101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
		8S	Consumer Service Provider (CSP)	
Must Use	NM102	1065	Entity Type Qualifier	M ID 1/1
			Code qualifying the type of entity	
		3	Unknown	
Must Use	NM103	1035	Name Last or Organization Name	M AN 1/35
			Individual last name or organizational name	
			Distribution Company Name	
Must Use	NM108	66	Identification Code Qualifier	M ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
		1	D-U-N-S Number, Dun & Bradstreet	
		9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	NM109	67	Identification Code	M AN 2/80
			Code identifying a party or other code	
			Distribution Company Entity ID	
Must Use	NM111	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
		40	Receiver Entity to accept transmission	
			The receiver is the Non-Billing Party	
		41	Submitter Entity transmitting transaction set	
			The sender is the Billing Party	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines

Segment: **NM1** **Name: Supplier (N1~SJ)****Position:** 030**Loop:** NM1 Mandatory**Level:** Heading**Usage:** Mandatory**Max Use:** 1**Purpose:** To supply the full name of an individual or organizational entity**Syntax Notes:** 1 If either NM108 or NM109 is present, then the other is required.

2 If NM111 is present, then NM110 is required.

Semantic Notes: 1 NM102 qualifies NM103.**Comments:** 1 NM110 and NM111 further define the type of entity in NM101.**Notes:** Supplier Name and Entity ID

REQUIRED

NM1~SJ~3~SUPPLY-IT INC.~~~~~1~111222333~41

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	NM101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			SJ Service Provider	
			Identifies name and address information as pertaining to a service provider for which billing is being rendered	
Must Use	NM102	1065	Entity Type Qualifier	M ID 1/1
			Code qualifying the type of entity	
			3 Unknown	
Must Use	NM103	1035	Name Last or Organization Name	M AN 1/35
			Individual last name or organizational name	
			Supplier Name	
Must Use	NM108	66	Identification Code Qualifier	M ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	NM109	67	Identification Code	M AN 2/80
			Code identifying a party or other code	
			Supplier Entity ID	
Must Use	NM111	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			40 Receiver	
			Entity to accept transmission	
			The receiver is the 'Non-Billing Party'	
			41 Submitter	
			Entity transmitting transaction set	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines

The sender is the 'Billing Party'

X12 Implementation Guidelines

Segment: **HL** Hierarchical Level

Position: 010

Loop: HL Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:

Semantic Notes:

Comments:

- 1** The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data. The HL segment defines a top-down/left-right ordered structure.
- 2** HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
- 3** HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4** HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
- 5** HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes: REQUIRED

HL~1~~24

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	HL01	628	Hierarchical ID Number	M AN 1/12
			A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	
			Always '1' since there is only one account per 248 transaction	
Must Use	HL03	735	Hierarchical Level Code	M ID 1/2
			Code defining the characteristic of a level in a hierarchical structure	
		24	Supergroup	
			Customer	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines

Segment: **NM1** Customer Name (NM1~D4)

Position: 020

Loop: HL Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To supply the full name of an individual or organizational entity

Syntax Notes: 1 If either NM108 or NM109 is present, then the other is required.

2 If NM111 is present, then NM110 is required.

Semantic Notes: 1 NM102 qualifies NM103.

Comments: 1 NM110 and NM111 further define the type of entity in NM101.

Notes: REQUIRED

NM1~D4~3~JOHN ENERGY USER

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	NM101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			D4 Debtor	
Must Use	NM102	1065	Entity Type Qualifier	M ID 1/1
			Code qualifying the type of entity	
			3 Unknown	
Used	NM103	1035	Name Last or Organization Name	O AN 1/35
			Individual last name or organizational name	
			Customer Name as it appears on the Customer's bill	

X12 Implementation Guidelines**Segment:** **REF** Customer ID (REF~12)**Position:** 060**Loop:** HL Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:**Notes:** ID that uniquely defines the Customer in marketplace.

REQUIRED

REF~12~123456789019990102

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			12 Billing Account	
			Account number under which billing is rendered	
Used	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **REF** Non-Billing Party Account ID (REF~11)**Position:** 060**Loop:** HL Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information**Syntax Notes:** **1** At least one of REF02 or REF03 is required.**2** If either C04003 or C04004 is present, then the other is required.**3** If either C04005 or C04006 is present, then the other is required.**Semantic Notes:** **1** REF04 contains data relating to the value cited in REF02.**Comments:****Notes:** ID that uniquely defines the Customer in Non-Billing Party systems. The Billing Party is required to store this ID and echo on transactions to the Non-Billing Party if this ID was previously provided to the Billing Party
REQUIRED if provided previously by the Non-Billing Party

REF~11~123456789019990102

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			11 Account Number	
			Number identifies a telecommunications industry account	
Used	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Non-Billing Party Account ID	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **REF** Write-off Account ID (REF~X0)**Position:** 060**Loop:** HL Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:

Notes:

ID that uniquely defines the Customer in marketplace after the Customer has been written-off by the Billing Party. Used only when the Billing Party creates a new account for written-off customers.

REQUIRED when Billing Party creates a new account for a written-off Customer

REF~X0~10111111234567890

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification X0 Debtor's Account	
Used	REF02	127	Customer Account ID	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **REF** Old Customer ID (REF~45)**Position:** 060**Loop:** HL Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To specify identifying information

Syntax Notes:

- 1** At least one of REF02 or REF03 is required.
- 2** If either C04003 or C04004 is present, then the other is required.
- 3** If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1** REF04 contains data relating to the value cited in REF02.

Comments:

Notes:

Cross-reference ID used to identify a Customer if the Customer has received a new Customer ID in last 45 days
 REQUIRED when the Customer ID has changed in the last 45 days

REF~45~1235367812

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification 45 Old Account Number Identifies accounts being changed	
Used	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **PER** Administrative Communications Contact**Position:** 070**Loop:** HL Mandatory**Level:** Detail**Usage:** Conditional**Max Use:** 1**Purpose:** To identify a person or office to whom administrative communications should be directed**Syntax Notes:** 1 If either PER03 or PER04 is present, then the other is required.

2 If either PER05 or PER06 is present, then the other is required.

3 If either PER07 or PER08 is present, then the other is required.

Semantic Notes:**Comments:****Notes:** REQUIRED if in Billing Party systems

PER~IC~~TE~7175551111~TE~7175551112

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PER01	366	Contact Function Code	M ID 2/2
			Code identifying the major duty or responsibility of the person or group named	
			IC Information Contact	
Used	PER03	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number	
			TE Telephone	
Used	PER04	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable	
			Last Known Customer Telephone Number #1	
Used	PER05	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number	
			TE Telephone	
Used	PER06	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable	
			Last Known Customer Telephone Number #2	

D R A F T IR/TEIS Working Paper

X12 Implementation Guidelines**Segment:** **BAL** Balance Returned (BAL~CD)**Position:** 110**Loop:** HL Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To identify the specific monetary balances associated with a particular account**Syntax Notes:****Semantic Notes:****Comments:****Notes:**

REQUIRED

BAL~CD~BD~325.67

BAL~CD~BD~-250.00

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BAL01	951	Balance Type Code	M ID 1/2
			Code indicating the type of balance	
			CD Cycle to Date	
			Denotes balance data associated with defined periods	
Must Use	BAL02	522	Amount Qualifier Code	M ID 1/3
			Code to qualify amount	
			BD Balance Due	
Must Use	BAL03	782	Monetary Amount	M R 1/18
			Monetary amount	
			Amount for which the Billing Party will (a) no longer pursue (original) or (b) resume pursuing (cancel) collections.	
			A negative amount indicates that the Non-Billing Party has been overpaid and is responsible for reimbursing the Customer	

X12 Implementation Guidelines**Segment:** **DTP** **Date of Termination of Billing Services (DTM~630)****Position:** 120**Loop:** DTP Mandatory**Level:** Detail**Usage:** Mandatory**Max Use:** 1**Purpose:** To specify any or all of a date, a time, or a time period**Syntax Notes:****Semantic Notes:** 1 DTP02 is the date or time or period format that will appear in DTP03.**Comments:****Notes:** REQUIRED for an original 248 (BHT02 = 22)

DTP~630~D8~19990226

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTP01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time 630 Account Closed	
Must Use	DTP02	1250	Date Time Period Format Qualifier	M ID 2/3
			Code indicating the date format, time format, or date and time format D8 Date Expressed in Format CCYYMMDD	
Must Use	DTP03	1251	Date Time Period	M AN 1/35
			Expression of a date, a time, or range of dates, times or dates and times	

X12 Implementation Guidelines

Segment: **SE** Transaction Set Trailer
Position: 180
Loop:
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:**Semantic Notes:**

Comments: 1 SE is the last segment of each transaction set.

Notes: REQUIRED

SE~28~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

Comments on Annual Plan Item 1a / 2 Submitted by Energy Services Group

Energy Services Group offers the following comments for consideration by the REQ and RGQ Executive Committees:

'Model Business Practice' Section in final NAESB Book.

ESG believes that the structure of the practices and standards adopted by NAESB should follow a consistent and an easy-to-use structure. That is part of the reason that the RXQ adopted many of the WGQ conventions for book structure, as these books are easy for both business and technical resources to digest. Many RXQ parties are familiar or even abiding by the WGQ standards.

In its work in support of API 1a and 2, the Information Requirements (IR) and Technical Electronic Implementation (TEIS) Subcommittees identified a number of issues that were considered by IR/TEIS as 'model business practices'. When presented to BPS, IR/TEIS was informed that they should include these practices in the technical section.

ESG believes that it is often difficult to draw a line between what is a 'business practice' versus what is a 'technical practice'. Until strong criteria are developed for that line, the default position for a practice should be an MBP. If there is not consensus about a practice being business or technical, it should be assumed a business practice, i.e. an MBP.

ESG believes that anything that qualifies as an MBP should be included in one MBP section in the book. We should not have an MBP section where BPS-generated MBP's are found, and a separate section where IR/TEIS MBP's are found.

The function of IR is to take BPS-initiated standards and add detail. It should be expected that IR will identify MBP's. ESG believes that these should be added to the list of BPS-generated MBP's, not stored in a separate section.

The function of TEIS is to take IR-initiated products and add further technical detail. ESG believes that TEIS will rarely identify MBP's, but depending on the subject matter experts available to this team and the other teams, this may happen. ESG believes that any MBP's identified by TEIS should also be found – once approved – in the same list of BPS-generated MBPs.

ESG believes that BPS should be the gatekeeper on what MBP's appear in that section. Just because IR or TEIS identifies an MBP, that does not imply that it is an accepted MBP. One should not be allowed to lose a battle over an MBP in BPS, then allowed to win that battle in IR or TEIS.

ESG believes that MBP's discovered by IR or TEIS should be provided to the BPS for debate and eventual approval. Once approved, all MBP's should appear in the same section.

In preparing documents, IR and TEIS have prepared the documents with the expectation that what was prepared would be reviewed and approved by BPS, and then would be merged with existing BPS products to create a single list of MBPs.

Definitions

Many of the same issues apply to the 'Definitions' section. Again in its work in support of API 1a and 2, the IR and TEIS identified a number of terms that were considered by IR/TEIS as 'definitions'. When presented to BPS, IR/TEIS was informed that they should include these definitions in the technical section.

ESG believes that all definitions should be included in one Definition section, not dispersed throughout the book.

ESG believes that again BPS should be the gatekeeper for what definitions appear in a book, deciding which merit definition status, and which should be forwarded to the Glossary Subcommittee for that status.

ESG believes that it is acceptable to have definitions in each book that are not registered with the Glossary Subcommittee.

Comments on Annual Plan Item 1a / 2 Submitted by Energy Services Group

It is ESG's understanding that, based on the RXQ book numbering scheme, having definitions specific to each book is supported. For example, in a book you might find a 0.x.y.z definition that was found to merit Glossary Subcommittee approval and was defined in Book 0, as well as a 3.x.y.z definition that did not garner Glossary Subcommittee approval but because of its use in Book 3 merited a definition.

'Model' Business Practices

Recently some have suggested that the use of the word 'model' implies that NAESB is simply documenting the different market 'models' available, rather than defining the 'model' – best - practices that should be followed. A review of NAESB history shows different: WGQ sifted through 30+ versions of the Nomination practice and settled on 3 variations, eliminating over 25. In developing the RXQ Book 3 Billing and Payment MBPs', BPS eliminated a number of market models (e.g. New England).

NAESB should be identifying the best models, not simply documenting the existing ones. NAESB books should not simply be a handy-reference for how to do business in ABC Electric Company's territory versus how to do it in XYZ Electric Company. This is an exercise in futility, as they are difficult to document, and they constantly change.

NAESB books should represent the best ways to do business. That is the reason for our balanced voting structures, as not everyone will get everything they want, and some may disagree.

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NORTH AMERICAN ENERGY STANDARDS BOARD

Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials

February 6-7, 2007

Retail Quadrants

TAB 13

Proposed Standard for Annual Plan Item 2 Technical Implementation Standards – Customer Information

- Action may be required of the Retail ECs to approve the proposed standard.
- This section includes the recommendation and comments due on February 5 will be provided under separate cover.
- Tab 13 corresponds to agenda item 3 for the Retail ECs.



**RECOMMENDATION TO NAESB
RETAIL ELECTRIC QUADRANT EXECUTIVE COMMITTEE AND
RETAIL GAS QUADRANT EXECUTIVE COMMITTEE**

For Quadrant: REQ and RGQ
Requesters:
Request No.: 2006 Retail Quadrants Annual Plan Item 2
Request Title: RXQ.8: Technical Electronic Implementation Standards – Customer Information

1. RECOMMENDED ACTION:

☒ Accept as requested
☐ Accept as modified below
☐ Decline

**EFFECT OF EC VOTE TO ACCEPT
RECOMMENDED ACTION:**

☐ Change to Existing Practice
☐ Status Quo

2. TYPE OF DEVELOPMENT/MAINTENANCE

Per Request:

☐ Initiation
☐ Modification
☐ Interpretation
☐ Withdrawal

☐ Principle
☐ Definition
☐ Business Practice Standard
☐ Document
☐ Data Element
☐ Code Value
☐ X12 Implementation Guide
☐ Business Process Documentation

Per Recommendation:

☐ Initiation
☐ Modification
☐ Interpretation
☐ Withdrawal

☐ Principle
☐ Definition
☐ Business Practice Standard
☐ Document
☐ Data Element
☐ Code Value
☐ X12 Implementation Guide
☐ Business Process Documentation

3. RECOMMENDATION

SUMMARY: The RXQ IR & TEIS has completed its work on standards for RXQ.8 Customer Information model business practices. The document posted at the following link:

http://naesb.org/pdf2/2006_retail_api2_rec_attachment.doc

is the proposed addition to the RXQ.8 book.

RECOMMENDED STANDARDS:

See the attachment to the recommendation:
http://naesb.org/pdf2/2006_retail_api2_rec_attachment.doc

4. SUPPORTING DOCUMENTATION

a. Description of Request: The REQ and RGQ IR & TEIS request that the respective EC's review the technical model business practices that complete the technical sections of the RXQ.8 book.



**RECOMMENDATION TO NAESB
RETAIL ELECTRIC QUADRANT EXECUTIVE COMMITTEE AND
RETAIL GAS QUADRANT EXECUTIVE COMMITTEE**

For Quadrant: REQ and RGQ

Requesters:

Request No.: 2006 Retail Quadrants Annual Plan Item 2

**Request Title: RXQ.8: Technical Electronic Implementation
Standards – Customer Information**

b. Description of Recommendation: The REQ and RGQ IR & TEIS recommend that the IR & TEIS model business practices be ratified and included along with existing ratified RXQ.8 BPS model business practices.

c. Business Purpose: The RXQ.8 technical model business practices define the technical model business practices that support the RXQ.8 model business practices.

d. Commentary/Rationale of Subcommittee(s)/Task Force(s):

The TEIS voted to send the recommendation to the Executive Committee after a 30 day formal comment period on December 12th, 2006. The following is the motion made during that conference call:

Mr. Behr moved to accept the document posted for the meeting, and to post the recommendation for the formal thirty day comment period and to forward the recommendation to the REQ and RGQ Executive Committee for adoption. No second is required. The motion passed unanimously.

The attendees of this conference call were:

George Behr	Energy Services Group
Laura Kennedy	NAESB
Dan Rothfuss	Duke Energy
Phil Precht	Baltimore Gas and Electric Company
Dan Jones	Duke Energy

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RXQ.8.2 – DEFINITIONS

ID	Title	Definition
RXQ.8.2.1	Historical Interval Usage	Usage provided in interval increments.
RXQ.8.2.2	Historical Summarized Usage	Usage provided in summary format including interval, non-interval or unmetered.
RXQ.8.2.3	Historical Usage Loop	Enables repeating of information by meter, time, unit of measure, etc.

RXQ.8.3 – MODEL BUSINESS PRACTICES

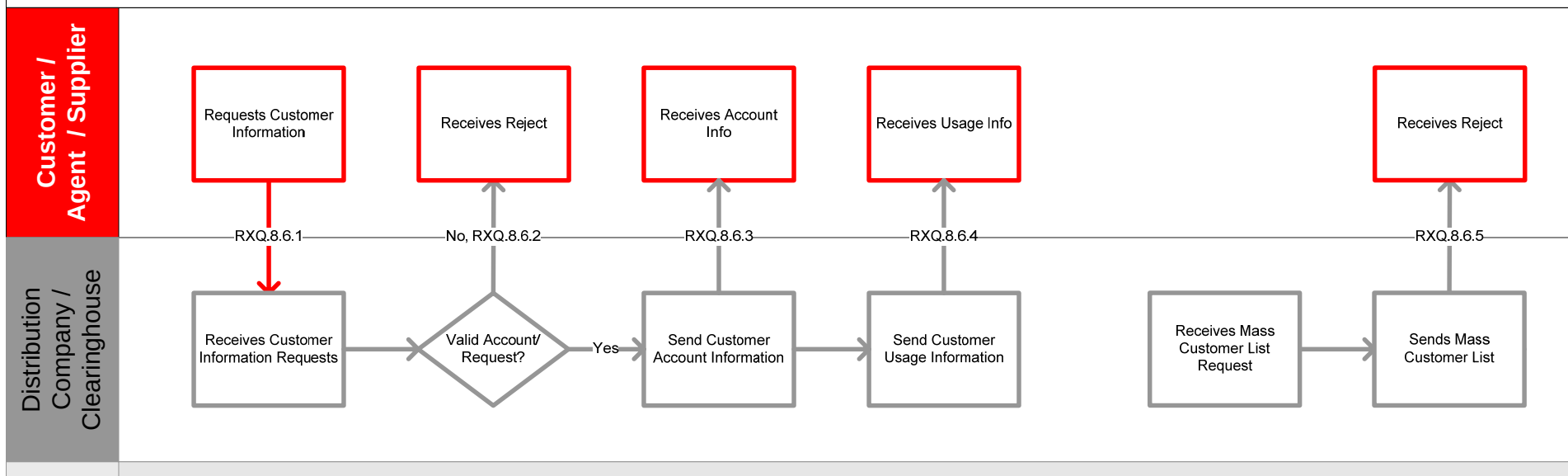
ID	Practice
RXQ.8.3.1.9	There will be one Historical Usage Loop for each meter for each unit of measure. There will be a separate Historical Usage Loop to reflect summed adjusted consumption.
RXQ.8.3.1.10	Historical Usage is provided for the most recent 12 months of usage for the premise - not the most recent 12 months of usage for the Customer.
RXQ.8.3.1.11	The Historical Usage Loop is repeated once for each month of usage provided according to the meter cycle reporting period. For instance, when reporting 12 months of usage (March-February) for unmetered usage, the PTD*BD Historical Usage Loop is repeated twelve times, one PTD*BD for March, one PTD*BD for April, one PTD*BD for May, etc. for each device type. When reporting 12 months of usage (March-February) for non-interval usage, the PTD*PL Historical Usage Loop is repeated twelve times, one PTD*PL for March, one PTD*PL for April, one PTD*PL for May, etc. for each meter. When reporting 12 months of usage (March-February) for interval usage, the PTD*BO and the PTD PM are repeated twelve times each, one PTD*BO and one PTD*PM for March, one PTD*BO and one PTD*PM for April, one PTD*BO and one PTD*PM for May, etc. for each meter.
RXQ.8.3.1.12	Additive/Subtractive Metering: The Historical Usage Loop is used for Additive/Subtractive Metering when the Master Meter is on one ESI ID and the additive and/or subtractive meters are on ESI IDs that are different than the master Meter. All additive usage is summed. All subtractive usage is summed. It is possible to receive two additive/subtractive loops - one with summed additive usage and one with summed subtractive usage. When reporting usage for the additive/Master and/or subtractive/Master usage, the meter number is not provided in the PTD04 and PTD05. The type of Master/Subtractive and/or Master/ Additive usage must be provided in the PTD06 by using code "AI" or code "AO".

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ID	Practice
RXQ.8.3.1.13	For Missing or Abundance of Consumption - Non Interval: The Historical Usage Loop is also used to report missing or abundance of consumption when the consumption (added or subtracted) provided has not been registered by the meter, for example: tampering, fast, slow and/or flat/bypass. The conditions exist only for non-interval meters on the same ESI ID. The meter number must be provided in the PTD04 and PTD05. The type of missing or abundance consumption must be provided in the PTD06.
RXQ.8.3.1.14	Interval usage is provided at intervals as granular as possible (e.g. 15 minutes). If intervals are available for a Customer, the Distribution Company sends the Usage Data Set with the following two PTD Loops: - PTD~BO (Interval Summary) - PTD~PM (Interval Detail) If no intervals or if intervals are not available, the Distribution Company sends the Usage Data Set containing any of the following PTD Loops, as appropriate, along with a status code REF~1P~HIU: - PTD~BD (Unmetered Services) - PTD~BO (Interval Summary) - PTD~PL (Non-Interval Detail)
RXQ.8.3.1.15	Summarized usage may contain any of the following PTD loops: - PTD~BD (Unmetered Services) - PTD~BO (Interval Summary) - PTD~PL (Non-Interval Detail)

RXQ.8.4 – MODELS

RXQ.8 Customer Information Overview



Arrow color indicates initiator
 Arrow direction indicates direction of information flow

RXQ.8.5 – RELATED STANDARDS

Customer Information transactions adhere to a number of standards originally set forth in RXQ.3:

RXQ.3.2.12 Commodity Service Type

Sending parties explicitly identify the commodity for each Customer.

RXQ.3.2.14 Customer ID

The 'Customer ID' data element is the unique identification of a Customer in a marketplace. The Distribution Company assigns the Customer ID to a Customer.

Two models are supported for Customer ID :

- Account Number of the Distribution Company. In this marketplace model, the account number of the Distribution Company defines the unique Customer ID for a Customer.
- Service Delivery ID. In this marketplace model either a Distribution Company defines the unique Customer ID for a Customer using the ID for the service delivery location (e.g. ESI ID).

The ZIP Code for the Customer must be provided whenever the Supplier is not the current Supplier to confirm that the Customer ID provided is correct.

RXQ.3.2.17 Entity ID

Trading partners use Entity ID's in inner and outer transaction envelopes, including name segments such as the X12 N1 and NM1.

RXQ.3.2.38 Non-Billing Party Account ID

Billing Parties and Clearinghouses store the Non-Billing Party Account ID if provided by the Non-Billing Party. For example, when a Supplier enrolls a Customer, they must include the Customer ID, but may also choose to include their Account ID from their internal systems. If provided, this ID should be echoed in all future transactions.

RXQ.3.2.46 Old Customer ID

In the case where a Distribution Company needs to change the Customer ID key for a Customer (for example, if the Distribution Company implements a new customer information system), some cross-reference between the old Customer ID and the new one is needed by the Supplier. The Distribution Company should provide both the Old Customer ID and the current Customer ID in transactions for 90 days.

RXQ.

RXQ.8.6 – TECHNICAL IMPLEMENTATION: CUSTOMER INFORMATION

This section provides high-level conventions and themes found in the technical details for the implementation of NAESB Customer Information transactions in support of energy marketplaces.

The Customer Information transactions include:

- Customer Information Request
- Customer Information Rejection
- Customer Information Account Data Set
- Customer Information Usage Data Set
- Mass Customer List

Customer Information transactions flow from a Customer, an agent of the Customer, or Supplier to the Distribution Company, and from a Distribution Company to the Customer, a Supplier, or an agent of the Customer.

The technical specifications (X12) require that parties define themselves and their trading partners in each transaction as both:

- a) the type of entity (e.g. Distribution Company), and
- b) whether the defined entity is the sender/submitter, or receiver.

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REQ/RGQ Customer Information Model Business Practices (RXQ.8)
Customer Information Request

RXQ.8.6.1 – CUSTOMER INFORMATION REQUEST

Technical Implementation Of Business Process

Related Model Business Practice's: RXQ.8.3.1.4, RXQ.8.3.1.6, RXQ.8.3.2.2

The Customer Information Request transaction is the inter-company communication that a Supplier or Customer uses to request Customer account and usage information from a Distribution Company or a Clearinghouse. The Customer Information Request transaction is NOT used to request or communicate customer information for enrollment or billing.

The **Sender** of the Customer Information Request is the Customer, a Supplier, an agent of either the Customer or the Supplier, or other market participants. The **Receiver** of the Customer Information Request is the organization that hosts account and historical usage for the Customer, and is usually either a Distribution Company or a Clearinghouse (e.g. ERCOT).

The Customer Information Request is identified by the Customer Information Request ID, assigned by the by the originator of the Uniform Electronic Transaction.

A separate Customer Information Request is required for each Customer (Customer ID). The Customer Information Reject, Customer Information Account Data Set, and Customer Information Usage Data Set responses are cross-referenced to the Transaction ID of the Customer Information Request.

Each Customer Information Request header contains: Transaction ID, Transaction Date, Distribution Company Entity ID, Distribution Company Name, Supplier Entity ID, Supplier Name, Clearinghouse Entity ID, Clearinghouse Name, Customer Account ID or SSID, Customer ZIP, Customer Name

Sample Paper Transaction: Request Data Set

Customer Information Request	
Customer Information Request Date:	20040413
Customer Information Request Unique ID:	04132004TR4877
Sender Name:	Sell-It Incorporated
Sender Entity ID:	123456789
Receiver Name:	Distribute-It Incorporated
Receiver Entity ID:	546897321
Customer ID :	12345678901234

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REQ/RGQ Customer Information Model Business Practices (RXQ.8)
Customer Information Request

Data Dictionary

Data Elem. Name	Description	Use	Condition	Comments [Options]
Customer Info Account Data Set Date	Date the transaction was generated	M		
Customer Info Account Data Set ID	Unique number created by the originator identifying this Customer Information transaction	M		
Distribution Company Entity ID	Distribution Company Entity ID (DUNS Number or DUNS+4 Number or other mutually-agreed upon number)	M		
Distribution Company Entity Name	Name that further identifies the Distribution Company	M		
Clearinghouse Entity ID	Clearinghouse Entity ID (e.g. DUNS Number)	RBC		
Clearinghouse Entity Name	Clearinghouse Name	RBC		
Supplier Entity ID	Supplier Entity ID (e.g. DUNS Number)	M		
Supplier Entity Name	Supplier Entity Name	M		
Billing Cycle	Billing Cycle	M		
Number Service Delivery Points	Number of Service Deliver Points	RBC		
Customer Name	Customer Name	M		
Customer Name Overflow	Additional information used to further identify the Customer, as defined in Billing Party's systems.	BC	M if in Distribution Company systems	
Service Location Address	Service Location Street Address	M		
Service Location City	Service Location City	M		
Service Location State	Service Location State	M		
Service Location ZIP	Service Location ZIP code	M		
Capacity Obligation	Capacity obligation or contribution	C	M if Service Type=Electric	
Transmission Obligation	Transmission obligation or contribution	C	M if Service Type=Electric	
Customer ID	Customer Account ID or Service Delivery ID; ID that uniquely defines the Customer in the marketplace.	M		

Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

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REQ/RGQ Customer Information Model Business Practices (RXQ.8)
Customer Information Request

Data Elem. Name	Description	Use	Condition	Comments [Options]
Old Customer ID	Previous Customer ID assigned by the Clearinghouse, for use when Clearinghouse changes Customer ID	BC	M when Account ID's are changed by Distribution Company	
Load Profile Assignment	Load Profile Assignment	C	M if Service Type=Electric	
Commodity Service Type	Identifies type of energy commodity service	M		[Electric, Gas]
Meter Read Cycle	Meter Read Cycle	M		

Code Values

Data Element	Code Description	Code Definition	Code Value
Action Code	Request	Request	26
Commodity Service Type	Electric	Electric	ELECTRIC
Commodity Service Type	Gas	Natural Gas	GAS
Customer ID Type	Account	Account	11
Customer ID Type	Service Delivery ID	SD ID	Q5
Entity Type	Distribution Company	Distribution Company	8S
Entity Type	Supplier	Supplier	SJ
Entity Type	Clearinghouse	Clearinghouse	AY
Entity Type	Customer	Customer	8R
Interval Level	Historical Interval Usage	Historical Interval Usage	HI
Interval Level	Historical Summary Usage	Historical Summary Usage	HU
Receiver/Submitter	Receiver	Receiver	40
Receiver/Submitter	Submitter	Submitter	41
Receiver/Submitter	Clearinghouse	Clearinghouse	OA
Request Type Action	Request	Request	7
Request Type Code	Inquiry	Inquiry	029
Transaction Purpose	Response	Response	11
Transaction Purpose	Request	Request	13

Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

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RXQ.8.6.2 – CUSTOMER INFORMATION REJECTION

Technical Implementation Of Business Process

Related Model Business Practices: RXQ.8.3.1.4, RXQ.8.3.1.6, RXQ.8.3.2.2

The Customer Information Rejection transaction is the inter-company communication that a party uses to communicate rejection of a Customer Information Request.

The **Sender** of the Customer Information Request Reject is the organization that hosts account and historical usage for the Customer, and is usually either a Distribution Company or a Clearinghouse (e.g. ERCOT). The **Receiver** of the Customer Information Request Reject is the company that sent the Customer Information Request (either Customer, a Supplier, an agent of either the Customer or the Supplier, or other market participant).

The Customer Information Request Reject is identified by the Customer Information Request Reject ID, assigned by the by the originator of the Uniform Electronic Transaction.

A separate Customer Information Request Reject is required for each account. The Customer Information Request Reject is cross-referenced to the Transaction ID of the Customer Information Request.

Each Customer Information Request Reject header contains:

- Transaction ID
- Request Transaction ID
- Transaction Date
- Distribution Company Entity ID
- Distribution Company Name
- Supplier Entity ID
- Supplier Name
- Clearinghouse Entity ID
- Clearinghouse Name
- Customer ID
- Rejection Code
- Rejection Text

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 REQ/RGQ Customer Information Model Business Practices (RXQ.8)
 Customer Information Rejection

Sample Paper Transaction: Rejection

Customer Information Request Header	
Customer Information Request Date:	20040413
Customer Information Request Unique ID:	04132004TR4877
Sender Name:	Sell-It Incorporated
Sender Entity ID:	123456789
Receiver Name:	Distribute-It Incorporated
Receiver Entity ID:	546897321
Customer ID:	12345678901234
Accepted:	No

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
Customer Information Rejection

Data Dictionary

Data Elem. Name	Description	Use	Condition	Comments [Options]
Customer Info Reject Date	Date the transaction was generated	M		
Customer Info Reject ID	Unique number created by the originator identifying this Customer Information transaction	M		
Distribution Company Entity ID	Distribution Company Entity ID (DUNS Number or DUNS+4 Number or other mutually-agreed upon number)	M		
Distribution Company Entity Name	Name that further identifies the Distribution Company	M		
Clearinghouse Entity ID	Clearinghouse Entity ID (e.g. DUNS Number)	RBC		
Clearinghouse Entity Name	Clearinghouse Name	RBC		
Supplier Entity ID	Supplier Entity ID (e.g. DUNS Number)	M		
Supplier Entity Name	Supplier Entity Name	M		
Customer Name	Customer Name, as sent in the Request	M		
Service Location ZIP	Service Location ZIP code	BC		
Customer ID	Customer Account ID or Service Delivery ID; ID that uniquely defines the Customer in the marketplace.	M		
Old Customer ID	Previous Customer ID assigned by the Clearinghouse, for use when Clearinghouse changes Customer ID	BC	M when Account ID's are changed by Distribution Company	
Commodity Service Type	Identifies type of energy commodity service	M		[Electric, Gas]
Rejection Code	Code identifying why it was rejected	M		
Rejection Text	Text identifying why it was rejected	M		

Code Values

Data Element	Code Description	Code Definition	Code Value
Action Code	Response	Response	27
Commodity Service Type	Electric	Electric	ELECTRIC
Commodity Service Type	Gas	Natural Gas	GAS

Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

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Customer Information Rejection

Customer ID Type	Account	Account	11
Customer ID Type	Service Delivery ID	SD ID	Q5
Entity Type	Distribution Company	Distribution Company	8S
Entity Type	Supplier	Supplier	SJ
Entity Type	Clearinghouse	Clearinghouse	AY
Entity Type	Customer	Customer	8R
Interval Level	Historical Interval Usage	Historical Interval Usage	HI
Interval Level	Historical Summary Usage	Historical Summary Usage	HU
Receiver/Submitter	Receiver	Receiver	40
Receiver/Submitter	Submitter	Submitter	41
Receiver/Submitter	Clearinghouse	Clearinghouse	OA
Rejection Reason Code	Customer ID exists but is active	Customer ID exists but is active	008
Rejection Reason Code	Other	Other	A13
Rejection Reason Code	Customer ID invalid or not found	Customer ID invalid or not found	A83
Rejection Reason Code	Action Code Invalid	Action Code Invalid	ACI
Rejection Reason Code	Requestor not certified	Requestor not certified	ANM
Rejection Reason Code	Required information missing	Required information missing	API
Rejection Reason Code	Entity ID invalid or not found	Entity ID invalid or not found	D76
Rejection Reason Code	Duplicate	Duplicate	DUP
Rejection Reason Code	Maint Type Code Invalid	Maint Type Code Invalid	MTI
Rejection Reason Code	ZIP invalid	ZIP invalid	ZIP
Request Type Action	Reject	Reject	U
Request Type Code	Inquiry	Inquiry	029
Status Reason Code	Other	Other	A13
Status Reason Code	HI Unavailable	HI Unavailable	HIU
Status Reason Code	HU Unavailable	HU Unavailable	HUU
Transaction Purpose	Response	Response	11

Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

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RXQ.8.6.3 – CUSTOMER INFORMATION ACCOUNT DATA SET

Technical Implementation Of Business Process

Related Model Business Practices: RXQ.8.3.1.4, RXQ.8.3.1.6, RXQ.8.3.2.2

The Customer Information Account Data Set transaction is the inter-company communication that a party uses to communicate acceptance and account-level information for the Customer.

The **Sender** of the Customer Information Account Data Set could be a Distribution Company or a Clearinghouse (e.g. ERCOT). The **Receiver** of the Customer Information Account Data Set is a supplier or other market participant.

The Customer Information Account Data Set is identified by the Customer Information Request Account Data Set ID, assigned by the by the originator of the Uniform Electronic Transaction.

A separate Customer Information Account Data Set is required for each Customer (Customer ID). The Customer Information Account Data Set is cross-referenced to the Customer Information Request Transaction ID.

Each Customer Information Account Data Set header contains:

- Transaction ID
- Transaction Date
- Distribution Company ID
- Distribution Company Name
- Supplier ID
- Supplier Name
- Clearinghouse ID
- Clearinghouse Name
- Customer Account ID or SSID
- Prev Cust Acct ID
- Customer Name
- Customer Name Overflow
- Address
- City
- State
- ZIP
- Billing Cycle
- Peak Load Contribution / Capacity Obligation.
- Transmission Obligation
- Wholesale Delivery Points
- Life Support Indicator
- Installed Capacity

Each Customer Information Account Data Set includes the following details for each meter:

- Meter Number
- Meter Type

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 Customer Information Account Data Set

- Meter Multiplier
- Number of Dials
- Distribution Company Rate Class
- Distribution Company Rate Subclass
- Meter Reading Cycle
- Meter Cycle By Day of Month
- Load Profile Assignment
- Service Type

Sample Paper Transaction: Customer Information Account Data Set

Customer Information Request Header	
Customer Information Account Data Set Date:	20040413
Customer Information Account Data Set Unique ID:	04132004TR4877
Sender Name:	Sell-It Incorporated
Sender Entity ID:	123456789
Receiver Name:	Distribute-It Incorporated
Receiver Entity ID:	546897321
Customer ID:	12345678901234
Accepted:	No

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REQ/RGQ Customer Information Model Business Practices (RXQ.8)
Customer Information Account Data Set

Data Dictionary

Customer Info Response Date	Date the transaction was generated	M		
Customer Info Response ID	Unique number created by the originator identifying this Customer Information transaction	M		
Distribution Company Entity ID	Distribution Company Entity ID (DUNS Number or DUNS+4 Number or other mutually-agreed upon number)	M		
Distribution Company Entity Name	Name that further identifies the Distribution Company	M		
Clearinghouse Entity ID	Clearinghouse Entity ID (e.g. DUNS Number)	RBC		
Clearinghouse Entity Name	Clearinghouse Name	RBC		
Supplier Entity ID	Supplier Entity ID (e.g. DUNS Number)	M		
Supplier Entity Name	Supplier Entity Name	M		
Billing Cycle	Billing Cycle	M		
Number Service Delivery Points	Number of Service Deliver Points	RBC		
Customer Name	Customer Name	M		
Customer Name Overflow	Additional information used to further identify the Customer, as defined in Billing Party's systems.	BC	M if in Distribution Company systems	
Service Location Address	Service Location Street Address	M		
Service Location City	Service Location City	M		
Service Location State	Service Location State	M		
Service Location ZIP	Service Location ZIP code	M		
Capacity Obligation	Capacity obligation or contribution	C	M if Service Type=Electric	
Transmission Obligation	Transmission obligation or contribution	C	M if Service Type=Electric	
Customer ID	Customer Account ID or Service Delivery ID; ID that uniquely defines the Customer in the marketplace.	M		
Old Customer ID	Previous Customer ID assigned by the Clearinghouse, for use when Clearinghouse changes Customer ID	BC	M when Account ID's are changed by Distribution Company	

Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

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Customer Information Account Data Set

Load Profile Assignment	Load Profile Assignment	C	M if Service Type=Electric	
Commodity Service Type	Identifies type of energy commodity service	M		[Electric, Gas]
Meter Read Cycle	Meter Read Cycle	M		

Code Values

Data Element	Code Description	Code Definition	Code Value
Commodity Service Type	Electric	Electric	ELECTRIC
Commodity Service Type	Gas	Natural Gas	GAS
Customer ID Type	Account	Account	11
Customer ID Type	Service Delivery ID	SD ID	Q5
Distribution Loss Factor	Distribution Company Defined A	Distribution Company Defined A	A
Distribution Loss Factor	Distribution Company Defined B	Distribution Company Defined B	B
Distribution Loss Factor	Distribution Company Defined C	Distribution Company Defined C	C
Distribution Loss Factor	Distribution Company Defined D	Distribution Company Defined D	D
Distribution Loss Factor	Distribution Company Defined E	Distribution Company Defined E	E
Distribution Loss Factor	Transmission Only	Transmission Only	T
Entity Type	Distribution Company	Distribution Company	8S
Entity Type	Supplier	Supplier	SJ
Entity Type	Clearinghouse	Clearinghouse	AY
Entity Type	Customer	Customer	8R
Interval Level	Historical Interval Usage	Historical Interval Usage	HI
Interval Level	Historical Summary Usage	Historical Summary Usage	HU
Life Support	Life Support Required	Life Support Required	Y
Life Support	Life Support Not Required	Life Support Not Required	N
Measure TOU Qualifier	Intermediate Peak	Intermediate Peak	43
Measure TOU Qualifier	Low	Low	66
Measure TOU Qualifier	Off Peak	Off Peak	41
Measure TOU Qualifier	On Peak	On Peak	42
Measure TOU Qualifier	Total	Total	51
Meter Type	Meter Type	Meter Type	[see guide]
Receiver/Submitter	Receiver	Receiver	40
Receiver/Submitter	Submitter	Submitter	41
Receiver/Submitter	Clearinghouse	Clearinghouse	OA
Request Type Action	Accept	Accept	WQ
Request Type Code	Inquiry	Inquiry	029

Use Legend: **M** = Mandatory; **C** = Conditional; **SO**=Sender's Option; **BC**=Business Conditional; **RBC**=Retail Business Conditional

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 Customer Information Account Data Set

Data Element	Code Description	Code Definition	Code Value
Transaction Action Code	Response	Response	27
Transaction Purpose	Cancellation	Cancellation	11
Transaction Purpose	Original	Original	13

RXQ.8.6.4 – CUSTOMER INFORMATION USAGE DATA SET

Technical Implementation Of Business Process

Related Model Business Practices: RXQ.8.3.1.4, RXQ.8.3.1.6, RXQ.8.3.2.2

The Customer Information Usage Data Set transaction is the inter-company communication that itemizes energy consumption or demand, providing a historical profile of the Customer energy use over time. The transaction reflects usage from actual meter reads, estimated meter reads, interval meter reads, and unmetered usage. Customer Information Usage Data Set is not used to communicate monthly usage for billing purposes.

The types of usage transactions supported by Customer Information Set in energy markets are:

- Monthly usage
- Interval usage
- Summarized interval usage

Each Customer Information Usage Data Set transaction can include any of the following categories of Usage:

- Non-Interval Detail (PTD*PL) – Monthly usage, including time of use, additive/subtractive, missing/abundance consumption,
- Unmetered Services Detail (PTD*BD)
- Interval Detail (PTD*PM)

The **Sender** of the transaction is either the meter reading entity , the Distribution Company, or a Clearinghouse (e.g. ERCOT). The **Receiver** of the usage could be a Customer, a Supplier, a Distribution Company or a Clearinghouse (e.g. ERCOT).

The usage is identified by the **Usage ID** (formerly 'Reference Number ID'). This Usage ID is assigned by the originator of the usage Uniform Electronic Transaction.

Each original Customer Information Set header contains:

- Sender Entity ID
- Sender Name
- Customer ID
- Customer Name
- Receiver Entity ID
- Receiver Name
- Purpose
- Usage ID
- Report Type Code
- Commodity Service Type
- Transaction Date

Each Customer Information Usage Data Set can contain multiple detail records. Each detail record contains:

- Ending/Single Reading
- Quantity
- Summary Level

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 Customer Information Usage Data Set

- Unit of Measure
- Interval End Date Time
- Measurement Reference ID
- Service Period End Date
- Service Period Start Date
- Therm Factor
- Transformer Loss Multiplier
- Usage Detail Category
- Usage Code

If providing information at a meter level, each original Customer Information Usage Data Set detail contains, if available:

- Beginning Reading
- Meter Multiplier
- Meter Consumption Type
- Meter Interval Type
- Meter Number
- Meter Role
- Number of Dials / Digits
- Power Factor
- Pressure Correction Factor
- Primary Metering Indicator

In addition to the above detail elements, each original Customer Information Set interval usage transaction has a interval detail record for each interval, as defined by **Meter Consumption Type** and **Meter Report Period**, including:

- Interval Date
- Interval Time
- Interval Quantity
- Interval Unit of Measure

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 REQ/RGQ Customer Information Model Business Practices (RXQ.8)
 Customer Information Usage Data Set

Sample Paper Transaction: Historical Usage

Usage Header	
Usage Date:	20040413
Usage Unique ID:	04132004TR4877
Original Usage Unique ID:	
Purpose:	Original
Final Indicator:	No
Sender Name:	Distribute-It Incorporated
Sender Entity ID:	123456789
Receiver Name:	Sell-It Incorporated
Receiver Entity ID:	546897321
Total KWH Billed	4,000
Total KW Billed	20
Total KVA Billed	18

Category	Meter #	Service Period Start Date	Service Period End Date	Interval End Time	Actual/ Estimated	Unit of Measure	Quantity
IU	12345678	20040410	20040509	0015	Actual	KW	200
IU	12345678	20040410	20040509	0030	Estimated	KW	

Category	Meter #	Service Period Start Date	Service Period End Date	Actual/ Estimated	Unit of Measure	Quantity
MU	23456789	20040410	20040509	Actual	KWH	200
MU	23456789	20040410	20040509	Estimated	KWH	

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REQ/RGQ Customer Information Model Business Practices (RXQ.8)
Customer Information Usage Data Set

Data Dictionary

Data Elem. Name	Description	Use	Condition	Comments [Options]
Transaction Purpose	Identifies the reason for sending this information	M		[Original, Cancellation]
Usage ID	Unique ID created by the originator of the usage transaction; used for cross-reference between Usage, Invoice and Payment transactions	M		
Usage Date	Date this transaction was created by the sender's application system.	M		
Report Type Code	Defines if usage is reported at interval, non-interval or mixed	M		[Interval,Non-Interval,Mixed]
Receiver Entity ID	Receiver's Entity Common Code ID (e.g. DUNS Number)	M		
Receiver Entity Name	Receiver Name	M		
Sender Entity ID	Common Code ID (DUNS Number or DUNS+4 Number or other mutually-agreed upon number) of the party that initiates the transaction.	M		
Sender Name	Name of the trading partner that initiates the transaction.	M		
Service Period Start Date	Previous Meter Reading Date	M		
Service Period End Date	Current Meter Reading Date	M		
Customer Name	Customer Name	M		
Customer ID	Customer Account ID or Service Delivery ID; ID that uniquely defines the Customer in the marketplace.	M		
Commodity Service Type	Identifies type of energy commodity service	M		[Electric, Gas]
Power Region	Reliability Council	RBC		
Usage Detail Category	Code that defines what type of detailed usage is reported	M		[Non-Interval Metered, Interval Metered, Summary Interval, Unmetered, Billed]

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REQ/RGQ Customer Information Model Business Practices (RXQ.8)
Customer Information Usage Data Set

Data Elem. Name	Description	Use	Condition	Comments [Options]
Billed Demand	Demand Customer was actually billed. Billed (derived) Demand is based on contract or rate minimum and may be different than measured demand.	M		
Billed Consumption	Consumption Customer was billed	M		
Measured Demand	Measured Demand	M		
Interval Meter Read End Time	Timestamp for end of interval read	C	[M] when Report Type='INTERVAL'	
Interval Meter Read Transformer Loss Multiplier	Transformer Loss Multiplier. When a Customer owns a transformer and the transformer loss is not measured by the meter.	C	[M] when this measure is available	
Interval Meter Read Multiplier	Represents the number of units that are reflected by one dial or digit increment. Can be multiple multipliers per meter	C	[M] when Report Type='METER'	
Interval Meter Read Power Factor	Relationship between Watts and Volt - Amperes necessary to supply electric load	C	[M] when this measure is available	
Interval Meter Read Estimated Actual Flag	Flag identifying if beginning and ending meter reads are estimated or actual		[M] when Report Type ='METER'	[Beg / End actual; Beg actual / End estimated; Actual Total; As Billed; Beg est. / End actual; Beg est. / End est.]
Interval Meter Read Unit of Measure	Unit of measure for read	BC	M when line item has a measure	[Kilowatt demand, kilovolt Amperes Reactive Demand, Kilovolt Amperes Reactive Hour, Kilovolt Amperes, Kilowatt Hour]
Interval Meter Read Beginning	Value specifying beginning reading for the metering period.	C	[M] when Report Type ='METER'	
Interval Meter Read Ending/Single	The ending reading or single reading for metering period.	C	[M] when Report Type ='METER'	
Interval Meter Quantity Usage Code	Code distinguishes between estimated usage and actual usage	M		[Actual, Estimated]
Interval Meter Quantity	Usage	M		

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Data Elem. Name	Description	Use	Condition	Comments [Options]
Interval Meter Quantity Unit of Measure	Unit of measure for quantity	BC	M when line item has a measure	[Kilowatt demand, kilovolt Amperes Reactive Demand, Kilovolt Amperes Reactive Hour, Kilovolt Amperes, Kilowatt Hour]
Interval Meter Channel Number	Interval Meter Channel Number	M		
Interval Meter Number of Dials / Digits	Number of meter dials or digits on the meter	C	[M] when Report Type = 'METER'	X12 uses dials to left of decimal, digits to right of decimal
Interval Meter Role	Code that defines the effect of consumption on summarized total.	C	[M] when Report Type = 'METER'	[Subtractive; Additive; Ignore]
Interval Meter ID	Serial number identifier for a specific interval meter	RBC		
Interval Meter Type	Meter Type			[See Meter Type Definition]
Interval Meter Rate Class	Rate Class	C		
Interval Meter Rate Subclass	Rate Subclass	C		
Interval Meter Summary Consumption	Total consumption on interval metered services			
Summary Interval Read End Time	Timestamp for end of interval read	C	[M] when Report Type='INTERVAL'	
Summary Interval Exchange Date	Date meter was exchanged	M		
Summary Interval Read Transformer Loss Multiplier	Transformer Loss Multiplier. When a Customer owns a transformer and the transformer loss is not measured by the meter.	C	[M] when this measure is available	
Summary Interval Read Multiplier	Represents the number of units that are reflected by one dial or digit increment. Can be multiple multipliers per meter	C	[M] when Report Type='METER'	
Summary Interval Read Power Factor	Relationship between Watts and Volt - Amperes necessary to supply electric load	C	[M] when this measure is available	
Summary Interval Read Estimated Actual Flag	Flag identifying if beginning and ending meter reads are estimated or actual		[M] when Report Type = 'METER'	[Beg / End actual; Beg actual / End estimated; Actual Total; As Billed; Beg est. / End actual; Beg est. / End est.]

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Data Elem. Name	Description	Use	Condition	Comments [Options]
Summary Interval Read Unit of Measure	Unit of measure for read	BC	M when line item has a measure	[Kilowatt demand, kilovolt Amperes Reactive Demand, Kilovolt Amperes Reactive Hour, Kilovolt Amperes, Kilowatt Hour]
Summary Interval Read Beginning	Value specifying beginning reading for the metering period.	C	[M] when Report Type = 'METER'	
Summary Interval Read Ending/Single	The ending reading or single reading for metering period.	C	[M] when Report Type = 'METER'	
Summary Interval Summary Consumption	Total consumption on interval metered services			
Summary Interval Quantity Usage Code	Code distinguishes between estimated usage and actual usage	M		[Actual, Estimated]
Summary Interval Quantity	Usage	M		
Summary Interval Quantity Unit of Measure	Unit of measure for quantity	BC	M when line item has a measure	[Kilowatt demand, kilovolt Amperes Reactive Demand, Kilovolt Amperes Reactive Hour, Kilovolt Amperes, Kilowatt Hour]
Summary Interval Number of Dials / Digits	Number of meter dials or digits on the meter	C	[M] when Report Type = 'METER'	X12 uses dials to left of decimal, digits to right of decimal
Summary Interval Role	Code that defines the effect of consumption on summarized total.	C	[M] when Report Type = 'METER'	[Subtractive; Additive; Ignore]
Summary Interval ID	Serial number identifier for a specific interval meter	RBC		
Summary Interval Type	Meter Type			[See Meter Type Definition]
Summary Interval Rate Class	Rate Class	C		
Summary Interval Rate Subclass	Rate Subclass	C		
Meter Add'l Info Code	Code used to define if the meter is 'behind the meter' (e.g. Cogen')	BC	[M] when meter is considered 'behind the meter']	[Behind the meter]
Pressure Correction Factor	Corrects for varying delivery pressures	C	[M] when Report Type = 'METER'	
Non-Interval Meter Read Therm Factor	Converts volumetric meter reading data to therm values	C	[M] when Report Type = 'METER' and ServiceType = 'GAS' and UnitMeasure = 'THERM'	

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Data Elem. Name	Description	Use	Condition	Comments [Options]
Non-Interval Meter Exchange Date	Date meter was exchanged	M		
Non-Interval Meter Read Transformer Loss Multiplier	Transformer Loss Multiplier. When a Customer owns a transformer and the transformer loss is not measured by the meter.	C	[M] when this measure is available	
Non-Interval Meter Read Multiplier	Represents the number of units that are reflected by one dial or digit increment. Can be multiple multipliers per meter	C	[M] when Report Type='METER'	
Non-Interval Meter Read Power Factor	Relationship between Watts and Volt - Amperes necessary to supply electric load	C	[M] when this measure is available	
Non-Interval Meter Read Estimated Actual Flag	Flag identifying if beginning and ending meter reads are estimated or actual	C	[M] when Report Type ='METER'	[Beg / End actual; Beg actual / End estimated; Actual Total; As Billed; Beg est. / End actual; Beg est. / End est.]
Non-Interval Meter Read Unit of Measure	Unit of measure for read	BC	M when line item has a measure	[Kilowatt demand, kilovolt Amperes Reactive Demand, Kilovolt Amperes Reactive Hour, Kilovolt Amperes, Kilowatt Hour, therms, ccf, mcf]
Non-Interval Meter Read Beginning	Value specifying beginning reading for the metering period.	C	[M] when Report Type ='METER'	
Non-Interval Meter Read Ending/Single	The ending reading or single reading for metering period.	C	[M] when Report Type ='METER'	
Non-Interval Meter Read Time Of Use	Code that defines whether this usage is on peak, off peak, or intermediate peak			[On Peak, Off Peak, Intermediate Peak, Total, Low]
Non-Interval Meter Number of Dials / Digits	Number of meter dials or digits on the meter	C	[M] when Report Type ='METER'	
Non-Interval Meter Role	Code that defines the effect of consumption on summarized total.	C	[M] when Report Type ='METER'	[Subtractive; Additive; Ignore]
Non-Interval Meter ID	Serial number identifier for a specific interval meter	RBC		
Non-Interval Meter Type	Type of usage that is reported. Consists of 2-digit prefix and 3-digit suffix. See 'X.X Meter Type Definition'.			[See Meter Type Definition]
Non-Interval Rate Class	Rate Class	C		
Non-Interval Rate Subclass	Rate Subclass	C		

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Data Elem. Name	Description	Use	Condition	Comments [Options]
Unmetered Quantity Usage Code	Code distinguishes between estimated usage and actual usage	M		[Actual, Estimated]
Unmetered Quantity	Unmetered Usage	M		
Unmetered Quantity Unit of Measure	Unit of measure for quantity	BC	M when line item has a measure	[Kilowatt demand, kilovolt Amperes Reactive Demand, Kilovolt Amperes Reactive Hour, Kilovolt Amperes, Kilowatt Hour, therms, ccf, mcf]

Code Values

Data Element	Code Description	Code Definition	Code Value
Customer ID Type	Account	Account	11
Customer ID Type	Service Delivery ID	SD ID	Q5
Date Qualifier	Service Period End	Service Period End	151
Date Qualifier	Service Period Start	Service Period Start	150
Entity Type	Distribution Company	Distribution Company	8S
Entity Type	Supplier	Supplier	SJ
Entity Type	Clearinghouse	Clearinghouse	AY
Entity Type	Customer	Customer	8R
Interval Level	Historical Interval Usage	Historical Interval Usage	HI
Interval Level	Historical Summary Usage	Historical Summary Usage	HU
Measure TOU Qualifier	Intermediate Peak	Intermediate Peak	43
Measure TOU Qualifier	Summer Super On-Peak	Summer Super On-Peak	71
Measure TOU Qualifier	Low	Low	66
Measure TOU Qualifier	Off Peak	Off Peak	41
Measure TOU Qualifier	On Peak	On Peak	42
Measure TOU Qualifier	Total	Total	51
Meter Role	Additive	Additive	A
Meter Role	Ignore	Ignore	I
Meter Role	Subtractive	Subtractive	S
Meter Type	Meter Type	Meter Type	[see guide]
Quantity Qualifier	Estimated	Estimated	KA
Quantity Qualifier	Actual	Actual	QD

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Data Element	Code Description	Code Definition	Code Value
Receiver/Submitter	Receiver	Receiver	40
Receiver/Submitter	Submitter	Submitter	41
Receiver/Submitter	Clearinghouse	Clearinghouse	OA
Report Type Code	Interval	Interval	CI
Report Type Code	Non-Interval & Unmetered	Non-Interval & Unmetered	DR
Report Type Code	Non-Interval	Non-Interval	DD
Request Type Code	Inquiry	Inquiry	029
Transaction Action Code	Response	Response	27
Transaction Purpose	Original	Original	13
Usage Detail Category	Billed	Usage actually billed to Customer by Billing Party	BB
Usage Detail Category	Interval	Interval usage detail	PM
Usage Detail Category	Interval Summary	Interval usage summarized by meter, time of use	BO
Usage Detail Category	Non-Interval	Non-interval usage summarized by meter, read period	PL
Usage Detail Category	Non-Interval Summary	Non-interval usage summarized by read period	SU
Usage Detail Category	Unmetered	Unmetered usage	BD

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Customer Information Usage Data Set

RXQ.8.6.5 – MASS CUSTOMER LIST

Technical Implementation Of Business Process

Related Model Business Practices: 8.3.2.2

The Mass Customer List transaction is the inter-company communication that provides a high-level energy profile of qualified Customers. The transaction reflects summarized usage from actual meter reads, estimated meter reads, interval meter reads, and unmetered usage. The Mass Customer List is not used to communicate monthly usage for billing purposes.

The **Sender** of the transaction is the party that hosts Customer Information, usually either the Distribution Company or a Clearinghouse (e.g. ERCOT). The **Receiver** of the usage will be a Supplier.

The Mass Customer List may be posted on a website, or sent via e-mail, via postal on a CD, or via traditional NAESB internet communications.

The Mass Customer List is not available in X12 EDI format.

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Mass Customer List

Data Dictionary

Data Elem. Name	Description	Use	Condition	Comments
Customer ID	Customer Account ID or Service Delivery ID; ID that uniquely defines the Customer in the marketplace.	RBC	M if required by Applicable Regulatory Authority	
Customer Name	Customer Name	M		
Customer Name Overflow	Additional information used to further identify the Customer, as defined in Billing Party's systems.	BC	M if in host systems	
Interval Meter Indicator	Interval Meters on Account	M		[Yes, No]
Mail Address	Mail Address	M		
Mail Address 2	Mail Address 2	BC	M if in host systems	
Mail City	Mail City	M		
Mail State	Mail State	M		
Mail ZIP	Mail ZIP code	M		
Old Customer ID	Previous Customer ID assigned by the Distribution Company, for use when Distribution Company changes Customer ID	BC	M when Account ID's are changed by Distribution Company	
Billing Cycle	Billing Cycle	M		
Budget Bill Indicator	Budget Billing	M		[Yes, No]
Capacity Obligation	Capacity obligation or contribution	C	M if Commodity Service Type=Electric	
Commodity Service Type	Identifies type of energy commodity service	M		[Electric, Gas]
Load Profile Class	Load Profile Class	M		
Load Profile Segment	Load Profile Segment	C		
Meter Number	Meter Number	M		
Meter Read Cycle	Meter Read Cycle	M		
Meter Type	Meter Type	M		[KWMON, KHMN, etc]
Number Service Delivery Points	Number of Service Deliver Points or Units (e.g. unmetered)	M		
Rate	Distribution Company Rate	M		
Service Location City	Service Location City	M		
Service Location House	Service Location House Number	M		
Service Location State	Service Location State	M		
Service Location Street	Service Location Street	M		
Service Location ZIP	Service Location ZIP code	M		
Transmission Obligation	Transmission obligation or contribution	C	M if Commodity Service Type=Electric	
Actual / Estimated Indicator	Actual / Estimated Indicator	M		[Actual, Estimated]; Repeats per measure
Meter Read Date	Meter Read Date	M		Repeats per month per
Quantity	Quantity	M		Repeats per month per
Unit of Measure	Unit of Measure	M		[KW, KWH, etc]; Repeats per measure

Code Values

Data Element	Code Description	Code Definition
Commodity Service Type	Electric	Electric
Commodity Service Type	Gas	Natural Gas
Customer ID Type	Account	Account

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Mass Customer List

Customer ID Type	Service Delivery ID	SD ID
Unit of Measure	kiloWatts	Kilowatt demand
Unit of Measure	kiloWatt	kilowatt hours
Meter Type	[See "8.3.x.x Meter Type"]	

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X12 IMPLEMENTATION GUIDELINES

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814 NAESB RXQ.8.6.1 CUSTOMER INFORMATION REQUEST

Functional Group ID=**GE**

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the General Request, Response or Confirmation Transaction Set (814) for use within the context of an Electronic Data Interchange (EDI) environment. This standard can be used to request actions to be performed, to respond to a request for actions to be performed or to confirm information related to actions performed.

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BGN	Beginning Segment	M	1		
LOOP ID - N1							>1
M	040	N1	Name: Market Participants	M	1		
LOOP ID - N1							1
M	040	N1	Name: Customer	M	1		
M	070	N4	Geographic Location	M	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
LOOP ID - LIN							>1
M	010	LIN	Item Identification	M	1		
M	020	ASI	Action or Status Indicator	M	1		
M	030	REF	Customer ID (REF~12/Q5)	M	1		
M	150	SE	Transaction Set Trailer	M	1		

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Segment: **ST Transaction Set Header**

Position: 010

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the start of a transaction set and to assign a control number

Syntax Notes:

Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

Comments:

Notes: Required

ST~814~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set	
			814 General Request, Response or Confirmation	
Must Use	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

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Segment:	BGN Beginning Segment
Position:	020
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the beginning of a transaction set
Syntax Notes:	1 If BGN05 is present, then BGN04 is required.
Semantic Notes:	1 BGN02 is the transaction set reference number. 2 BGN03 is the transaction set date. 3 BGN04 is the transaction set time. 4 BGN05 is the transaction set time qualifier. 5 BGN06 is the transaction set reference number of a previously sent transaction affected by the current transaction.
Comments:	
Notes:	Required BGN~11~200104021956531~20010402~~~200104011956531~~27

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	BGN01	353	Transaction Set Purpose Code	M ID 2/2
			Code identifying purpose of transaction set 11 Response 13 Request	
Must Use	BGN02	127	Reference Identification	M AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier A unique transaction identification number assigned by the originator of this transaction. This number must be unique over time. Transaction Reference numbers will only contain uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded.	
Must Use	BGN03	373	Date	M DT 8/8
			Date expressed as CCYYMMDD The transaction creation date - the date that the data was processed by the sender's application system.	
Must Use	BGN08	306	Action Code	M ID 1/1
			Code indicating type of action Identifies the type of 814 being sent or received. Ignore ANSI X12 definitions of these codes. 26 Bankruptcy Filed - Review Account Customer Information Request	

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Segment: **N1 Name: Market Participants**

Position: 040

Loop: N1 Mandatory

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: N1 defines market participants involved in this business process, including Supplier, Distribution Company and Clearinghouse where applicable. There will be 2 or more N1 market participant segments depending on the number of market participants involved.

REQUIRED

N1~8S~Distribute-It, Inc.~1~123456789~~41

N1~SJ~Supply-It, Inc.~1~123456789~~40

N1~AY~Register-It, Inc.~1~123456789~~40

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
		8S	Consumer Service Provider (CSP)	
			Distribution Company (DC)	
		AY	Clearinghouse	
			Clearinghouse	
		SJ	Service Provider	
			Supplier	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Market Participant Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
		1	D-U-N-S Number, Dun & Bradstreet	
		9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Market Participant Entity Common Code ID	
Dep	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	

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Required if DC is the sender, otherwise not used.

40	Receiver
41	Submitter
OA	Electronic Return Originator

Required when forwarding a rejected Request
(used only by Clearinghouses).

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Segment: **N1** **Name: Customer**

Position: 040

Loop: N1 Mandatory

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Customer Name

REQUIRED

N1~8R~CUSTOMER NAME

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
		8R	Consumer Service Provider (CSP) Customer	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Supplier Name	

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Segment: **N4 Geographic Location**

Position: 070

Loop: N1 Mandatory

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To specify the geographic place of the named party

Syntax Notes: 1 If N406 is present, then N405 is required.

Semantic Notes:

- Comments:**
- 1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
 - 2 N402 is required only if city name (N401) is in the U.S. or Canada.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must	N403	116	Postal Code	M ID 3/15
Use			Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	
			Required	

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Segment:	LIN Item Identification
Position:	010
Loop:	LIN Mandatory
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify basic item identification data
Syntax Notes:	1 If either LIN04 or LIN05 is present, then the other is required. 2 If either LIN06 or LIN07 is present, then the other is required. 3 If either LIN08 or LIN09 is present, then the other is required. 4 If either LIN10 or LIN11 is present, then the other is required. 5 If either LIN12 or LIN13 is present, then the other is required. 6 If either LIN14 or LIN15 is present, then the other is required. 7 If either LIN16 or LIN17 is present, then the other is required. 8 If either LIN18 or LIN19 is present, then the other is required. 9 If either LIN20 or LIN21 is present, then the other is required. 10 If either LIN22 or LIN23 is present, then the other is required. 11 If either LIN24 or LIN25 is present, then the other is required. 12 If either LIN26 or LIN27 is present, then the other is required. 13 If either LIN28 or LIN29 is present, then the other is required. 14 If either LIN30 or LIN31 is present, then the other is required.
Semantic Notes:	1 LIN01 is the line item identification
Comments:	1 See the Data Dictionary for a complete list of IDs. 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.
Notes:	This LIN echoes the LIN from the Customer Information Request. Required LIN~1~SH~EL~SH~HI Request for Historical Usage for each detail interval, which also includes a summary by meter. LIN~1~SH~EL~SH~HU Request for Historical Usage at the Meter Level or for Unmetered Services

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	LIN01	350	Assigned Identification	M AN 1/20
			Alphanumeric characters assigned for differentiation within a transaction set	
Must Use	LIN02	235	Product/Service ID Qualifier	M ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
			SH Service Requested	
Must Use	LIN03	234	Product/Service ID	M AN 1/48
			Identifying number for a product or service	
			Commodity	
			EL Electric Service	
Must Use	LIN04	235	Product/Service ID Qualifier	M ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	

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Must Use	LIN05	234	SH	Service Requested	M	AN 1/48
			Product/Service ID			
			Identifying number for a product or service			
			HI	Historical Interval Usage		
			HU	Historical Summarized Usage		

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Segment: **ASI** **Action or Status Indicator**
Position: 020
Loop: LIN Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the action to be taken with the information provided or the status of the entity described

Syntax Notes:**Semantic Notes:****Comments:**

Notes: Identifies the action to be taken or the status of a requested action for the service identified in the LIN segment.

Required

ASI~WQ~029

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ASI01	306	Action Code	M ID 1/2
			Code indicating type of action 7 Request	
Must Use	ASI02	875	Maintenance Type Code	M ID 3/3
			Code identifying the specific type of item maintenance 029 Inquiry	

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Segment: **REF Customer ID (REF~12/Q5)**

Position: 030

Loop: LIN Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: ID that uniquely defines the Customer in marketplace. Governing document define whether REF~12 or REF~Q5 is required

- REF~12 uses REF02 for ID; usually Distribution Company account number
- REF~Q5 uses REF03 for ID; usually the Service Delivery ID (e.g. ESI ID in ERCOT)

REQUIRED unless not provided on the request

REF~12~2931839200

REF~Q5~~10111111234567890ABCDEFGHIJKLMNOPS

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			12 Billing Account	
			Account number under which billing is rendered	
			Account number ID; sent in REF02	
Must Use	REF02	127	Customer Account ID; use when REF01=12	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

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Segment: **SE** Transaction Set Trailer
Position: 150
Loop:
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:**Semantic Notes:**

Comments: 1 SE is the last segment of each transaction set.

Notes: Required

SE~11~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

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814 NAESB RXQ.8.6.2 CUSTOMER INFORMATION REJECT

Functional Group ID=**GE**

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the General Request, Response or Confirmation Transaction Set (814) for use within the context of an Electronic Data Interchange (EDI) environment. This standard can be used to request actions to be performed, to respond to a request for actions to be performed or to confirm information related to actions performed.

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BGN	Beginning Segment	M	1		
			LOOP ID - N1			>1	
	040	N1	Name: Market Participants	O	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - LIN			>1	
M	010	LIN	Item Identification	M	1		
M	020	ASI	Action or Status Indicator	M	1		
M	030	REF	Customer ID (REF~12/Q5)	M	>1		
M	030	REF	Rejection Reason (REF~7G)	M	>1		
M	150	SE	Transaction Set Trailer	M	1		

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Segment: **ST Transaction Set Header**

Position: 010

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the start of a transaction set and to assign a control number

Syntax Notes:

Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

Comments:

Notes: REQUIRED

ST~814~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set	
			814 General Request, Response or Confirmation	
Must Use	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

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Segment: **BGN Beginning Segment**
Position: 020
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the beginning of a transaction set
Syntax Notes: 1 If BGN05 is present, then BGN04 is required.
Semantic Notes: 1 BGN02 is the transaction set reference number.
 2 BGN03 is the transaction set date.
 3 BGN04 is the transaction set time.
 4 BGN05 is the transaction set time qualifier.
 5 BGN06 is the transaction set reference number of a previously sent transaction affected by the current transaction.

Comments:**Notes:**

REQUIRED

BGN~11~200104021956531~20010402~~~200104011956531~~27

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BGN01	353	Transaction Set Purpose Code	M ID 2/2
			Code identifying purpose of transaction set	
			11 Response	
Must Use	BGN02	127	Reference Identification	M AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			A unique transaction identification number assigned by the originator of this transaction. This number must be unique over time.	
			Transaction reference numbers will only contain uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded.	
Must Use	BGN03	373	Date	M DT 8/8
			Date expressed as CCYYMMDD	
			The transaction creation date - the date that the data was processed by the sender's application system.	
Must Use	BGN06	127	Reference Identification	M AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Cross-reference to the BGN02 of the Customer Information Request	
			REQUIRED	
Must Use	BGN08	306	Action Code	M ID 1/1
			Code indicating type of action	
			Identifies the type of Retail Market 814 being sent or received. Ignore ANSI X12 definitions of these codes.	
			27 Moved - Follow Up	
			Customer Information Response	

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Segment: **N1 Name: Market Participants**

Position: 040

Loop: N1 Optional

Level: Heading

Usage: Optional

Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2 N105 and N106 further define the type of entity in N101.

Notes: N1 defines market participants involved in this business process, including Supplier, Distribution Company and Clearinghouse where applicable. There will be 2 or more N1 market participant segments depending on the number of market participants involved.
REQUIRED

N1~8S~Distribute-It, Inc.~1~123456789~~41

N1~SJ~Supply-It, Inc.~1~123456789~~40

N1~AY~Register-It, Inc.~1~123456789~~40

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
		8S	Consumer Service Provider (CSP)	
			Distribution Company	
		AY	Clearinghouse	
			Clearinghouse	
		SJ	Service Provider	
			Supplier	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Market Participant Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
		1	D-U-N-S Number, Dun & Bradstreet	
		9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Market Participant Entity Common Code ID	
Dep	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	

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REQUIRED

40	Receiver
41	Submitter
OA	Electronic Return Originator

REQUIRED when forwarding a rejected Request
(used only by Clearinghouses).

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Segment:	LIN Item Identification
Position:	010
Loop:	LIN Mandatory
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify basic item identification data
Syntax Notes:	1 If either LIN04 or LIN05 is present, then the other is required. 2 If either LIN06 or LIN07 is present, then the other is required. 3 If either LIN08 or LIN09 is present, then the other is required. 4 If either LIN10 or LIN11 is present, then the other is required. 5 If either LIN12 or LIN13 is present, then the other is required. 6 If either LIN14 or LIN15 is present, then the other is required. 7 If either LIN16 or LIN17 is present, then the other is required. 8 If either LIN18 or LIN19 is present, then the other is required. 9 If either LIN20 or LIN21 is present, then the other is required. 10 If either LIN22 or LIN23 is present, then the other is required. 11 If either LIN24 or LIN25 is present, then the other is required. 12 If either LIN26 or LIN27 is present, then the other is required. 13 If either LIN28 or LIN29 is present, then the other is required. 14 If either LIN30 or LIN31 is present, then the other is required.
Semantic Notes:	1 LIN01 is the line item identification
Comments:	1 See the Data Dictionary for a complete list of IDs. 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.
Notes:	This LIN echoes the LIN from the Customer Information Request.

REQUIRED

LIN~1~SH~EL~SH~HI

Request for Historical Usage for each detail interval, which also includes a summary by meter.

LIN~1~SH~EL~SH~HU

Request for Historical Usage at the Meter Level or for Unmetered Services

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	LIN01	350	Assigned Identification	O AN 1/20
			Alphanumeric characters assigned for differentiation within a transaction set	
Must Use	LIN02	235	Product/Service ID Qualifier	M ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
			SH Service Requested	
Must Use	LIN03	234	Product/Service ID	M AN 1/48
			Identifying number for a product or service	
			Commodity	
			ELECTRIC Electric Service	
			GAS Natural Gas Service	
Must Use	LIN04	235	Product/Service ID Qualifier	M ID 2/2
			Code identifying the type/source of the descriptive number used in	

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Product/Service ID (234)

SH Service Requested

Must Use	LIN05	234	Product/Service ID	M AN 1/48

Identifying number for a product or service

HI Historical Interval Usage

Request to obtain Historical Interval Usage for this premise by interval.

If the intervals are available, the DC will send the 867_02 Historical Usage, containing the following two PTD Loops:

PTD~BO (Interval Summary)

PTD~PM (Interval Detail)

If this Account/SD ID does not have interval meters, or if the intervals are not available, the DC will send the 867_02 Historical Usage, containing any of the following PTD Loops, as appropriate, along with a status code REF~1P~HIU:

PTD~BD (Unmetered Services)

PTD~BO (Interval Summary)

PTD~PL (Non-Interval Detail)

HU Historical Summarized Usage

Request to obtain Historical Summarized Usage for this premise (interval, non-interval or unmetered). The DC will send the 867_02 Historical Usage, which may contain any of the following PTD Loops:

PTD~BD (Unmetered Services)

PTD~BO (Interval Summary)

PTD~PL (Non-Interval Detail)

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Segment: **ASI** **Action or Status Indicator**
Position: 020
Loop: LIN Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the action to be taken with the information provided or the status of the entity described

Syntax Notes:**Semantic Notes:****Comments:**

Notes: Identifies the action to be taken or the status of a requested action for the service identified in the LIN segment.

REQUIRED

ASI~WQ~029

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ASI01	306	Action Code	M ID 1/2
			Code indicating type of action	
			U Reject	
Must Use	ASI02	875	Maintenance Type Code	M ID 3/3
			Code identifying the specific type of item maintenance	
			029 Inquiry	

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Segment: **REF Customer ID (REF~12/Q5)**

Position: 030

Loop: LIN Mandatory

Level: Detail

Usage: Mandatory

Max Use: >1

Purpose: To specify identifying information

Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes:

ID that uniquely defines the Customer in marketplace. Governing document define whether REF~12 or REF~Q5 is required

- REF~12 uses REF02 for ID; usually Distribution Company account number
- REF~Q5 uses REF03 for ID; usually the Service Delivery ID (ESI ID in ERCOT)
REQUIRED unless not provided on the request

REF~12~2931839200

REF~Q5~~10111111234567890ABCDEFGHIJKLMNOPS

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			12 Billing Account	
			Account number under which billing is rendered	
			Account number ID; sent in REF02	
Must Use	REF02	127	Customer Account ID; use when REF01=12	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

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Segment: **REF** **Rejection Reason (REF~7G)**

Position: 030

Loop: LIN Mandatory

Level: Detail

Usage: Mandatory

Max Use: >1

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: More than one rejection reason code may be sent, by repeating the REF~7G segment.

Accept Response: Not Used

Reject Response: REQUIRED

REF~7G~A13~ADDITIONAL REASON TEXT HERE

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			7G Data Quality Reject Reason	
			Reject reasons associated with a reject status notification.	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			008 Customer ID exists but is not active	
			Retired	
			A13 Other	
			Explanation REQUIRED in REF03.	
			A76 Customer ID invalid or not found	
			A83 Invalid or Unauthorized Action	
			Information provided was not supported in the Texas SET Standards.	
			ACI Action Code (ASI01) Invalid	
			ANM Requestor not certified	
			Supplier does not have a service agreement with the Distribution Company	
			API Required information missing	
			Explanation REQUIRED in REF03. May not be used in place of other, more specific error codes.	
			D76 Entity Common Code ID [DUNS] Invalid or Not Found	
			DOT Duplicate Original Transaction ID	
			Original Transaction ID (BGN02) already submitted on ESI-ID. For ERCOT Use Only ERCOT 27	

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DUP	Duplicate
	Transaction submitted contains the same BGN02, BGN06, (if applicable), and ESI-ID as another received transaction from the same Supplier
MTI	ERCOT 27
MTI	Maintenance Type Code (ASI02) Invalid
ZIP	Invalid Zip Code
	Only applicable to the first five characters of the zip code, which are used for validation. ERCOT is the only entity that may validate on Zip Code.

Dep	REF03	352	Description	X	AN 1/80
			A free-form description to clarify the related data elements and their content		
			Used to further describe the reason code sent in REF02. Codes "A13" and "API" require a text explanation in this element.		

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Segment: **SE** Transaction Set Trailer
Position: 150
Loop:
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:**Semantic Notes:**

Comments: 1 SE is the last segment of each transaction set.

Notes: REQUIRED

SE~11~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

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814 NAESB RXQ.8.6.3 CUSTOMER INFORMATION ACCOUNT DATA SET

Functional Group ID=**GE**

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the General Request, Response or Confirmation Transaction Set (814) for use within the context of an Electronic Data Interchange (EDI) environment. This standard can be used to request actions to be performed, to respond to a request for actions to be performed or to confirm information related to actions performed.

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BGN	Beginning Segment	M	1		
			LOOP ID - N1			>1	
	040	N1	Name: Market Participants	O	1		
			LOOP ID - N1			1	
	040	N1	Name: Customer	C	1		
	050	N2	Additional Name Information	O	>1		
	060	N3	Service Delivery Address Information	C	1		
M	070	N4	Geographic Location	M	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - LIN			>1	
M	010	LIN	Item Identification	M	1		
M	020	ASI	Action or Status Indicator	M	1		
M	030	REF	Customer ID (REF~12/Q5)	M	1		
	030	REF	Status Reason (REF~1P)	C	>1		
	030	REF	Old Customer ID (REF~45)	C	1		
M	030	REF	Distribution Loss Factor (REF~AQ)	M	1		
	030	REF	Station ID (REF~SPL)	C	1		
	060	AMT	Installed Capacity (AMT~KC)	C	1		
	060	AMT	Peak Load Contribution (AMT~KZ)	C	1		
	060	AMT	Peak Demand (AMT~MA)	C	1		
M	060	AMT	Total (AMT~TA)	M	1		
			LOOP ID - NM1			>1	
M	080	NM1	Meter Level Information	M	1		n1
M	130	REF	Meter Multiplier (REF~4P)	M	>1		
M	130	REF	Number of Dials (REF~IX)	M	>1		
M	130	REF	Load Profile (REF~LO)	M	>1		
M	130	REF	Meter Type (REF~MT)	M	1		
	130	REF	Distribution Company Rate Class (REF~NH)	C	1		
	130	REF	Distribution Company Rate Subclass	C	1		

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M	130	REF	(REF~PR) Meter Reading Cycle (REF~TZ)	M	1
	140	DTM	Meter Cycle by Day of the Month (DTM~313)	O	1
M	150	SE	Transaction Set Trailer	M	1

Transaction Set Notes

1. The NM1 loop is used to identify the parties associated with the individual line item (LIN), such as an individual consumer in a consolidated third party Consumer Service Provider transaction.

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Segment: **ST Transaction Set Header**

Position: 010

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the start of a transaction set and to assign a control number

Syntax Notes:

Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

Comments:

Notes: Required

ST~814~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set	
			814 General Request, Response or Confirmation	
Must Use	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

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Segment: **BGN Beginning Segment**

Position: 020

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of a transaction set

Syntax Notes: 1 If BGN05 is present, then BGN04 is required.

Semantic Notes: 1 BGN02 is the transaction set reference number.

2 BGN03 is the transaction set date.

3 BGN04 is the transaction set time.

4 BGN05 is the transaction set time qualifier.

5 BGN06 is the transaction set reference number of a previously sent transaction affected by the current transaction.

Comments:

Notes: Required

BGN~11~200104021956531~20010402~~~200104011956531~~27

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BGN01	353	Transaction Set Purpose Code	M ID 2/2
			Code identifying purpose of transaction set	
			11 Response	
Must Use	BGN02	127	Reference Identification	M AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			A unique transaction identification number assigned by the originator of this transaction. This number must be unique over time.	
			Transaction Reference numbers will only contain uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded.	
Must Use	BGN03	373	Date	M DT 8/8
			Date expressed as CCYYMMDD	
			The transaction creation date - the date that the data was processed by the sender's application system.	
Used	BGN06	127	Reference Identification	C AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			REQUIRED	
			Cross-reference to the BGN02 of the Customer Information Request	
Must Use	BGN08	306	Action Code	M ID 1/1
			Code indicating type of action	
			Identifies the type of Retail Market 814 being sent or received. Ignore ANSI X12 definitions of these codes.	
			27 Moved - Follow Up	
			Customer Information Response	

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Segment: **N1 Name: Market Participants**

Position: 040

Loop: N1 Optional

Level: Heading

Usage: Optional

Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2 N105 and N106 further define the type of entity in N101.

Notes: N1 defines market participants involved in this business process, including Supplier, Distribution Company and Clearinghouse where applicable. There will be 2 or more N1 market participant segments depending on the number of market participants involved.
REQUIRED

N1~8S~Distribute-It, Inc.~1~123456789~~41

N1~SJ~Supply-It, Inc.~1~123456789~~40

N1~AY~Register-It, Inc.~1~123456789~~40

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
		8S	Consumer Service Provider (CSP)	
			Distribution Company (DC)	
		AY	Clearinghouse	
			Clearinghouse	
		SJ	Service Provider	
			Supplier	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Market Participant Name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
		1	D-U-N-S Number, Dun & Bradstreet	
		9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Market Participant Entity ID	
Dep	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	

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Required if Distribution Company is the sender, otherwise not used.

40	Receiver
41	Submitter
OA	Electronic Return Originator

Required when forwarded by Clearinghouse

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **N1** **Name: Customer**

Position: 040

Loop: N1 Conditional

Level: Heading

Usage: Conditional

Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 N105 and N106 further define the type of entity in N101.

Notes: Customer Name

REQUIRED

N1~8R~CUSTOMER NAME

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
		8R	Consumer Service Provider (CSP) Customer	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Supplier Name	

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Segment: **N2 Additional Name Information**
Position: 050
Loop: N1 Conditional
Level: Heading
Usage: Optional
Max Use: >1
Purpose: To specify additional names or those longer than 35 characters in length

Syntax Notes:

Semantic Notes:

Comments:

Notes: Used to communicate additional name information such as 'store number', etc
 REQUIRED if maintained by the Distribution Company

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Used	N201	93	Name Free-form name	O AN 1/60

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 REQ/RGQ Customer Information Model Business Practices (RXQ.8)
 X12 Implementation Guidelines

Segment: **N3 Service Delivery Address Information**

Position: 060

Loop: N1 Conditional

Level: Heading

Usage: Conditional

Max Use: 1

Purpose: To specify the location of the named party

Syntax Notes:

Semantic Notes:

Comments:

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N301	166	Address Information	M AN 1/55
			Address information	
Used	N302	166	Address Information	O AN 1/55
			Address information	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **N4 Geographic Location**

Position: 070

Loop: N1 Conditional

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To specify the geographic place of the named party

Syntax Notes: 1 If N406 is present, then N405 is required.

Semantic Notes:

- Comments:**
- 1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
 - 2 N402 is required only if city name (N401) is in the U.S. or Canada.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N401	19	City Name	M AN 2/30
			Free-form text for city name	
			REQUIRED	
Must Use	N402	156	State or Province Code	M ID 2/2
			Code (Standard State/Province) as defined by appropriate government agency	
			REQUIRED	
Must Use	N403	116	Postal Code	M ID 3/15
			Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	
			REQUIRED	

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Segment:	LIN Item Identification
Position:	010
Loop:	LIN Mandatory
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To specify basic item identification data
Syntax Notes:	1 If either LIN04 or LIN05 is present, then the other is required. 2 If either LIN06 or LIN07 is present, then the other is required. 3 If either LIN08 or LIN09 is present, then the other is required. 4 If either LIN10 or LIN11 is present, then the other is required. 5 If either LIN12 or LIN13 is present, then the other is required. 6 If either LIN14 or LIN15 is present, then the other is required. 7 If either LIN16 or LIN17 is present, then the other is required. 8 If either LIN18 or LIN19 is present, then the other is required. 9 If either LIN20 or LIN21 is present, then the other is required. 10 If either LIN22 or LIN23 is present, then the other is required. 11 If either LIN24 or LIN25 is present, then the other is required. 12 If either LIN26 or LIN27 is present, then the other is required. 13 If either LIN28 or LIN29 is present, then the other is required. 14 If either LIN30 or LIN31 is present, then the other is required.
Semantic Notes:	1 LIN01 is the line item identification
Comments:	1 See the Data Dictionary for a complete list of IDs. 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.
Notes:	This LIN echoes the LIN from the Customer Information Request. Required LIN~1~SH~EL~SH~HI Request for Historical Usage for each detail interval, which also includes a summary by meter. LIN~1~SH~EL~SH~HU Request for Historical Usage at the Meter Level or for Unmetered Services

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	LIN01	350	Assigned Identification	O AN 1/20
			Alphanumeric characters assigned for differentiation within a transaction set	
Must Use	LIN02	235	Product/Service ID Qualifier	M ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
			SH Service Requested	
Must Use	LIN03	234	Product/Service ID	M AN 1/48
			Identifying number for a product or service	
			Commodity	
			EL Electric Service	
Must Use	LIN04	235	Product/Service ID Qualifier	X ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	

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Must Use	LIN05	234	SH	Service Requested	X	AN 1/48
			Product/Service ID			
			Identifying number for a product or service			
			HI	Historical Interval Usage		
			HU	Historical Summarized Usage		

D R A F T IR/TEIS Working Paper
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Segment: **ASI** **Action or Status Indicator**
Position: 020
Loop: LIN Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the action to be taken with the information provided or the status of the entity described

Syntax Notes:**Semantic Notes:****Comments:**

Notes: Identifies the action to be taken or the status of a requested action for the service identified in the LIN segment.

Required

ASI~WQ~029

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ASI01	306	Action Code	M ID 1/2
			Code indicating type of action WQ Accept	
Must Use	ASI02	875	Maintenance Type Code	M ID 3/3
			Code identifying the specific type of item maintenance 029 Inquiry	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
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Segment: **REF Customer ID (REF~12/Q5)**

Position: 030

Loop: LIN Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To specify identifying information

Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes:

ID that uniquely defines the Customer in marketplace. Governing document define whether REF~12 or REF~Q5 is required

- REF~12 uses REF02 for ID; usually Distribution Company account number
- REF~Q5 uses REF03 for ID; usually the Service Delivery ID (e.g. ESI ID in ERCOT)

REQUIRED

REF~12~2931839200

REF~Q5~~10111111234567890ABCDEFGHIJKLMNOPS

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			12 Billing Account	
			Account number under which billing is rendered	
			Account number ID; sent in REF02	
Must Use	REF02	127	Customer Account ID; use when REF01=12	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
Used	REF03	352	Service Delivery ID; use when REF01=Q5	X AN 1/80
			A free-form description to clarify the related data elements and their content	

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Segment: **REF** **Status Reason (REF~1P)**

Position: 030

Loop: LIN Mandatory

Level: Detail

Usage: Conditional

Max Use: >1

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: REQUIRED when status information must be conveyed

REF~1P~HUU~HISTORICAL USAGE UNAVAILABLE

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			1P	Accessorial Status Code
				Used on the response when the request is accepted, and additional status information must be provided.
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			A13	Other
				Explanation Required in REF03.
			HIU	Historical Interval Usage Unavailable
				Historical Usage summarized to a meter level will be provided instead (867_02).
			HUU	Historical Usage Unavailable
				No Historical Usage
Dep	REF03	352	Description	X AN 1/80
			A free-form description to clarify the related data elements and their content	
				Used to further describe the reason code sent in REF02. Code "A13" requires a text explanation in this element.

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REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **REF** **Old Customer ID (REF~45)**

Position: 030

Loop: LIN Mandatory

Level: Detail

Usage: Conditional

Max Use: 1

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: Cross-reference ID used to identify a Customer if the Customer has received a new Customer ID in last 90 days
REQUIRED if Customer ID has changed in the last 90 days.
REF~45~1105687500

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			45 Old Account Number	
			Identifies accounts being changed	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

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Segment: **REF** **Distribution Loss Factor (REF~AQ)**

Position: 030

Loop: LIN Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: Defines the related loss factor value used in settlement

Required with Customer Information Set
REF~AQ~T

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification AQ Access Code	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			With the exception of code "T", each Distribution Company will post what each of the next 5 codes represent and how they are applied.	
			A Distribution Company Defined A	
			B Distribution Company Defined B	
			C Distribution Company Defined C	
			D Distribution Company Defined D	
			E Distribution Company Defined E	
			T Transmission Only	

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Segment: **REF** Station ID (REF~SPL)

Position: 030

Loop: LIN Mandatory

Level: Detail

Usage: Conditional

Max Use: 1

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: Defines the ISO-defined substation where distribution system is connected to transmission grid for the service delivery point.
Required with Customer Information Set
REF~SPL~MESA SUBSTATION

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification SPL Standard Point Location Code (SPLC)	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

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Segment: **AMT** **Installed Capacity (AMT~KC)**

Position: 060

Loop: LIN Mandatory

Level: Detail

Usage: Conditional

Max Use: 1

Purpose: To indicate the total monetary amount

Syntax Notes:

Semantic Notes:

Comments:

Notes: REQUIRED for ELECTRIC if available

AMT~KC~752

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	AMT01	522	Amount Qualifier Code	M ID 1/3
			Code to qualify amount	
			KC Obligated	
			An amount a party has an obligation to pay upon a successful performance by another party, (e.g., funds obligated on a contract)	
			Electric: Installed Capacity (as determined by control area).	
Must Use	AMT02	782	Monetary Amount	M R 1/18
			Monetary amount	
			Installed Capacity	

D R A F T IR/TEIS Working Paper
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Segment: **AMT** **Peak Load Contribution (AMT-KZ)**

Position: 060

Loop: LIN Mandatory

Level: Detail

Usage: Conditional

Max Use: 1

Purpose: To indicate the total monetary amount

Syntax Notes:

Semantic Notes:

Comments:

Notes: REQUIRED for ELECTRIC if available

AMT-KZ-752

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	AMT01	522	Amount Qualifier Code	M ID 1/3
			Code to qualify amount	
			KZ	Mortgagor's Monthly Obligations
				Electric: Peak load contribution for the transmission service calculation, coincident with the Distribution Company Peak.
Must Use	AMT02	782	Monetary Amount	M R 1/18
			Monetary amount	
			Peak Load Contribution	

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X12 Implementation Guidelines

Segment: **AMT** **Peak Demand (AMT~MA)**

Position: 060

Loop: LIN Mandatory

Level: Detail

Usage: Conditional

Max Use: 1

Purpose: To indicate the total monetary amount

Syntax Notes:

Semantic Notes:

Comments:

Notes: REQUIRED for ELECTRIC if the meter measures demand
REQUIRED for GAS
AMT~MA~423899.2

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	AMT01	522	Amount Qualifier Code	M ID 1/3
			Code to qualify amount	
			MA Maximum Amount	
			Peak Demand or Maximum Daily Quantity (MDQ).	
Must Use	AMT02	782	Monetary Amount	M R 1/18
			Monetary amount	
			Peak Demand (kW) for Electric or MDQ (Dekatherms) for gas.	

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Segment: **AMT** **Total (AMT~TA)**
Position: 060
Loop: LIN Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the total monetary amount

Syntax Notes:

Semantic Notes:

Comments:

Notes: REQUIRED

AMT~TA~12345678.9

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	AMT01	522	Amount Qualifier Code	M ID 1/3
			Code to qualify amount	
			TA	Total Annual Sales
				Total kWh (Electric) or Dekatherms (Gas)
Must Use	AMT02	782	Monetary Amount	M R 1/18
			Monetary amount	
				Total kWh (Electric) or Dekatherms (Gas)

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Segment: **NM1 Meter Level Information**

Position: 080

Loop: NM1 Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To supply the full name of an individual or organizational entity

Syntax Notes: 1 If either NM108 or NM109 is present, then the other is required.

2 If NM111 is present, then NM110 is required.

Semantic Notes: 1 NM102 qualifies NM103.

Comments: 1 NM110 and NM111 further define the type of entity in NM101.

Notes: REQUIRED

NM1~MQ~3

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	NM101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			MQ Metering Location	
Must Use	NM102	1065	Entity Type Qualifier	M ID 1/1
			Code qualifying the type of entity	
			3 Unknown	

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X12 Implementation Guidelines

Segment:	REF Meter Multiplier (REF~4P)
Position:	130
Loop:	NM1 Mandatory
Level:	Detail
Usage:	Mandatory
Max Use:	>1
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required. 2 If either C04003 or C04004 is present, then the other is required. 3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	
Notes:	One meter multiplier segment for each meter type, creating the potential for more than one REF~4P segment per NM1 Loop. For instance, if the meter has multiple meter types, and therefore the REF~MT segment is REF~MT~COMBO, there will be multiple REF~4P segments, one to indicate the meter multiplier for each type. For example, <pre>NM1~MQ~3~~~~~32~1234568MG REF~MT~COMBO REF~4P~1200~K1015~TU^41 REF~4P~1~KH015</pre> Required with Customer Information Set, one for each meter type for each meter that is for billing purposes. Not used for UNMETERED services <pre>REF~4P~10~KHMON~TU^41 REF~4P~1~K1MON~TU^41</pre>

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			4P Affiliation Number	
			Meter Multiplier	
			(Ending Reading - Beginning Reading) * Meter Multiplier = Billed Usage	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Meter Multiplier	
Must Use	REF03	352	Description	X AN 1/80
			A free-form description to clarify the related data elements and their content	
			Meter Type (see REF~MT for valid codes). "COMBO" is not a valid code for this element.	
Must Use	REF04	C040	Reference Identifier	O
			To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier	
			Note this is a composite data element. Populate C04001 & C04002.	

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Must Use	C04001	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			TU Trial Location Code	
			Time of Use	
Must Use	C04002	127	Reference Identification	M AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			NOTE: Other codes (as identified by UIG) can be used to identify quantities measured by the meter, but should not be used to identify tariffed/calculated measurements.	
			41 Off Peak	
			42 On Peak	
			43 Intermediate Peak	
			51 Totalizer	

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X12 Implementation Guidelines

Segment: **REF** **Number of Dials (REF~IX)**

Position: 130

Loop: NM1 Mandatory

Level: Detail

Usage: Mandatory

Max Use: >1

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes:

One number of dials segment for each meter type, creating the potential for more than one REF~IX segment per NM1 Loop.
REQUIRED, one for each meter type for each meter that is used for billing purposes that has dials. Not used for UNMETERED services or demand
REF~IX~6.0~KHMON~TU^51

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			IX Item Number	
			Number of Dials on the Meter displayed as X.Y, where X is dials to the left of the decimal point, and Y dials to the right.	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Number of Dials	
Must Use	REF03	352	Description	X AN 1/80
			A free-form description to clarify the related data elements and their content	
			Meter Type (see REF~MT for valid codes). "COMBO" is not a valid code for this element.	
Must Use	REF04	C040	Reference Identifier	O
			To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier	
			Note that this is a composite data element. Populate C04001 and C04002.	
Must Use	C04001	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			TU Trial Location Code	
			Time of Use	
Must Use	C04002	127	Reference Identification	M AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Other codes can be used to identify quantities measured by the meter, but should not be used to identify tariffed/calculated measurements.	

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41	Off Peak
42	On Peak
43	Intermediate Peak
51	Totalizer

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Segment: **REF** **Load Profile (REF~LO)**

Position: 130

Loop: NM1 Mandatory

Level: Detail

Usage: Mandatory

Max Use: >1

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes:

REQUIRED:

(a) for each non-interval meter used for billing purposes, and
(b) if load profile is available. Includes UNMETERED services.
REF~LO~GS

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			LO	Load Planning Number
			Load profile	
			For gas, it is critical that a base line and trend be provided if the Supplier is responsible for scheduling nominations. The Load Profile information is used for both nominations and scheduling.	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Electric: Load Profile	
			Gas: Baseline	
Dep	REF03	352	Description	X AN 1/80
			A free-form description to clarify the related data elements and their content	
			Electric: Not Used	
			Gas: Trend (DTH per day)	

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Segment: **REF Meter Type (REF~MT)**

Position: 130

Loop: NM1 Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: See "RXQ.3.2.34 Meter Type". Coded value that defines the measure type and the frequency the meter is read. Only one Meter Type REF~MT segment for each NM1 loop. Use code 'COMBO' for multiple meter types, with specific meter types identified in REF03 for each meter attribute.
REQUIRED for each meter that is used for billing purposes. Not used for UNMETERED services.
REF~MT~KHMON
REF~MT~TZDAY
REF~MT~COMBO

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			MT Meter Ticket Number	
			Meter Type	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Meter type is a five-character field: (a) first two characters are type of consumption; (b) last three characters are metering interval reported for billing purposes. "COMBO" is used for meters that record more than one measurement.	
			Valid values include combinations of the following:	
			Type of Consumption	
			Electric:	
			-EA: Each	
			-K1: kiloWatt Demand (kW)	
			-K2: Kilovolt Amperes Reactive Demand (kVAR)	
			-K3: Kilovolt Amperes Reactive Hour (kVARH)	
			-K4: Kilovolt Amperes (kVA)	
			-K5: Kilovolt Amperes Reactive (kVAR)	
			-KH: kiloWatt Hour (kWh)	
			-T9: Thousand kiloWatt Hours (MW)	
			Gas:	
			-BY: British Thermal Unit - (Btu)	
			-BZ: Million BTUs (MMBtu - Dekatherms)	
			-EA: Each (Used for Unmetered Accounts)	
			-HH: Hundred Cubic Feet (Ccf)	
			-TD: Therms	

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-TZ: Thousand Cubic Feet (Mcf)

Metering Interval Reported for Billing Purposes

-nnn: Number of minutes from 001 to 999

-ANN: Annual

-BIA: Bi-annual

-BIM: Bi-monthly

-DAY: Daily

-MON: Monthly

-QTR: Quarterly

-TOU: Time of Use

Examples:

-KHMOM: kiloWatt Hours Per Month

-K1015: kiloWatt Demand per 15 minute interval

-HHMON: Hundred Cubic Feet Per Month

-TZDAY: Thousand Cubic Feet Per Day

-COMBO: meter has multiple measurements, e.g. both kWh and kw.

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Segment: **REF** **Distribution Company Rate Class (REF~NH)**

Position: 130

Loop: NM1 Mandatory

Level: Detail

Usage: Conditional

Max Use: 1

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: Required with Customer Information Set for each meter that is used for billing purposes. Also used for UNMETERED services.
REF~NH~RS1

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			NH Rate Card Number	
			Distribution Company rate class or tariff	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Distribution Company Rate Class or Tariff	

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Segment: **REF Distribution Company Rate Subclass (REF~PR)**

Position: 130

Loop: NM1 Mandatory

Level: Detail

Usage: Conditional

Max Use: 1

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: Required with Customer Information Set if maintained by Distribution Company, for each meter used for billing purposes, including UNMETERED services
REF~PR~123

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			PR Price Quote Number	
			Distribution Company Rate Subclass - Used to provide further classification of a rate.	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Distribution Company Rate Subclass	

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Segment: **REF** **Meter Reading Cycle (REF~TZ)**

Position: 130

Loop: NM1 Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: Meter cycles will be provided on the Distribution Company's website.

Required for each meter used for billing purposes. For unmetered services, the billing cycle is provided.
REF~TZ~15

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			TZ Total Cycle Number	
			Cycle number when the meter will be read.	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Metered: Meter Reading Cycle	
			Unmetered: Billing Cycle	

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Segment: **DTM** **Meter Cycle by Day of the Month (DTM~313)**

Position: 140

Loop: NM1 Mandatory

Level: Detail

Usage: Optional

Max Use: 1

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PR Request: Required if changing meter read based on a day of the month

All other Requests: Not Used

All other Responses: Not Used

DTM~313~~~~DD~01

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			313 Cycle	
			New Permanent Read Day	
Must Use	DTM05	1250	Date Time Period Format Qualifier	X ID 2/3
			Code indicating the date format, time format, or date and time format	
			DD Day of Month in Numeric Format	
			The numeric day of the month expressed using a lead zero if the number of the day is less than ten	
Must Use	DTM06	1251	Date Time Period	X AN 1/35
			Expression of a date, a time, or range of dates, times or dates and times	
			Day of month that the meter will be read, in DD format (i.e., 01 - 28).	

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Segment: **SE** Transaction Set Trailer
Position: 150
Loop:
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:**Semantic Notes:**

Comments: 1 SE is the last segment of each transaction set.

Notes: Required

SE~11~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

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867 NAESB RXQ.8.6.4 CUSTOMER INFORMATION USAGE DATA SET

Functional Group ID=**PT**

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Product Transfer and Resale Report Transaction Set (867) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to: (1) report information about product that has been transferred from one location to another; (2) report sales of product from one or more locations to an end customer; or (3) report sales of a product from one or more locations to an end customer, and demand beyond actual sales (lost orders). Report may be issued by either buyer or seller.

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BPT	Beginning Segment for Product Transfer and Resale	M	1		
M	060	REF	Customer ID (REF~12/Q5)	M	1		
			LOOP ID - N1			>1	
M	080	N1	Name: Market Participants	M	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - PTD			1	
M	010	PTD	Non-Interval Detail	M	1		
	020	DTM	Service Period Start (DTM~150)	O	10		
	020	DTM	Service Period End (DTM~151)	O	10		
	020	DTM	Meter Exchange Date (DTM~514)	O	10		
	030	REF	Meter Role (REF~JH)	O	20		
	030	REF	Meter Type (REF~MT)	O	20		
			LOOP ID - QTY			>1	
	110	QTY	Quantity	O	1		
	160	MEA	Meter Reads (MEA~~PRQ)	O	40		
	160	MEA	Transformer Loss Factor (MEA~~CO)	O	40		
	160	MEA	Meter Multiplier (MEA~~MU)	O	40		
	160	MEA	Power Factor (MEA~~ZA)	O	40		
			LOOP ID - PTD			>1	
M	010	PTD	Unmetered Services	M	1		
	020	DTM	Service Period Start (DTM~150)	O	10		
	020	DTM	Service Period End (DTM~151)	O	10		
	030	REF	Unmetered Service Type (REF~PRT)	O	20		
			LOOP ID - QTY			>1	
	110	QTY	Quantity	O	1		
			LOOP ID - PTD			>1	

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M	010	PTD	Interval Summary	M	1
	020	DTM	Service Period Start (DTM~150)	O	10
	020	DTM	Service Period End (DTM~151)	O	10
	020	DTM	Meter Exchange Date (REF~514)	O	10
	030	REF	Meter Role (REF~JH)	O	20
	030	REF	Meter Type (REF~MT)	O	20
	LOOP ID - QTY				>1
	110	QTY	Quantity	O	1
	160	MEA	Measurements (Transformer Loss Factor)	O	40
	160	MEA	Power Factor (MEA~~ZA)	O	40
LOOP ID - PTD					>1
M	010	PTD	Interval Detail	M	1
	020	DTM	Service Period Start (DTM~150)	O	10
	020	DTM	Service Period End (DTM~151)	O	10
	020	DTM	Meter Exchange Date (REF~514)	O	10
	030	REF	Channel Number (REF~6W)	O	20
	030	REF	Meter Type (REF~MT)	O	20
	030	REF	Meter Role (REF~JH)	O	20
LOOP ID - QTY					>1
	110	QTY	Quantity	O	1
	210	DTM	Interval End Date Time (DTM~194)	O	10

Summary:

	<u>Pos.</u> <u>No.</u>	<u>Seg.</u> <u>ID</u>	<u>Name</u>	<u>Req.</u> <u>Des.</u>	<u>Max.Use</u>	<u>Loop</u> <u>Repeat</u>	<u>Notes and</u> <u>Comments</u>
M	030	SE	Transaction Set Trailer	M	1		

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Segment: **ST Transaction Set Header**

Position: 010

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the start of a transaction set and to assign a control number

Syntax Notes:

Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

Comments:

Notes: REQUIRED

ST~867~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set	
			867 Product Transfer and Resale Report	
Must Use	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

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Segment: **BPT** **Beginning Segment for Product Transfer and Resale**
Position: 020
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the beginning of the Product Transfer and Resale Report Transaction Set and transmit identifying data

- Syntax Notes:** 1 If either BPT05 or BPT06 is present, then the other is required.
Semantic Notes: 1 BPT02 identifies the transfer/resale number.
 2 BPT03 identifies the transfer/resale date.
 3 BPT08 identifies the transfer/resale time.
 4 BPT09 is used when it is necessary to reference a Previous Report Number.

Comments:**Notes:**

REQUIRED

BPT~52~200107310001~20000731~C1~~~~~2000107300003

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BPT01	353	Transaction Set Purpose Code	M ID 2/2
			Code identifying purpose of transaction set	
			52 Response to Historical Inquiry	
			Response to a request for historical meter reading	
Must Use	BPT02	127	Reference Identification	O AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			A unique transaction identification number assigned by the originator of this transaction. This number must be unique over time.	
			Transaction Reference numbers will only contain uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded.	
Must Use	BPT03	373	Date	M DT 8/8
			Date expressed as CCYYMMDD	
			The transaction creation date - the date that the data was processed by the sender's application system.	
Used	BPT04	755	Report Type Code	O ID 2/2
			Code indicating the title or contents of a document, report or supporting item	
			Provides header-level indication of what types of usage are included	
			C1 Cost Data Summary	
			Interval Meters	
			DD Distributor Inventory Report	
			Non-interval metered and unmetered	
			DR Datalog Report	
			Mixed Values - reporting cycle contains periods of both non-interval and interval data.	
Must Use	BPT09	127	Reference Identification	M AN 1/30
			Reference information as defined for a particular Transaction Set or as	

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specified by the Reference Identification Qualifier

Cross-references to the 814 Customer Information Request Transaction
ID (BGN06 in original 814 Request)

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Segment:	REF	Customer ID (REF~12/Q5)
Position:	060	
Loop:		
Level:	Heading	
Usage:	Mandatory	
Max Use:	1	
Purpose:	To specify identifying information	
Syntax Notes:	1 At least one of REF02 or REF03 is required. 2 If either C04003 or C04004 is present, then the other is required. 3 If either C04005 or C04006 is present, then the other is required.	
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.	
Comments:		
Notes:	ID that uniquely defines the Customer in marketplace. Applicable Regulatory Authority governing documents define whether REF~12 or REF~Q5 is required. - REF~12 uses REF02 for ID; usually Distributionj Company account number - REF~Q5 uses REF03 for ID; usually the Service Delivery ID (e.g. Service Delivery ID in ERCOT) REQUIRED REF~12~1234567890 REF~Q5~~10111111234567890ABCDEFGHIJKLMNOPS	

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			12 Billing Account	
			Account number under which billing is rendered	
			Account number ID; sent in REF02	
			Q5 Property Control Number	
			Service Delivery ID (e.g. ESIID); sent in REF03	
Used	REF02	127	Customer Account ID; use when REF01=12	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
Must Use	REF03	352	Service Delivery ID; use when REF01=Q5	X AN 1/80
			A free-form description to clarify the related data elements and their content	

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Segment: **N1 Name: Market Participants**

Position: 080

Loop: N1 Mandatory

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2 N105 and N106 further define the type of entity in N101.

Notes: Used to identify parties to the transaction. A separate N1 loop and N1 segment is required for each market participant, including any clearinghouses (e.g. ERCOT)

REQUIRED

N1~8S~Distribution-It~1~007909411~~41

N1~SJ~Supply-It~1~007909411~~40

N1~AY~Clear-It~1~007909411~~OA

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
		8S	Consumer Service Provider (CSP)	
			Distribution Company (Distribution Company)	
		AY	Clearinghouse	
		SJ	Service Provider	
			Supplier	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
		1	D-U-N-S Number, Dun & Bradstreet	
		9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
Dep	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
		40	Receiver	
		41	Submitter	
		OA	Electronic Return Originator	
			A firm, organization, or individual who collects a prepared tax return for the purpose of having an	

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electronic return produced and who obtains the
taxpayer's signature for electronic filing

Used when forwarding through Clearinghouse

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Segment: **PTD Non-Interval Detail**

Position: 010

Loop: PTD Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data

Syntax Notes: 1 If either PTD02 or PTD03 is present, then the other is required.

2 If either PTD04 or PTD05 is present, then the other is required.

Semantic Notes:

Comments:

Notes:

PTD = PL (Non-Interval Detail)

One PTD~PL Loop for each meter for each unit of measure.

PTD~PL~~~MG~1234568MG

PTD~PL~~~~~AO (used to report subtractive metering off a master meter)

PTD~PL~~~MG~1234568MG~MD (used to report tampering)

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code	M ID 2/2
			Code identifying the type of product transfer	
			PL Property Level Movement/Sale	
			Non-Interval Detail	
Dep	PTD04	128	Reference Identification Qualifier	X ID 2/3
			Code qualifying the Reference Identification	
			MG Meter Number	
			Not used if the PTD06= "AO" or "AI"	
Dep	PTD05	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Meter Number	
			Meter numbers will contain only uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded, and significant leading and trailing zeros that are part of the meter number must be present.	
			Not used if the PTD06= "AO" or "AI"	
			When using codes "AI" and "AO", the Meter Number is not provided in the in the PTD04/PTD05.	
			When using codes "CD", "DC", "DM", and "MD", the Meter Number must be provided in the PTD04/PTD05.	
Used	PTD06	486	Product Transfer Movement Type Code	O ID 2/2
			To indicate the type of product transfer movement	
			To indicate the type of product transfer movement. This field is only used when reporting the type of Master/Additive usage, Master/Subtractive usage or missing or abundance of consumption adjustment.	
			AI Adjustment In	

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AO	Additive Metering
	Additive Usage for Additive meters off the master meter where a different Service Delivery ID has been assigned to the master and/or all applicable subtractive or additive meters. The receiver must add this consumption to the Service Delivery ID. When the PTD06 equals "AI", the REF~JH equals "A".
CD	Adjustment Out
	Subtractive Metering
DC	Subtractive Usage for Subtract meters off the master meter where a different Service Delivery ID has been assigned to the master and/or all applicable subtractive or additive meters. . The receiver must subtract this consumption from the Service Delivery ID. When the PTD06 equals "AO", the REF~JH equals "S".
	Customer to Distributor
DM	Added Flat /Bypass- Missing or Abundance of Consumption
	For adjusting consumption when the added consumption provided has not been registered by the meter. The condition exists only for non-interval meters on the same Service Delivery ID. The receiver must add this consumption to the meter number provided in the PTD05. When the PTD06 equals "CD", the REF~JH equals "A".
MD	Distributor to Customer
	Added Slow- Missing or Abundance of Consumption
MD	For adjusting consumption when the added consumption provided has not been registered by the meter. The conditions exists only for non-interval meters on the same Service Delivery ID. The receiver must add this consumption to the meter number provided in the PTD05. When the PTD06 equals "DC", the REF~JH equals "A".
	Distributor to Manufacturer
MD	Subtracted Fast- Missing or Abundance of Consumption
	For adjusting consumption when the subtracted consumption provided has not been registered by the meter. The condition exists only for non-interval meters on the same Service Delivery ID. The receiver must add this consumption to the meter number provided in the PTD05. When the PTD06 equals "DM", the REF~JH equals "S".
MD	Manufacturer to Distributor
	Added Tampering- Missing or Abundance of Consumption
	For adjusting consumption when the added

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consumption provided has not been registered by the meter. The condition exists only for non-interval meters on the same Service Delivery ID. The receiver must add this consumption to the meter number provided in the PTD05. When the PTD06 equals "MD", the REF~JH equals "A".

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **DTM** **Service Period Start (DTM~150)**

Position: 020

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times

- Syntax Notes:**
- 1 At least one of DTM02 DTM03 or DTM05 is required.
 - 2 If DTM04 is present, then DTM03 is required.
 - 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = PL (Non-Interval Detail)

REQUIRED, unless an Exchange Date (DTM~514) is substituted for this code.

DTM~150~20010101

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			150 Service Period Start	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
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Segment: **DTM** **Service Period End (DTM~151)**

Position: 020

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times

- Syntax Notes:**
- 1 At least one of DTM02 DTM03 or DTM05 is required.
 - 2 If DTM04 is present, then DTM03 is required.
 - 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = PL (Non-Interval Detail)

REQUIRED, unless an Exchange Date (DTM~514) is substituted for this code.

DTM~151~20010131

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			151 Service Period End	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **DTM** **Meter Exchange Date (DTM~514)**

Position: 020

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = PL (Non-Interval Detail)

REQUIRED when a meter is exchanged and the meter agent does not change.

Date Range in the first PTD is shown as:

DTM~150~20010101

DTM~514~20010114

Date Range in the second PTD is shown as:

DTM~514~20010114

DTM~151~20010128

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			514 Transferred	
			Exchange Date	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
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Segment: **REF** **Meter Role (REF~JH)**

Position: 030

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 20

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: PTD = PL (Non-Interval Detail)

REQUIRED

REF~JH~A

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			JH Tag	
			Meter Role	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			A Additive	
			This consumption must be added to the summarized total	
			I Ignore	
			This consumption did not contribute to the summarized total (do nothing)	
			S Subtractive	
			This consumption must be subtracted from the summarized total	

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Segment: **REF** **Meter Type (REF~MT)**

Position: 030

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 20

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: PTD = PL (Non-Interval Detail)

This segment is sent to indicate the type of usage that is reported in this PTD loop.

REQUIRED

REF~MT~KHMON

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			MT	Meter Ticket Number
			Meter Type	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			See "RXQ.3.2.24".	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **QTY** Quantity

Position: 110

Loop: QTY Optional

Level: Detail

Usage: Optional

Max Use: 1

Purpose: To specify quantity information

Syntax Notes: 1 At least one of QTY02 or QTY04 is required.

2 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.

Comments:

Notes: PTD = PL (Non-Interval Detail)

There will be one QTY loop for each Time of Use (i.e., one for On Peak kWh, one for Off Peak kWh, one for Total kWh, etc.)

Note Quantity is the total measured consumption for the billable period including all billable adjustments applicable, e.g., transformer loss factor and the meter multiplier. The Quantity in the QTY02 has not been adjusted for any additive/Master Meter, subtractive/Master Meter or missing or abundance of consumption occurring in the PTD~PL when the PTD06 has a valid code.

The QTY02 must equal the MEA03 when the MEA03 is provided.

REQUIRED

QTY~QD~1000

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity	
			92 Allotted Usage Quantity	
			Estimated for reasons beyond the control of MDMA	
			AO Verified Receipts	
			Verified as actual value	
			KA Estimated	
			Quantity is estimated	
			QD Quantity Delivered	
			Quantity is actual	
Must Use	QTY02	380	Quantity	X R 1/15
			Numeric value of quantity	
			Total Consumption / Max Demand	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **MEA** **Meter Reads (MEA~~PRQ)**

Position: 160

Loop: QTY Optional

Level: Detail

Usage: Optional

Max Use: 40

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

Syntax Notes:

- 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
- 2 If MEA05 is present, then MEA04 is required.
- 3 If MEA06 is present, then MEA04 is required.
- 4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
- 5 Only one of MEA08 or MEA03 may be present.

Semantic Notes: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments: 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes: PTD = PL (Non-Interval Detail)

REQUIRED

MEA03 must equal QYT02 when the MEA07=51

MEA~~PRQ~1000~~~~51

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			PRQ Product Reportable Quantity	
			Consumption	
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	
			Total consumption after multiplier is applied.	
Must Use	MEA07	935	Measurement Significance Code	O ID 2/2
			Code used to benchmark, qualify or further define a measurement value	
		41	Off Peak	
		42	On Peak	
		43	Intermediate	
			Mid-Peak	
		51	Total	
			Totalizer/Total/Max (Demand)	
		71	Low	
			Summer Super On-Peak	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **MEA Transformer Loss Factor (MEA~~CO)**

Position: 160

Loop: QTY Optional

Level: Detail

Usage: Optional

Max Use: 40

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

- Syntax Notes:**
- 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
 - 2 If MEA05 is present, then MEA04 is required.
 - 3 If MEA06 is present, then MEA04 is required.
 - 4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
 - 5 Only one of MEA08 or MEA03 may be present.

Semantic Notes: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments: 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes: PTD = PL (Non-Interval Detail)

REQUIRED when the transformer loss is not measured by the meter

The value in the field will always be a positive value

MEA~~CO~1.015 (format when the factor is positive)

MEA~~CO~.985 (format when the factor is negative)

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			CO Core Loss	
			Transformer Loss Factor	
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	
			Transformer Loss Factor	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **MEA** **Meter Multiplier (MEA~~MU)**

Position: 160

Loop: QTY Optional

Level: Detail

Usage: Optional

Max Use: 40

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

Syntax Notes: 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.

2 If MEA05 is present, then MEA04 is required.

3 If MEA06 is present, then MEA04 is required.

4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.

5 Only one of MEA08 or MEA03 may be present.

Semantic Notes: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments: 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes: PTD = PL (Non-Interval Detail)

If no meter multiplier, then populate with "1"

Note: Format of the multiplier could be in the form of a fraction (e.g. 48.78432)

REQUIRED

MEA~~MU~1

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			MU	Multiplier
				Meter Multiplier
				(Ending Reading - Beginning Reading) * Meter Multiplier = Billed Usage
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	
			Meter Multiplier	

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Segment: **MEA** **Power Factor (MEA~~ZA)**

Position: 160

Loop: QTY Optional

Level: Detail

Usage: Optional

Max Use: 40

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

- Syntax Notes:**
- 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
 - 2 If MEA05 is present, then MEA04 is required.
 - 3 If MEA06 is present, then MEA04 is required.
 - 4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
 - 5 Only one of MEA08 or MEA03 may be present.

Semantic Notes: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments: 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes: PTD = PL (Non-Interval Detail)

REQUIRED if measured

MEA~~ZA~.95

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			ZA Power Factor	
			Relationship between watts and volt - amperes necessary to supply electric load	
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	
			Power Factor	

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Segment: **PTD Unmetered Services**

Position: 010

Loop: PTD Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data

Syntax Notes: 1 If either PTD02 or PTD03 is present, then the other is required.

2 If either PTD04 or PTD05 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = BD (Unmetered Services)

One PTD loop is required for each unmetered service type.

PTD~BD

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code	M ID 2/2
			Code identifying the type of product transfer	
			BD	Issue - Other Department
				Unmetered Services Detail

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Segment: **DTM** **Service Period Start (DTM~150)**

Position: 020

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times

- Syntax Notes:**
- 1 At least one of DTM02 DTM03 or DTM05 is required.
 - 2 If DTM04 is present, then DTM03 is required.
 - 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = BD (Unmetered Services)

REQUIRED

DTM~150~20010101

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			150 Service Period Start	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

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Segment: **DTM** **Service Period End (DTM~151)**

Position: 020

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times

- Syntax Notes:**
- 1 At least one of DTM02 DTM03 or DTM05 is required.
 - 2 If DTM04 is present, then DTM03 is required.
 - 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = BD (Unmetered Services)

REQUIRED

DTM~151~20010131

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			151 Service Period End	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

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Segment: **REF Unmetered Service Type (REF~PRT)**

Position: 030

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 20

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes:

This segment is used to provide additional information to the Supplier for the specified Unmetered Service. It describes the type of device which this measurement loop references and can include additional text information which may be useful to the Supplier (i.e., a specific wattage of a light, additional text information for further clarification, etc.)

PTD = BD (Unmetered Services)

REQUIRED if there are unmetered services on the account

REF~PRT~MV~750

REF~PRT~SD~400 Company Owned

REF~PRT~SD~400 Customer Owned

REF~PRT~MV~Third party maintained facilities

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			PRT Product Type	
			Defined Unmetered Service Type	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			If a new code is needed, it must be requested via the Change Control process.	
			AN Antenna	
			AR Argon	
			BB Bill Boards	
			BS Bus Shelters	
			CU Cat Unit	
			ED Electronic Device	
			FL Fluorescent	
			HA Historical/Antique	
			IN Incandescent	
			LV Levys	
			MH Metal Halide	
			MV Mercury Vapor	

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OT	Other Un-Metered
PA	Power Analog node
PB	Phone Booth
PO	Phone Outlet
PS	Pump Station
RR	Rail Road Crossings
SD	Sodium
TL	Traffic Lights
TR	Tranceiver
WM	Wallpacked Mercury Vapor
WS	Warning Sirens

Dep	REF03	352	Description	X	AN 1/80
A free-form description to clarify the related data elements and their content					
Used to provide additional clarification information to the Supplier for the Unmetered Service when necessary. When applicable, used to provide the specific wattage/lumens for a light.					

D R A F T IR/TEIS Working Paper
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Segment: **QTY** Quantity

Position: 110

Loop: QTY Optional

Level: Detail

Usage: Optional

Max Use: 1

Purpose: To specify quantity information

Syntax Notes: 1 At least one of QTY02 or QTY04 is required.

2 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.

Comments:

Notes: PTD = BD (Unmetered Services)

One QTY Loop is required for each consumption quantity per device.

Note: The billable quantity is the total unmetered consumption per device type for the billable period. There is no PTD06= "AI","A0","CD","DC","DM" or "MD" Adjusted Consumption in this loop.
QTY~QD~2000~EA^20^KH^100

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity QD Quantity Delivered	
Must Use	QTY02	380	Quantity	X R 1/15
			Numeric value of quantity Total consumption of device type.	
Must Use	QTY03	C001	Composite Unit of Measure	O
			To identify a composite unit of measure (See Figures Appendix for examples of use) Note this is a composite data element, populate C00101	
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken EA Each	
Must Use	C00103	649	Multiplier	O R 1/10
			Value to be used as a multiplier to obtain a new value Number of unmetered devices for this specific Unmetered Service Type (as defined in the REF~PRT segment).	
Must Use	C00104	355	Unit or Basis for Measurement Code	O ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken KH Kilowatt Hour	
Must Use	C00106	649	Multiplier	O R 1/10
			Value to be used as a multiplier to obtain a new value This represents the consumption quantity per device	

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Segment: **PTD Interval Summary**

Position: 010

Loop: PTD Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data

Syntax Notes: 1 If either PTD02 or PTD03 is present, then the other is required.

2 If either PTD04 or PTD05 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = BO (Interval Summary)

One PTD~BO loop is required for each meter for each unit of measure.

PTD~BO~~~MG~1234568MG

PTD~BO~~~~~AI (used to report Additive/Master metering usage)

PTD~BO~~~~~AO (used to report Subtractive/Master metering usage)

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code	M ID 2/2
			Code identifying the type of product transfer	
			BO Designated Items	
			Interval Summary - interval meter consumption summarized across intervals.	
Dep	PTD04	128	Reference Identification Qualifier	X ID 2/3
			Code qualifying the Reference Identification	
			MG Meter Number	
			Not used if the PTD06 = "AO" or "AI".	
Dep	PTD05	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Meter Number	
			Meter numbers will contain only uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded, and significant leading and trailing zeros that are part of the meter number must be present.	
			Not used if the PTD06 = "AO" or "AI".	
Used	PTD06	486	Product Transfer Movement Type Code	O ID 2/2
			To indicate the type of product transfer movement	
			AI Adjustment In	
			Additive Metering	
			Additive Usage for Additive meters off the master meter where a different Service Delivery ID has been assigned to the master and/or all applicable subtractive or additive meters. When the PTD06 equals "AI", the REF~JH equals "A".	
			AO Adjustment Out	
			Subtractive Metering	

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Additive Usage for Subtract meters off the master meter where a different Service Delivery ID has been assigned to the master and/or all applicable subtractive or additive meters. . When the PTD06 equals "AO", the REF~JH equals "A".

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Segment: **DTM Service Period Start (DTM~150)**

Position: 020

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times

- Syntax Notes:**
- 1 At least one of DTM02 DTM03 or DTM05 is required.
 - 2 If DTM04 is present, then DTM03 is required.
 - 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = BO (Interval Summary)

REQUIRED, unless an Exchange Date (DTM~514) is substituted for this code.

DTM~150~20010101

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			150 Service Period Start	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **DTM Service Period End (DTM~151)**

Position: 020

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times

- Syntax Notes:**
- 1 At least one of DTM02 DTM03 or DTM05 is required.
 - 2 If DTM04 is present, then DTM03 is required.
 - 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = BO (Interval Summary)

REQUIRED, unless an Exchange Date (DTM~514) is substituted for this code.

DTM~151~20010131

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			151 Service Period End	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **DTM** **Meter Exchange Date (REF~514)**

Position: 020

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = BO (Interval Summary)

REQUIRED when a meter is exchanged and the meter agent does not change.

Date Range in the first PTD is shown as:

DTM~150~19990201

DTM~514~19990214

Date Range in the second PTD is shown as:

DTM~514~19990214

DTM~151~19990228

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			514 Transferred	
			Exchange Date	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **REF** **Meter Role (REF~JH)**

Position: 030

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 20

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: PTD = BO (Interval Summary)

REQUIRED

REF~JH~A

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			JH Tag	
			Meter Role	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
		A	Additive	
			This consumption must be added to the summarized total	
		I	Ignore	
			This consumption did not contribute to the summarized total (do nothing)	
		S	Subtractive	
			This consumption must be subtracted from the summarized total	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **REF** **Meter Type (REF~MT)**

Position: 030

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 20

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: PTD = BO (Interval Summary)

This segment is sent primarily to indicate the type of usage that is reported in this PTD loop. There will be one PTD loop for each unit of measure.

REQUIRED

REF~MT~KHMON

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			MT Meter Ticket Number	
			Meter Type	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			See "RXQ.3.2.24".	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **QTY** Quantity

Position: 110

Loop: QTY Optional

Level: Detail

Usage: Optional

Max Use: 1

Purpose: To specify quantity information

Syntax Notes: 1 At least one of QTY02 or QTY04 is required.

2 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.

Comments:

Notes: PTD = BO (Interval Summary)

REQUIRED

Note: Quantity is the total measured consumption for the billable period including all billable adjustments applicable, e.g., transformer loss factor and the meter multiplier. The quantity in the QTY02 as not been adjusted for any master/additive/ subtractive meter usage. The QTY02 must equal the MEA03 when the MEA03 is provided.

Quantity is sent with a minimum of two digits and a maximum of four digits to the right of the decimal point, e.g., 525.15; 567.1375, etc., while adhering to the ANSI rules for providing Real numbers. For instance, if the quantity reported is:

525	then the QTY02 is reported as	525
525.1275	then the QTY02 is reported as	525.1275
525.12	then the QTY02 is reported as	525.12
525.10	then the QTY02 is reported as	525.1
0	then the QTY02 is reported as	0

Leading zeros are suppressed and trailing zeros are truncated. Please refer to ANSI ASC X12 Version 004010 for further information on ANSI data elements, segments and loop usage and requirements.

Distribution Company should round - not truncate to adhere to the min/max requirements of 2/4 digits to the right of the decimal.

QTY~QD~746

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity	
			KA Estimated	
			QD Quantity Delivered	
			Quantity is estimated	
			Quantity is actual	
Must Use	QTY02	380	Quantity	X R 1/15
			Numeric value of quantity	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **MEA Measurements (Transformer Loss Factor)**

Position: 160

Loop: QTY Optional

Level: Detail

Usage: Optional

Max Use: 40

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

- Syntax Notes:**
- 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
 - 2 If MEA05 is present, then MEA04 is required.
 - 3 If MEA06 is present, then MEA04 is required.
 - 4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
 - 5 Only one of MEA08 or MEA03 may be present.

Semantic Notes: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments: 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes: PTD = BO (Interval Summary)

Required when the transformer loss is not measured by the meter

"Where the delivery point is prior to the transformation such that the customer is responsible for losses and the meter is after the transformer and therefore does not record losses, the transformer loss factor will be greater than unity. E.g. 1.006, to reflect a positive adjustment to the meter readiness. Where the delivery point is after the transformation such that the customer is not responsible for transformer losses, and the meter is prior to the transformer and therefore does reflect transformer losses, the transformer loss factor will be less than unity. E.g. 0.995, to reflect a negative adjustment to the meter readings."

The value in the field will always be a positive value, for example:

MEA~~CO~1.015 (format when the factor is positive)

MEA~~CO~.985 (format when the factor is negative)

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			CO Core Loss	
			Transformer Loss Factor	
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	
			Transformer Loss Factor	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **MEA** **Power Factor (MEA~~ZA)**

Position: 160

Loop: QTY Optional

Level: Detail

Usage: Optional

Max Use: 40

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

- Syntax Notes:**
- 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
 - 2 If MEA05 is present, then MEA04 is required.
 - 3 If MEA06 is present, then MEA04 is required.
 - 4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
 - 5 Only one of MEA08 or MEA03 may be present.

Semantic Notes: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments: 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes: PTD = BO (Interval Summary)

Required if measured

MEA~~ZA~.95

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			ZA Power Factor	
			Relationship between watts and volt - amperes necessary to supply electric load	
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	
			Power Factor	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **PTD Interval Detail**

Position: 010

Loop: PTD Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data

Syntax Notes: 1 If either PTD02 or PTD03 is present, then the other is required.

2 If either PTD04 or PTD05 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = PM (Interval Detail)

One PTD~PM loop is required for each meter channel for each unit of measure.
PTD~PM~~~MG~1234568MG

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code	M ID 2/2
			Code identifying the type of product transfer	
			PM Physical Meter Information	
			Interval Detail	
Must Use	PTD04	128	Reference Identification Qualifier	X ID 2/3
			Code qualifying the Reference Identification	
			MG Meter Number	
Must Use	PTD05	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Meter Number	
			Meter numbers will contain only uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded, and significant leading and trailing zeros that are part of the meter number must be present.	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **DTM** **Service Period Start (DTM~150)**

Position: 020

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times

- Syntax Notes:**
- 1 At least one of DTM02 DTM03 or DTM05 is required.
 - 2 If DTM04 is present, then DTM03 is required.
 - 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = PM (Interval Detail)

Required, unless an Exchange Date (DTM~514) is substituted for this code.

DTM~150~20010101

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			150 Service Period Start	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **DTM Service Period End (DTM~151)**

Position: 020

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times

- Syntax Notes:**
- 1 At least one of DTM02 DTM03 or DTM05 is required.
 - 2 If DTM04 is present, then DTM03 is required.
 - 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = PM (Interval Detail)

Required, unless an Exchange Date (DTM~514) is substituted for this code.

DTM~151~20010131

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			151 Service Period End	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **DTM** **Meter Exchange Date (REF~514)**

Position: 020

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = PM (Interval Detail)

Required when a meter is exchanged and the meter agent does not change.

Date Range in the first PTD is shown as:

DTM~150~20010101

DTM~514~20010114~1200

Date Range in the second PTD is shown as:

DTM~514~20010114~1200

DTM~151~20010128

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			514 Transferred	
			Exchange Date	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	
Must Use	DTM03	337	Time	X TM 4/8
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	
			HHMM, where H = Hours (00 to 23) and M = Minutes (00 to 59) in Central Prevailing Time (CT). For this transaction, since X12 does not allow 2400 for time, 2359 will be used to indicate midnight. For example, midnight between October 15th and October 16th will be reflected as 2359 of October 15th.	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **REF** **Channel Number (REF~6W)**

Position: 030

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 20

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: PTD = PM (Interval Detail)

REQUIRED

REF~6W~2

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			6W	
			Sequence Number	
			Channel Number	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Channel Number	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **REF** **Meter Type (REF~MT)**

Position: 030

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 20

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: PTD = PM (Interval Detail)

This segment is sent to indicate the type of usage that is reported in this PTD loop.

Required
REF~MT~KHMON

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			MT	Meter Ticket Number
			Meter Type	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			See "RXQ.3.2.24".	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **REF** **Meter Role (REF~JH)**

Position: 030

Loop: PTD Mandatory

Level: Detail

Usage: Optional

Max Use: 20

Purpose: To specify identifying information

- Syntax Notes:**
- 1 At least one of REF02 or REF03 is required.
 - 2 If either C04003 or C04004 is present, then the other is required.
 - 3 If either C04005 or C04006 is present, then the other is required.
- Semantic Notes:**
- 1 REF04 contains data relating to the value cited in REF02.

Comments:

Notes: PTD = PM (Interval Detail)

REQUIRED

REF~JH~A

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			JH Tag	
			Meter Role	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
		A	Additive	
			This consumption must be added to the summarized total	
		I	Ignore	
			This consumption did not contribute to the summarized total (do nothing)	
		S	Subtractive	
			This consumption must be subtracted from the summarized total	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **QTY** Quantity

Position: 110

Loop: QTY Optional

Level: Detail

Usage: Optional

Max Use: 1

Purpose: To specify quantity information

Syntax Notes: 1 At least one of QTY02 or QTY04 is required.

2 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.

Comments:

Notes: PTD = PM (Interval Detail)

REQUIRED

Note: Quantity is the total measured interval consumption for the billable period including all billable adjustments applicable, e.g., transformer loss factor and the meter multiplier. The quantity in the QTY02 has not been adjusted for any additive or subtractive usage.

Quantity is sent with a minimum of two digits and a maximum of four digits to the right of the decimal point, e.g., 525.15; 567.1375, etc., while adhering to the ANSI rules for providing Real numbers. For instance, if the quantity reported is:

525	then the QTY02 is reported as	525
525.1275	then the QTY02 is reported as	525.1275
525.12	then the QTY02 is reported as	525.12
525.10	then the QTY02 is reported as	525.1
0	then the QTY02 is reported as	0

Leading zeros are suppressed and trailing zeros are truncated. Please refer to ANSI ASC X12 Version 004010 for further information on ANSI data elements, segments and loop usage and requirements.

Distribution Company should round - not truncate to adhere to the min/max requirements of 2/4 digits to the right of the decimal.

QTY~QD~22348

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity	
			KA Estimated	
			Quantity is estimated	
			QD Quantity Delivered	
			Quantity is actual	
Must Use	QTY02	380	Quantity	X R 1/15
			Numeric value of quantity	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **DTM** **Interval End Date Time (DTM~194)**

Position: 210

Loop: QTY Optional

Level: Detail

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: PTD = PM (Interval Detail)

REQUIRED

DTM~194~20010115~1500

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			194 Period End	
			The date/time of the end of the interval	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	
Must Use	DTM03	337	Time	X TM 4/8
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	
			HHMM, where H = Hours (00 to 23) and M = Minutes (00 to 59) in Central Prevailing Time (CT). For this transaction, since X12 does not allow 2400 for time, 2359 will be used to indicate midnight. For example, midnight between October 15th and October 16th will be reflected as 2359 of October 15th.	

D R A F T IR/TEIS Working Paper
REQ/RGQ Customer Information Model Business Practices (RXQ.8)
X12 Implementation Guidelines

Segment: **SE** Transaction Set Trailer
Position: 030
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:**Semantic Notes:**

Comments: 1 SE is the last segment of each transaction set.

Notes: REQUIRED

SE~42~000000001

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

NORTH AMERICAN ENERGY STANDARDS BOARD

Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials

February 6-7, 2007

Retail Quadrants

TAB 14

Subcommittee Updates

- This material is for review only and no action is required of the retail ECs. The material may be used in updating the 2007 annual plan.
- The material in tab 14 corresponds to agenda item 4 of the retail ECs agenda.

NAESB Executive Committee Meeting Materials for February 6-7, 2007

Retail ECs Subcommittee Updates

RETAIL SUBCOMMITTEES AND TASK FORCES

Business Practices Subcommittee

- **November 10, 2006:** The Retail Business Practice Subcommittee conference call to review any comments submitted on the Recommendation for the Retail 2006 Annual Plan Item 4 i was cancelled by the chairs do to the number of comments submitted on the item.
- **December 7, 2006:** The Retail Business Practice Subcommittee met via conference call to continue work on the drop and account maintenance section of Retail 2006 Annual Plan Item 4. In addition, the subcommittee discussed future meeting dates and reviewed the process flow diagrams for the customer drop and account maintenance.
- **January 16, 2007:** The Retail BPS met in Houston, TX to continue work on the MBPs for Customer Drop and Account Maintenance. In addition, the subcommittee reviewed process flow diagrams for the Customer Enrollment MBP for the Texas Registration Agent Model.
- **January 31, 2007:** The Retail BPS met via conference call to discuss Recommendation for 2005 Annual Plan Item No. 3 – Customer Information, Recommendation for R05016 – Customer Billing and Payment Notification via Uniform Electronic Transactions, and 2007 Annual Plan Item No. 3a(ii) – Customer Drop.
- **Planned, February 23, 2007:** The Retail BPS will meet via conference call to continue work on Customer Drop and Account Maintenance MBPs. The subcommittee should also begin on work on the MBPs for Customer Enrollment for the Texas Registration Agent Model.

Information Requirements Subcommittee

- **November 29, 2006:** During this call, the IR and TEIS reviewed the revised technical implementation documents for Billing & Payments; the technical documents for the Customer Information model business practices and the Customer Invoice model business practices; and began work on Retail 2006 Annual Plan Item 7 - Prepare a joint analysis with the WGQ for AS2 and AS3 protocols as compared to the NAESB IET (for this item, the IR and TEIS was joined by the WGQ Electronic Delivery Mechanism (EDM) Subcommittee).
- **December 13, 2006:** The IR and TEIS held a conference call with web conferencing on December 13, 2006. During this call, the IR and TEIS completed the drafting of the technical implementation documents for Billing & Payments and completed the drafting of the technical documents for the Customer Information model business practices. The subcommittee voted to send both recommendations to the Retail Executive Committee for adoption.
- **January 11, 2007:** The IR and TEIS held a meeting with web conferencing on January 11 at NAESB's offices in Houston, Texas. During this meeting the IR and TEIS will begin work on drafting the technical implementation documents for the Customer Enrollment model business practices. The subcommittee will also try to complete the technical implementation documents for the Customer Invoice model business practices.
- **January 12, 2007:** The Retail IR and TEIS held a joint meeting with the WGQ EDM Subcommittee to continue working on Retail 2006 Annual Plan Item 7 – Prepare a joint analysis with the WGQ for AS2 and AS3 protocols as compared to the NAESB IET. It is the expectation that this group will draft a report in response to a review of the AS2 and AS3 protocols as compared to the NAESB IET.
- **January 18, 2007:** The Retail IR met to continue working on technical documents for the Customer Enrollment model business practices and the Customer Invoice model business practices.
- **January 24, 2007:** The Retail IR and TEIS held a joint meeting with the WGQ EDM Subcommittee to continue working on Retail 2006 Annual Plan Item 7 – Prepare a joint analysis with the WGQ for AS2 and AS3 protocols as compared to the NAESB IET. It is the expectation that this group will draft a report in response to a review of the AS2 and AS3 protocols as compared to the NAESB IET.

NAESB Executive Committee Meeting Materials for February 6-7, 2007

Retail ECs Subcommittee Updates

Technical Electronic Implementation Subcommittee (TEIS)

- **January 4, 2006:** The REQ & RGQ Technical Electronic Implementation Subcommittee continued its review of the
- **November 29, 2006:** During this call, the IR and TEIS reviewed the revised technical implementation documents for Billing & Payments; the technical documents for the Customer Information model business practices and the Customer Invoice model business practices; and began work on Retail 2006 Annual Plan Item 7 - Prepare a joint analysis with the WGQ for AS2 and AS3 protocols as compared to the NAESB IET (for this item, the IR and TEIS was joined by the WGQ Electronic Delivery Mechanism (EDM) Subcommittee).
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NORTH AMERICAN ENERGY STANDARDS BOARD

Executive Committee Meeting – WEQ, REQ, RGQ Meeting Materials

February 6-7, 2007

Retail Quadrants

TAB 15

2007 Annual Plan for Retail Quadrants

- The 2007 plan as approved by the Board of Directors at its December 2006 meeting is included. Should the Retail ECs determine that changes are to be made to the plan as a result of the subcommittee updates; a motion to approve the changes for forwarding to the Board for approval would be required. The motion would require a simple majority to pass.
- The materials in Tab 15 correspond to agenda item 4 for the Retail ECs agenda.



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NORTH AMERICAN ENERGY STANDARDS BOARD 2007 ANNUAL PLAN for the RETAIL GAS and ELECTRIC QUADRANTS¹ Approved by the Board of Directors on 12-14-06

Item Number & Description	Completion ²	Assignment
1 Billing & Payment		
a. Develop additional model business practices for reversal and reissue, transformer loss factors, budget billing and payment plans, and missed bill windows Status: Completed through the BPS process and submitted to IR.	1st Q 2007	IR
2 Electronic Retail Billing.		
b. Develop Technical Electronic Implementation Standards – Electronic Retail Billing Status: Underway.	1st Q 2007	TEIS
3 Customer Enrollment, Drop and Account Information Change		
a. Develop practices for submitting and receiving, processing and fulfilling a customer's request to enroll with or leave a supplier (including suppliers dropping customers) and for maintaining current customer account information, and for notifying affected parties.	2 nd Q 2007	BPS
i) Customer Enrollment Status: Underway. Customer Enrollment portion of the item is complete through the BPS.	2 nd Q 2007	BPS
ii) Customer Drop Status: Underway	1st Q 2007	BPS
iii) Account Information Change Status: Not Started.	2 nd Q 2007	BPS
b. Develop information requirements for submitting and receiving, processing and fulfilling a customer's request to enroll with or leave a supplier (including suppliers dropping customers) and for maintaining current customer account information, and for notifying affected parties. Status: Not Started. Drops and customer account information should span into 2007.	3 rd Q 2007	IR
c. Develop Technical Electronic Implementation Standards – Customer Enrollment, Drop and Account Information Change, Status: Not Started	4 th Q 2007	TEIS
4 Customer Enrollment, Drop and Account Information Change Using a Registration Agent		
a. Develop practices when using a Registration Agent for submitting and receiving, processing and fulfilling a Customer's request to enroll with or leave a Supplier (including Suppliers dropping Customers) and for maintaining current Customer account information, and for notifying affected parties.		
i) Customer Enrollment Status: Underway.	3rd Q 2007	Texas Task Force/ BPS
ii) Customer Drop	4th Q 2007	Texas Task Force/ BPS



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NORTH AMERICAN ENERGY STANDARDS BOARD
2007 ANNUAL PLAN for the RETAIL GAS and ELECTRIC QUADRANTS¹
Approved by the Board of Directors on 12-14-06

Item Number & Description	Completion ²	Assignment
Status: Not Started iii) Account Information Change Status: Not Started	1st Q 2008	Texas Task Force/ BPS
5 Customer Inquiries a. Develop procedures for responding to customer inquiries directed to Distributors and/or Suppliers and for notification of the other party. Status: Not Started. Delayed to 2008 for completion because the registration agent model is separate from customer enrollments.	2008	BPS
6 Prepare a joint analysis with the WGQ for AS2 and AS3 protocols as compared to the NAESB IET. Status: Underway.	TBD	TEIS & WGQ EDM
7 Develop NAESB Certification checklist criteria for Retail Quadrants to be used in the NAESB Certification Program. Status: Not Started.	TBD	TEIS
8 Address issues raised in the Department of Energy's Sandia National Laboratories on NAESB technical standards and respond to the surety assessment findings and recommendations. Status: Not Started.	4 th Q 2007	BPS/TEIS
9 Consider and develop as needed model business practices to support Gas Design Day Forecast¹ Status: Not Started. A reach out to the SGA and AGA for subject matter experts will be undertaken first, before the group is populated.	TBD	RGQ - New Task Force
10 Review and develop needed model business practices for a standardized method for quantifying benefits, savings, cost avoidance and/or the reduction in energy demand and usage derived from the implementation of demand side management and energy efficiency programs. This effort will include demand side response, energy efficiency programs and metering, including the 'curtailment service provider' program. Status: Not Started. A major announcement for an introductory meeting, probably at the DoE, will be sent forward to invite all interested stakeholders.	TBD 1st Q, 2007 for intro meeting	New Task Force

¹ Reach out to SGA and AGA for subject matter experts.



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Item Number & Description	Completion ²	Assignment
Program of Standards Maintenance & Fully Staffed Standards Work²		
Business Practice Requests	Ongoing	Assigned by the EC ³
Information Requirements and Technical Mapping of Business Practices	Ongoing	Assigned by the EC ⁴
Ongoing Interpretations for Clarifying Language Ambiguities	Ongoing	Assigned by the EC ⁴
Ongoing Maintenance of Code Values and Other Technical Matters	Ongoing	Assigned by the EC ⁴
Ongoing Development and Maintenance of Definitions	Ongoing	Glossary

Provisional Activities

Joint Effort:

Supplier Certification: Develop practices for Distribution Companies to register/certify new Suppliers when they seek to begin doing business in the Distribution Company's service area.

Modify TPA as necessary.

Review security standards as may be deemed necessary, such as Public Key Infrastructure (PKI).

Retail Electric Quadrant Effort Only:

Retail Meter Data Validation, Editing & Estimating: Develop procedures for insuring the integrity and validity of retail customer metering data that is needed by utilities and suppliers for billing, etc. Issues related to unbundled or competitive metering are not to be considered.

Settlement Process: Reconcile energy schedules and energy delivered by suppliers within a given market. Note: will need to be coordinated with the WEQ for the REQ.

Retail Gas Quadrant Effort Only:

Examine Wholesale Gas Quadrant Non-EDM Standards for applicability to retail business practices.

Settlement Process: Reconcile energy schedules and energy delivered by suppliers within a given market.

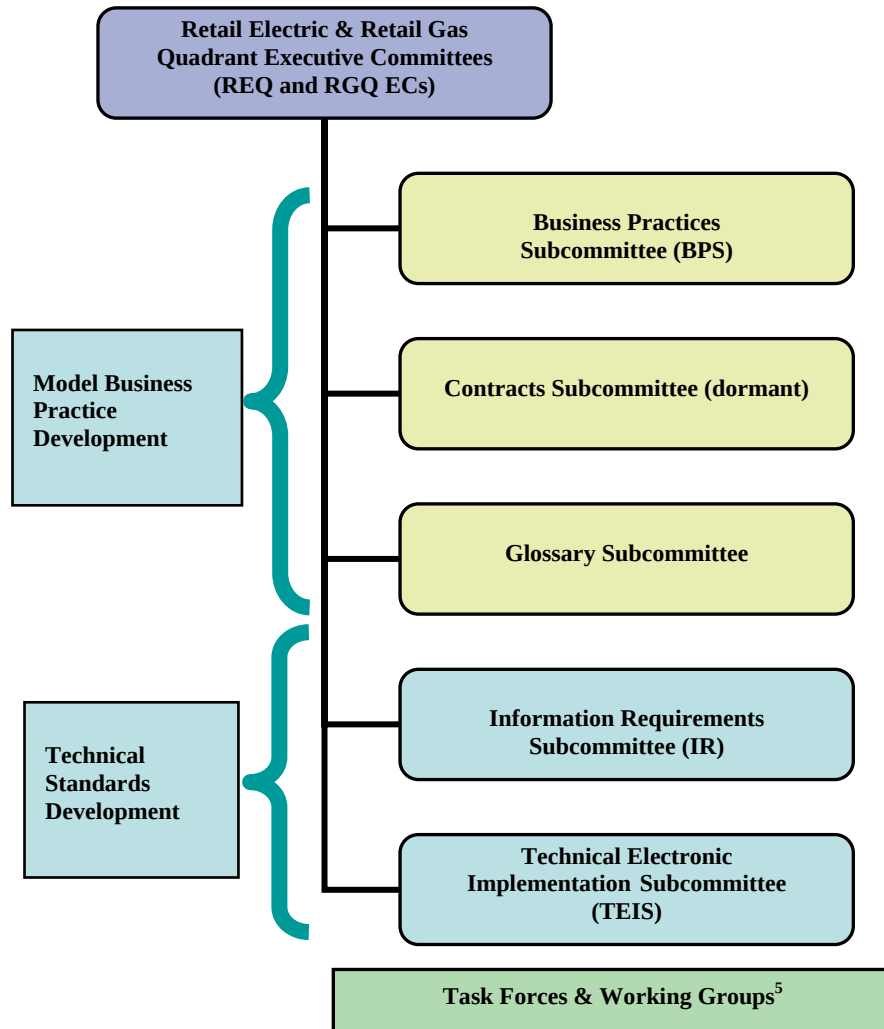


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NAESB RGQ EC and Subcommittee Leadership:

Executive Committee: Mike Novak, Chair and Suzanne Calcagno, Vice-Chair

Business Practices Subcommittee: Phil Precht

Information Requirements Subcommittee: George Behr

Technical Electronic Implementation Subcommittee: George Behr & Dan Rothfuss

Glossary Subcommittee: Don Sytsma

NAESB REQ EC and Subcommittee Leadership:

Executive Committee: Ruth Kiselewich, Chair and Ed Overtree, Vice-Chair

Business Practices Subcommittee: Mary Edwards and Dan Jones

Information Requirements Subcommittee: Ed Overtree

Technical Electronic Implementation Subcommittee: Jennifer Teel

Glossary Subcommittee: Mary Edwards and Patrick Eynon



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End Notes:

¹ As outlined in the NAESB Bylaws, the REQ and RGQ will also address requests submitted by members and assigned to the REQ and RGQ through the Triage Process.

² Dates in the completion column are by end of the quarter for completion by the assigned committee. The dates do not necessarily mean that the standards are fully staffed so as to be implementable by the industry, and/or ratified by membership. If one item is completed earlier than planned, another item can begin earlier and possibly complete earlier than planned. There are no begin dates on the plan.

³ This work is considered routine maintenance and thus the items are not separately numbered.

⁴ The REQ and RGQ ECs will assign maintenance efforts on a request by request basis.

⁵ The ECs and the subcommittees can create task forces and working groups to support their development activities for development of model business practices and technical standards.



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Attachment 1: Comments Received on 2007 Plan

1. Gas Design Day Forecast

Submitted by Ralph Cleveland, Senior Vice President | Engineering and Operations, AGL Resources

From: Ralph Cleveland [mailto:rcleve@aglresources.com]

Sent: Tuesday, October 10, 2006 5:13 PM

To: naesb@naesb.org

Subject: Gas Design Day Forecasting Standard

The following are the concepts around which it would be helpful to have an industry standard as to reasonable and acceptable modeling or methodology approach. I'm not sure how a proposal is usually structured, but I wanted to get this to NAESB today. This should be a good start. AGA and SGA have done some work through surveys and conferences to identify industry practice. For regulatory reasons, I think they have avoided attempting to say that there are established "best practices". We have some AGA/SGA survey results, if you would like to see them. If this is not what you were looking for, please let me know.

1. Number of years history considered in arriving at the design temperature (coldest in X years)
2. Acceptable independent variable besides same day temperature used in analysis (prior day temp, wind speed, etc)
3. Reasonable historical load / temperature analysis approach used to forecast future design (regression analysis, average load per HDD on cold days, etc)
4. Approach at removing outlier data from historical data sets
5. Acceptable R², MAPE or other statistical measure or forecast accuracy
6. Method for accessing potential design day forecast error (capacity reserve margin, forecast adder, etc)
7. Methodology to project design period load shape (multiple design days, historic design period temperatures, statistical approach)
8. Assumptions associated with on-system facility derate or pipeline capacity proration on design day.

RESOLUTION 11-15-06: Added to 2007 Annual Plan-- Reach out to SGA and AGA for subject matter experts will be undertaken.

2. Northeast Regional Best Practices

Submitted by Phil Precht, BG&E

Excerpt from "Restructuring Today": A major effort in that direction is a push to stimulate and activate pro-markets members of the legislature at a two day meeting set for Wilmington Oct 24-25 at the Doubletree Hotel. NEMA is behind the move. It's relying on pro-markets members of legislatures in Delaware, Pennsylvania and possibly Connecticut for a leadership round table and regulatory workshop to meet in Wilmington. James Lester of the Delaware PSC is a key speaker along with James Cawley who is the vice chair in Harrisburg. Several state legislators are to speak. Craig Goodman reports that business backers are happy to have marketers coming into Delaware to compete to supply the market. He's invited commissioners and staff from Delaware, Pennsylvania, New York and Connecticut to point out the best practices in the region. One subject of course will be the successes in New York and how to apply those best practices to other states. A major goal is not just copying New York's success but making the progress regional. Goodman thinks that would drive prices in the region down, lower the acquisition costs and bring economies of scale to the marketplace. Day one right now is best practices and day two is how to get there (implementation).

RESOLUTION 11-15-06: Not added to 2007 Annual Plan at this time – outreach to Craig Goodman first for feasibility.



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3. Demand Side Response

Submitted by George Behr, Energy Services Group

PJM is discussing demand side response and metering. They have a 'curtailment service provider' program that might benefit from NAESB standards. There are both wholesale and retail implications.

RESOLUTION 11-15-06: Combined with item 4 below.

4. Standardized Method for Quantifying Benefits, Savings, Cost Avoidance and/or the Reduction in Energy Demand Derived From the Implementation of Demand Side Management and Energy Efficiency Programs

Submitted by Carl Wilkins, Advanced Energy

LETTER:

Dear Ms. McQuade: Attached is a request for initiation of a NAESB business practice standard as described in your September 11, 2006, memo. We were advised by one of your board members, Mr. David Koogler with Dominion Power, to submit a request. Mr. Koogler was present when we gave our annual report to the N.C. Utilities Commission. He took note that we were challenged by one of the Commissioners to quantify more of the benefits that North Carolina and other states were enjoying as result of the work we do with energy utilization and market transformation. Advanced Energy is an independent non-profit that was chartered by the N.C. Utilities Commission in 1980 to work with electric utilities, in part, to develop and demand side management (DSM) and energy efficiency (EE) programs. Since 1980 Advanced Energy has been doing public benefits work to enhance how North Carolina businesses and individuals use energy. Recently we have been asked to assess the statewide potential for DSM and EE. It has been some time since these subjects have been discussed in regulatory and public settings, especially as it pertains to the need for future electricity generation. We have a long-standing relationship with utilities and appreciate their support and collaboration on many issues affecting energy utilization in our state. The Public Staff of the N.C. Utilities Commission is an ally and recently recommended that we advise the N.C. Utilities Commission as to how we would manage a statewide Public Benefits Fund specifically for DSM and EE. Other than the west coast, the northeast or selected mid-western states, the body of knowledge about DSM and EE has grown stale. Furthermore, a lot has changed with respect to the way homes and business and industry use energy since DSM and EE were in vogue in the 80s and early 90s. Many states and other jurisdictions lack the expertise and experience to evaluate and plan new programs. We heard that NAESB has an excellent reputation in the development of standards and felt that this area might be an area that fit NAESB's mission. Please contact me with any questions regarding our attached request. Sincerely, Carl L. Wilkins, P.E., Director, Utility Services

REQUEST:

Efforts are underway throughout the electricity industry to develop and implement demand side management measures and techniques in order to moderate the growth for electricity. However, a standardized method for quantifying the energy and demand impact of implementing proposed demand side management techniques does not exist. Entities involved in these activities are using a wide variety of methods to estimate the benefits of these programs. As various utilities across the nation look at implementing DSM and EE measures, it is evident that results may vary depending on many factors that are localized and at the discretion of the evaluating entity. On the other hand there are fairly standardized techniques for evaluating and presenting the benefits and costs for a supply side option. As regulatory commissions investigate utility integrated resource plans, the development and presentation of the DSM and EE options are vigorously challenged by interveners as being incomplete, inconsistent and not treated as fairly as supply side options. Furthermore, utilities recognize the uncertainty of some proposed demand side options because they lack standardized quantitative justification which may address issues such as program persistence and other variables out of the DSM/EE program's control. DSM and EE programs often fail to pass cost effectiveness tests (RIM, UTC, PCT, etc.) because the benefit/cost data that is presented may be inaccurate or based on poor assumptions. Having a standardized method that is both recognized and understood by utilities, regulatory agencies, program administrators, consumer advocates and energy service professionals is vital. For example, the amount of energy reduction for a DSM measure in a small building can be simulated by a computer model, obtained by actual load research, using results from another similar program or estimated by engineering calculations. The benefits, costs and energy impacts from either of



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the aforementioned techniques can vary widely.

The proposed standard will be used by regulatory agencies, utilities, program administrators and any entity that are involved with quantifying impacts of a DSM or energy efficiency program. This standard may become an important part of a utility's integrated resource planning process. As more electric utilities announce new base-load generation additions to their long-term resource plans, the opportunity for this proposed standard to be use becomes more evident.

Having a standardized process will prove beneficial to all stakeholders. The amount of time and resources expended in today's IRP hearings should be less if all parties adopt and use a standardized process and procedure for determining energy impacts of DSM and energy efficiency. The number of interveners and the amount of interrogatories should diminish once an accepted standard is made known to all. Future hearings should be less contentious, which will be appreciated by all parties. This standard if developed and adopted will lower the regulatory cost of implementation.

RESOLUTION 11-15-06: Combined with item 4 below. Item 3 is underway now in PJM and is both a retail and wholesale electric issue.

5. Participation

Submitted by Shay Reed, CostCo

Afternoon,

I recently attended the EEI conference national accounts meeting in Florida, and we were told that October 11th, 2006 is the deadline to be included for comments on several standards issues. After reading the memo I received, it appears that this is the comment deadline rather than inclusion in the comment group? Can you please confirm the requirements for inclusion in regards to NAESB standards? We would like to be involved, and hope we are not too late. Thank you for the information.

Shay Reed -

Thank you for your interest in NAESB standards development. If you would like to submit comments, please send them to NAESB (naesb@naesb.org) by the end of this week. Please let me know if you need any additional information. Best regards, Veronica Thomason

Submitted by: Denis George, Kroger

While I only saw this today and do not have time to submit substantive comments at this time, as a general matter The Kroger Co. - one of the largest grocery supermarket chains in the US (www.kroger.com) - would be happy to comment upon and participate in any initiative that would help bring uniform standards for retail EDI/XML transactions for both gas & electric utilities. Please feel free to direct further correspondence on this matter to me directly.

RESOLUTION 11-15-06: Combined with item 6 below.

6. Electronic Billing

Submitted by Suzanne Figy, Director, Operations - Data Services, Advantage IQ, Inc.

Hi Veronica, My name is Suzanne Figy and I am the Director of Operations - Data Services for Advantage IQ. Advantage IQ currently manages more than \$9.3 billion in facility bills for more than 375 clients. We currently process and pay more than 500,000 bills/month supporting over 190,000 sites. Advantage IQ maintains a solid relationship with more than 16,000 utilities nationwide. Currently, we receive 21% of our incoming utility bills via EDI. We are of great interest in having NAESB develop some standards in the areas outlined in the annual plan. Given the volumes of electronic bills we are currently managing I would like to request that we be included in the planning discussions. I would like to ask that you add myself as our representative. We have a great amount of excitement around these initiatives and feel we can be a great asset to the discussions. Please contact me if you need any additional information or have any further questions. Thank you, Suzanne Figy

Ms. Figy, Thank you for contacting our office with your request. We will be happy to add your request to the list of NAESB Retail Annual Plan topics for discussion. Best regards, Denise Rager



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RESOLUTION 11-15-06: Combined with item 5 above. EDI transactions for electronic billing between utilities and national accounts customers is on the 2007 annual plan now and the business practices have already been developed. XML transactions are not on the 2007 plan. If Kroger and CostCo are interested in pursuing XML, we would need to identify both the sponsors/champions for this development and also the subject matter experts that would participate in XML development. NAESB office will pursue determining if the interest level is high enough to warrant a conference call with applicable parties.

7. Customer Interval Data

Under consideration by the Massachusetts EBT

Draft Letter Prepared on 9/12/06 RE: Customer Interval Data

Dear Ms. Cottrell:

We, the undersigned competitive suppliers, third party providers and brokers, hereby request that the Department review a proposed change in the current practice regarding the authorization requirement for provision of customer interval metered usage data ("interval data") to suppliers. The proposed change would simplify the practice, reduce costs, and allow for improved data security by making suppliers responsible for maintaining customer authorizations and thereby paving the way ultimately for interval data to be requested and provided using standard electronic business transactions.. The proposal has been discussed by the Massachusetts Electronic Business Transactions ("EBT") Working Group, and the EBT has been authorized by the EBT electric distribution company members (EDCs) to represent their lack of objection to the change, provided it is acceptable to the Department.

Background: Increases in competitive market efficiency have revealed the existence of a bottleneck in the day-to-day operation of Massachusetts' deregulated electricity supply marketplace in regards to the provision of interval data. The unnecessarily labor intensive nature of requesting and receiving interval data for both prospective and existing customers, acts as a hindrance to the ability of suppliers to offer accurately derived and timely priced innovative competitive supply products to commercial and industrial customers. The process for provision of interval data to suppliers is governed by the EDCs' interval data tariffs as approved by the MDTE. Those tariffs provide that interval data will be made available to the customer or the customer's "authorized agent." However, the tariffs do not specify how that authorization is to be demonstrated. See, e.g., Massachusetts Electric Company, Optional Interval Data Service, M.D.T.E. No. 1034; Boston Edison Company, Optional Interval Data Service, M.D.T.E. No. 151. The Department's order approving those tariffs is similarly silent on the question of how the authorization is to be demonstrated. Metering and Billing Services, D.T.E. 01-28 (Phase I) (May 18, 2001).

Current Practice: Regardless of the lack of an explicit written statement from the Department that delineates what constitutes authorization, it has been the interpretation of the supplier and EDC communities that the supplier would demonstrate authorization by providing a copy of a signed authorization to the EDC with any interval data request. This is the current procedure; an authorization form must be manually issued to the EDC and the EDC, in turn, must file and manage this paperwork in-house, prior to releasing customer data. This is the perceived requirement and current practice whether the customer is a prospect requesting pricing, or already a fully enrolled customer of the supplier submitting the request. Over time, this practice but has proven to be unnecessarily cumbersome for customers and suppliers, as well as for EDCs. For customers the most obvious impact is a delay in pricing from prospective suppliers in a market where even a day can make a material difference in pricing.

Proposed Practice: We propose changing the current practice by removing the requirement that the customer authorization be provided to the utility. Instead we suggest that suppliers be held responsible for obtaining, holding and maintaining the appropriate customer authorization for any requests they make. With such a change, the supplier would still obtain a written authorization from the customer, either in the form of a stand alone consent form or a supply contract with an authorization provision. Further, we would propose that suppliers be required to maintain a scanned version of the written authorization on file at the suppliers' premises for the full length of the customer contract or 24 months, whichever is longer, and that such authorizations would be subject to audit by the Department. We also note that when the Supplier is requesting the interval data, it is assumed that they are paying the fee and will be billed accordingly from the utility. Under this proposal, the utility would then be released of the responsibility to obtain the authorization form and the cost of the request and would be liberated to honor the request for interval data without reference to paper files. Suppliers have indicated a willingness to go one step further and incorporate an authorization



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Attachment 1: Comments Received on 2007 Plan

provision into their customer contracts, should the Department accept this change in practice. In addition to saving time and manual effort, this step would pave the way for full EDI access to interval data in 2008, which is when the EDCs have indicated their systems would be ready to accept these requests electronically like other electronic business transactions sent via EDI. EDI works on a prescribed set of electronic communications between suppliers and distribution companies, and does not include a mechanism for the exchange of documents as part of that data transfer. The proposed change in procedure for authorizations would remove an important barrier to being able to request and receive interval data using the same standard vehicle used for all other utility/supplier data exchanges. In the EDI scenario, the supplier would submit an interval data request to the utility via EDI using the customer's account number as identifier and would represent that it has obtained the necessary customer authorization and is maintaining it on file. The utility would be free to rely on that representation, knowing that that supplier is subject to audit on any authorization by the DTE. This is exactly how EDI transactions work in other contexts, for example, customer enrollments. The supplier is required to obtain a written (or verified telephonic) authorization to enroll the customer, but is not required to file evidence of that authorization with the utility prior to enrollment acceptance, except upon request for audit. Instead, the supplier simply submits an "enroll customer" request using the customer's account number via EDI and the utility accepts that request as the supplier's representation that it has obtained the necessary authorization. The proposed change in practice for interval data requests would simply bring that practice in line with the procedure for customer enrollments and other supplier/utility transactions in Massachusetts, as well as with interval data practice in other regions of the country. The Massachusetts EBT members (both EDCs and suppliers) concur that this course of action is a win-win solution for everyone including the customer. Provision of interval data would take place seamlessly without a need to wait for manual intervention and would mirror the same procedure we currently follow for all historic usage data requests. We propose that this change in procedure apply to both historic interval data requests made for pricing prospective customers, as well as for monthly recurring interval reads used for forecasting and billing of a supplier's actively enrolled customers. The former would allow prospective customer's access to more timely pricing and product options in the marketplace, critical to making prudent business decisions in an ever-changing supply environment. The latter is necessary for timely billing of any non-fixed price product and is consistent with EPACT 2005's move toward providing customers with price sensitivity – more and more common in today's market.

Benefits of the Change in Practice: The Department has recognized, "historical interval load data are essential to the development of a strong competitive electric generation marketplace." Metering and Billing Services, D.T.E. 01-28 (Phase I) at 14. The availability of interval data improves the accuracy of forecasting and pricing. It also enables the development of innovative products and services for customers, critical to maturation of the competitive marketplace. The proposed change would greatly increase the efficiency of obtaining and receiving interval data and thus increase its availability for not only the EDC and suppliers, but more importantly, for customers. Therefore, we request that the Department review the proposed change in practice to allow suppliers to be the holder of record for customer interval data authorizations, whether they be within the customer's supply contract or in a separate authorization form.

We respectfully request the Department's expedited review of this proposed change in practice and thank you and the Department for your consideration. Sincerely, Constellation NewEnergy, ConEdison Solutions, Direct Energy, Dominion Energy Services Group, Gestalt LLC, Hess, PPL Solutions, Select Energy, TransCanada

RESOLUTION 11-15-06: The interval data is already in the model business practices for pre-enrollment activity. The standards do not specifically require that the utility maintain the information. For the EDI transactions, the 2007 plan already includes the development of EDI transactions. If MA EBT is interested in pursuing standard EDI transactions through NAESB, we would ask that the leaders of the group participate in the NAESB TEIS and EDM subcommittees to further their expectations. NAESB office will pursue determining if the interest level is high enough to warrant a conference call with applicable parties.



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Attachment 2: Potential Standards Development Efforts for 2007 and subsequent Retail Annual Plans

Projects that have been discussed but are not reflected on the 2007 plan nor have had requests prepared and submitted to NAESB are:

- Contracts: development of additional retail contracts and addenda that support the base contract already under development
- Customer Choice Activities
- Distributed Generation
- Energy Renewal and Green Energy Programs
- Interruption and Curtailment Procedures
- Load Profiling – gas and electric requirements
- Review security standards as may be deemed necessary, such as Public Key Infrastructure (PKI).
- Low Income Strategies
- Model Business Practices between utilities and suppliers in day to day transactions with RTOs (joint initiative with the WEQ)
- Net Metering
- Renewables/Renewable Portfolio Standards – work with the wholesale quadrant on nationally traded renewable energy credit
- Distribution Company/Supplier communications of gas supply requirements
- Model Business Practices for communications between suppliers and customers