North American Energy Standards Board
801 Travis, Suite 1675, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

NAESB RETAIL GAS & ELECTRIC QUADRANTS EXECUTIVE COMMITTEE MEETING

ASSEMBLED MEETING MATERIALS

AUGUST 18, 2010

North American Energy Standards Board

801 Travis, Suite 1675, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
RETAIL QUADRANTS DRAFT AGENDA

Wednesday, August 18, 2010 – 10:00 am to 4:00 pm MT
El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO

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13.	Adjourn	

Attire – Business Casual

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NAESB ANTITRUST GUIDELINES STATEMENT

ANTITRUST GUIDELINES

- The following guidelines will be reviewed by counsel at the meeting. The meeting will be monitored, transcribed, and minutes will the taken. The guidelines are as follows:

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.

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NORTH AMERICAN ENERGY STANDARDS BOARD
2010 EXECUTIVE COMMITTEE TERMS – Wholesale Gas Quadrant

PRODUCERS SEGMENT		**TERM END:**
Jim Busch	Director of Energy Policy and Regulation, BP Energy Company	12-31-2010
Pete Frost	Director – Regulatory Affairs, ConocoPhillips Gas and Power Marketing	12-31-2010
Chuck Cook	Manager - Regulatory Affairs, Chevron	12-31-2011
Richard D. Smith	Regulatory & Compliance Manager, Noble Energy, Inc.	12-31-2011
Mike Shepard	General Counsel, Mewbourne Oil Company	12-31-2011
PIPELINE SEGMENT		
Bill Griffith	Consultant, El Paso Natural Gas Company	12-31-2011
Kathryn Burch	Project Manager - Standards and Regulatory, Spectra Energy Transmission	12-31-2011
Dale Davis	Consultant, Williams Gas Pipeline	12-31-2010
Randy Young	Vice President - Regulatory Compliance and Corporate Services, Boardwalk Pipeline Partners, LP	12-31-2012
Kim Van Pelt	Regulatory Compliance Manager, Panhandle Eastern Pipe Line	12-31-2012
LOCAL DISTRIBUTION COMPANY (LDC) SEGMENT		
Rodger Schwecke	Director – Energy Markets and Capacity Products, Sempra Energy - Southern California Gas	12-31-2011
Phil Precht	Management Consultant – Pricing & Regulatory Services Department, Baltimore Gas and Electric Company	12-31-2011
Paul Buckley	Director of Rates and Regulatory Affairs, Washington Gas	12-31-2010
Mike Novak	Assistant General Manager, National Fuel Gas Distribution	12-31-2012
Craig Colombo	Energy Trader III, Dominion Resources	12-31-2012
END USERS SEGMENT		
Norm Spooner	Supply Chain Manager – Fuel & Term Trading Department, Arizona Public Service Company	12-31-2010
Valerie Crockett	Senior Program Manager - Energy Markets & Policy, Tennessee Valley Authority	12-31-2010
Lori-Lynn C. Pennock	Senior Fuel Supply Analyst, Salt River Project	12-31-2011
V A C A N C Y		12-31-2011
Tina Burnett	Natural Gas Operations Administrator, The Boeing Company	12-31-2011
SERVICES SEGMENT		
V A C A N C Y		12-31-2010
Lisa Simpkins	Vice President, Energy Policy – Natural Gas, Constellation Energy Commodities Group	12-31-2010
Leigh Spangler	CEO, Latitude Technologies, Inc.	12-31-2011
Jim Buccigross	Vice President, 8760 Inc.	12-31-2011
Jeff Jarvis	Senior Counsel, EnCana Marketing (USA), Inc.	12-31-2011

EXECUTIVE COMMITTEE OFFICERS: Jim Buccigross is WGQ chairman of the Executive Committee, Dale Davis is WGQ vice chairman; Mike Novak is the RGQ chairman, Phil Precht is the REQ chairman, Jim Minneman is REQ vice chairman, Kathy York is the WEQ chairman and Alan Johnson is the WEQ vice chairman.

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NORTH AMERICAN ENERGY STANDARDS BOARD
2010 EXECUTIVE COMMITTEE TERMS – Retail Electric Quadrant

SERVICE PROVIDERS/SUPPLIERS SEGMENT		**TERM END:**
Bill Barkas	Manager of Retail State Government Relations, Dominion Retail, Inc.	12-31-2011
Jim Minneman	Controller, PPL Solutions, LLC	12-31-2011
Jennifer Teel	Vice President of Client Services, ista	12-31-2010
Susan Munson	ERCOT Retail Market Liaison, Electric Reliability Council of Texas (ERCOT)	12-31-2010
UTILITIES SEGMENT		
Phil Precht	Management Consultant - Pricing and Regulatory Services Department, Baltimore Gas & Electric Company	12-31-2011
Patrick Eynon	Supervisor – Retail Access, Ameren Services	12-31-2011
Judy Ray	Industrial Segment Manager – Contract Administrator, Alabama Power Company	12-31-2010
Michael J. Jesensky	Director – Demand –Side Analysis, Dominion Resources Services, Inc. (representing Dominion Virginia Power)	12-31-2010
END USERS/PUBLIC AGENCIES SEGMENT		
V A C A N C Y		12-31-2011
V A C A N C Y		12-31-2011
Annunciata E. Marino	Utility Energy Policy and Technology Analyst, Pennsylvania Public Utility Commission	12-31-2010
Christopher Kotting	Administrator – Energy Assurance, Public Utility Commission of Ohio	12-31-2010

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NORTH AMERICAN ENERGY STANDARDS BOARD
2010 EXECUTIVE COMMITTEE TERMS – Wholesale Electric Quadrant

TRANSMISSION SEGMENT		**TERM END:**	**SUBSEGMENT:**
Patrick McGovern	Manager - System Services, Georgia Transmission Corporation	12-31-20011	Muni/Coop
Luke O'Dwyer	Senior Engineer, Salt River Project	12-31-2010	Fed/State/Prov.
Daryl McGee	Manager – Transmission Services, Southern Company Services	12-31-2010	IOU
Edward Davis	Policy Consultant, Entergy Services, Inc.	12-31-2011	IOU
Marceline Otondo	Regulatory Compliance Advisory, Arizona Public Service Company	12-31-2010	at large
Bob Harshbarger	OASIS Trading Manager, Puget Sound Energy	12-31-2011	at large
Michelle Mizumori	Director of Market – Operations Interface, Western Electricity Coordinating Council (WECC)	12-31-2011	At-Large
GENERATION SEGMENT			
William J. Gallagher	Special Contracts Chief, Vermont Public Power Supply Authority	12-31-2011	Muni/Coop
Kathy York	Sr. Energy Markets & Policy Specialist, Tennessee Valley Authority	12-31-2010	Fed/State/Prov.
V A C A N C Y		12-31-2010	IOU
John Ciza	Project Manager Energy Policy and Regulatory Affairs, Southern Company Services	12-31-2011	IOU
Alan Johnson	Director Regulatory Compliance – Commercial Operations & Commodities, NRG Energy, Inc.	12-31-2010	Merchant
Trent Carlson	Vice President – Regulatory Affairs, RRI Energy Services, Inc.	12-31-2011	at large
Shah Hossain	Senior Regulatory Specialist, Westar Energy, Inc.	12-31-2011	at large
MARKETERS/BROKERS SEGMENT			
Chris Norton	Director of Market Regulatory Affairs, American Municipal Power, Inc.	12-31-2010	Muni/Coop
Belinda Thornton	General Manager - Energy Origination, Tennessee Valley Authority	12-31-2011	Fed/State/Prov.
V A C A N C Y		12-31-2010	at large
Richard Lehman	Supply and Trading, Salt River Project	12-31-2011	at large
John Apperson	Director – Commercial and Trading, PacifiCorp Energy	12-31-2010	IOU
Roy True	Manager of Regulatory and Market Affairs, ACES Power Marketing	12-31-2011	at large
Barry Green	Barry Green Consulting (representing Electric Power Supply Association (EPSA))	12-31-2011	at large

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DISTRIBUTION/LOAD SERVING ENTITIES (LSE) SEGMENT		TERM END:	SUBSEGMENT:
Ray Phillips	Manager of Compliance and Special Projects, Alabama Municipal Electric Authority	12-31-2010	Muni/Coop
V A C A N C Y		12-31-2011	at large
Alan Pritchard	Senior Engineer, Duke Energy Corporation	12-31-2010	IOU
Rufus D. Gladney	Executive Manager of Energy Services West, Consumers Energy Company	12-31-2011	IOU
Robert Martinko	Consultant FERC Compliance, FirstEnergy Service Company	12-31-2010	at large
Syd Berwager	Industry Restructuring Project Manager, Bonneville Power Administration/Power Business Line	12-31-2011	Other
Andy Rodriquez	Manager of Business Practice Coordination, NERC	12-31-2011	At-Large
END USERS SEGMENT			
V A C A N C Y		12-31-2011	at large
Aaron Breidenbaugh	Senior Manager - Regulatory Affairs and Public Policy - New York, EnerNOC, Inc.	12-31-2010	at large
Lou Ann Westerfield	Policy Strategist, Idaho Public Utilities Commission, rep. National Association of Regulatory Utility Commissioners	12-31-2010	Regulator
V A C A N C Y		12-31-2011	at large
Christopher Kotting	Administrator – Energy Assurance, Public Utility Commission of Ohio	12-31-2010	at large
V A C A N C Y		12-31-2011	at large
Paul Sorenson	Vice President - Central Markets Strategy, Open Access Technology International, Inc.	12-31-2011	At-Large
INDEPENDENT GRID OPERATORS/PLANNERS			
Thomas Bowe	Executive Director – Reliability Integration, PJM Interconnection, LLC	12-31-2010	
Jim Castle	Manager - Grid Operations, New York Independent System Operator, Inc.	12-31-2010	
Matt Goldberg	Director Reliability & Operations Compliance ISO New England, Inc.	12-31-2010	
Nancy Traweek	Director – Market Services, California ISO	12-31-2010	
Joel Mickey	Director of Grid Operations, Electric Reliability Council of Texas	12-31-2011	
Ed Skiba	Consulting Advisor, Standards Compliance & Strategy, Midwest ISO	12-31-2011	
Charles Yeung	Executive Director Interregional Affairs, Southwest Power Pool	12-31-2011	

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TECHNOLOGY AND SERVICES		
Jim Buccigross	Vice President Energy Industry Practice, 8760, Inc.	12-31-2010
V A C A N C Y		12-31-2010
V A C A N C Y		12-31-2010
V A C A N C Y		12-31-2010
V A C A N C Y		12-31-2011
V A C A N C Y		12-31-2011
V A C A N C Y		12-31-2011

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NORTH AMERICAN ENERGY STANDARDS BOARD
2010 EXECUTIVE COMMITTEE TERMS – Retail Gas Quadrant

SERVICE PROVIDERS/SUPPLIERS SEGMENT		**TERM END:**
Dwight M. Whitley, Jr.	Corporate Counsel, Sierra Southwest Cooperative Services, Inc.	12-31-2011
V A C A N C Y		12-31-2011
Richard Zollars	Director - Data and Billing, Dominion Retail, Inc.	12-31-2010
V A C A N C Y		12-31-2010
DISTRIBUTORS SEGMENT		
Dan Jones	Supervisor - Certified Supplier Business Center, Duke Energy	12-31-2011
V A C A N C Y		12-31-2011
Michael Novak	Assistant General Manager, National Fuel Gas Distribution Corporation	12-31-2010
V A C A N C Y		12-31-2010
END USERS/PUBLIC AGENCIES SEGMENT		
V A C A N C Y		12-31-2010
V A C A N C Y		12-31-2010
V A C A N C Y		12-31-2011
V A C A N C Y		12-31-2011

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NORTH AMERICAN ENERGY STANDARDS BOARD
2010 EXECUTIVE COMMITTEE ALTERNATES – Wholesale Gas Quadrant

END USER SEGMENT	
Paul A. Jones	Senior Marketing Representative, Salt River Project
Art Morris	Gas Originator, Florida Power & Light Company
Kenneth Nordlander	Fuel Procurement, Arizona Public Service Company
DISTRIBUTION SEGMENT	
Rick Ishikawa	Interconnect Account Manager in Capacity Products Group, Southern California Gas Company
Donald Petersen	Senior Gas Resource Analyst, Pacific Gas and Electric Company
Jim Blasiak	Specialist Federal Regulatory Affairs, Washington Gas Light Company
George Simmons	FERC Specialist, NiSource Inc.
Scott Butler	Project Manager, Energy Markets Policy Group, Consolidated Edison Company of New York, Inc.
PIPELINE SEGMENT	
Bill Grygar	Vice President, Panhandle Eastern Pipe Line
Scott Hansen	Questar Pipeline Company
Ronald G. Tomlinson	Manager – Business Technology, Dominion Gas Transmission, Inc.
Paul Love	Director, Electronic Customer Services, Natural Gas Pipe Line Company of America
Mark Gracey	Consultant, Tennessee Gas Pipeline Company
Christopher Burden	Consultant e-Commerce & Service Delivery, Williams Gas Pipeline
Tom Gwilliam	Iroquois Gas Transmission System
PRODUCER SEGMENT	
David Ogden	Manager, Marketing Administration, Dominion Exploration & Production, Inc.
Catherine R. Abercrombie	Director – Regulatory Affairs, ConocoPhillips Gas and Power Marketing
Rhonda Denton	Regulatory Affairs, BP Energy Company
SERVICES SEGMENT	
Keith Sappenfield	Director, US Regulatory Affairs, Midstream and Marketing, EnCana Oil and Gas (USA), Inc.

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NORTH AMERICAN ENERGY STANDARDS BOARD
2010 EXECUTIVE COMMITTEE ALTERNATES – Retail Electric Quadrant

UTILITIES SEGMENT	
Keith P. Hock	Director ARES Business Center, Ameren Services Company
H. Neal Allen	Profitability & Economic Analysis Manager, Alabama Power Company
Debbie McKeever	Market Advocate, Oncor
William J. Welzant	Principal Supplier Services Analyst, Supplier Account Management, Baltimore Gas and Electric
END USERS/PUBLIC AGENCIES SEGMENT	

SERVICE PROVIDERS/SUPPLIERS SEGMENT	
Brandon S. Siegel	Manager – Market Management, E:SO
Wendell Miyaji	Senior Director – Systems, Comverge, Inc.

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NORTH AMERICAN ENERGY STANDARDS BOARD
2010 EXECUTIVE COMMITTEE ALTERNATES – Wholesale Electric Quadrant

END USER SEGMENT		**SUB-SEGMENT**
Mark W. Hackney	Regional Director – Transmission, Open Access Technology International, Inc.	At-Large
DISTRIBUTION/LSE SEGMENT		**SUB-SEGMENT**
Gerry Adamski	Vice President of Standards, NERC	At-Large
Lee Hall	Coordination Manager – Power Services, Bonneville Power Administration	Other
Ronald C. Snead	General Manager, System Planning and Business Services, Duke Energy	IOU
GENERATION SEGMENT		**SUB-SEGMENT**
Joel Dison	Project Manager, Southern Company Generation and Energy Marketing	IOU
Lou Oberski	Director – Electric Market Policy, Dominion Resources Services, Inc	IOU
Francis Halpin	Bonneville Power Administration	Fed/State/Prov.
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
Valerie Crockett	Senior Program Manager, Energy Markets & Policy, Tennessee Valley Authority	Fed/State/Prov
TRANSMISSION SEGMENT		**SUB-SEGMENT**
Barbara Rehman	Policy Development & Analysis, Bonneville Power Administration	Fed/State/Prov.
Chuck Feagans	Tennessee Valley Authority	Fed/State/Prov.
Shay Labray	Transmission Strategy Consultant, PacifiCorp	IOU
Jane Daly	Rate & Regulatory Advisor, Arizona Public Service Company	IOU
Narinder Saini	Policy Consultant, Entergy Services, Inc.	IOU
J.T. Wood	Southern Company Services	IOU
Dean Ulch	Principal Engineer – Transmission Policy and Services, Southern Company Services, Inc.	IOU
Hasnah Mat-Amin	Market Interface Manager, Western Electricity Coordinating Council	At Large
Ross Kovacs	Transmission Strategic Coordinator, Georgia Transmission Corporation	Muni/Coop

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INDEPENDENT GRID OPERATORS/PLANNERS SEGMENT		SUB-SEGMENT
Paul Wattles	Supervisor Demand Side Programs, Electric Reliability Council of Texas (ERCOT)	
Bill Blevins	Sr. Market Support Analyst, Electric Reliability Council of Texas (ERCOT)	
Heather Sanders	Renewable Integration Support Manager, California ISO	
Robert Coughlin	Principal Scientist Reliability & Operations Compliance, ISO New England, Inc.	
Eric Winkler	Project Manager – FCM and Tariff Administration, ISO New England, Inc.	
Cheryl Mendrala	Principal Engineer, ISO New England, Inc.	
Jason Marshall	Technical Manager, Midwest ISO	
Marie Knox	Sr. Standards Compliance Analyst, Midwest ISO	
Dean Hartung	Manager Real Time Market Operations, PJM Interconnection, LLC	
Cathy Wesley	Sr. Analyst, PJM Interconnection, LLC	
Carl Monroe	Sr. Vice President Operations & Chief Operating Officer, Southwest Power Pool	
Greg Campoli	Supervisor – Reliability Compliance and Assessment, New York ISO	
Diana Pommen	Director Interjurisdictional Affairs, Alberta Electric System Operator	
Jimmy Womack	Manager-Tariff Administration, Southwest Power Pool	
Terry Bilke	Director Standards Compliance and Strategy, Midwest ISO	

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NORTH AMERICAN ENERGY STANDARDS BOARD
2010 EXECUTIVE COMMITTEE ALTERNATES – Retail Gas Quadrant

DISTRIBUTORS SEGMENT	
Joe Stengel	Manager, Federal Regulatory Affairs, Philadelphia Gas Works
END USERS/PUBLIC AGENCIES SEGMENT	
SERVICE PROVIDERS/SUPPLIERS SEGMENT	
Paul Cherevka	Project Manager Data Warehouse, Dominion Retail

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July 30, 2010

TO: NAESB Wholesale Electric, Wholesale Gas and Retail Gas and Electric Quadrant Executive Committee Members, Alternates and Interested Industry Participants

FROM: Rae McQuade, NAESB President

RE: Quadrant Executive Committee Meeting Announcements and Draft Agendas with links to Meeting Materials Revised with Additional Links to Materials

NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETINGS
Hosted by El Paso Western Pipeline, Colorado Springs, CO

First, let me thank El Paso Western Pipeline and Bill Griffith for the generosity and commitment to the NAESB organization through hosting this series of meetings. Without such support, it would be very difficult to maintain the NAESB budget and provide various locations around the country to encourage attendance at the NAESB in-person meetings.

As we have announced at prior Executive Committee meetings, meeting announcements and in other communications, the Executive Committee (EC) will meet in Colorado Springs, CO hosted by the El Paso Western Pipeline. Below are the meeting arrangements:

Where:	El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO
Contact:	Veronica Thomason, 713-356-0060
When:	Tuesday, August 17 -- 10:00 a.m. to 4:00 p.m. MT – Wholesale Electric Quadrant Wednesday, August 18 -- 10:00 a.m. to 4:00 p.m. MT – Retail Gas Quadrant and Retail Electric Quadrant Thursday, August 19 -- 9:00 a.m. to 3:00 p.m. MT – Wholesale Gas Quadrant

If you plan to attend any of the above EC meetings and have not already RSVPed to our office through the other announcements, please do so at your earliest convenience to the NAESB office (naesb@naesb.org) so that proper meeting arrangements can be made by NAESB and our host. Travel information is posted on the NAESB web site on the EC pages and can be directly accessed from the following link: http://www.naesb.org/pdf4/ec081710ma.doc. If you plan to participate by conference call, the information to do so is provided in this document. The EC meetings will be web cast as well. The meetings, conference calling and web casting is open to any interested party.

The materials for the meeting will be emailed to the participants and posted on the web site shortly. In an effort to control costs and be more environmentally aware, we are not printing Executive Committee books any longer, they will be posted in an assembled pdf document for each quadrant meeting, in addition to the links to the native formatted documents provided in the agendas. For agenda items where materials are already available and have been sent to you in prior communications, or posted on the web site, the links to those documents are included in the agenda for your convenience, and to help you prepare for the meetings. The links are formatted in blue underlined text. As the meeting approaches, this agenda with additional links to documents will be posted on the web site, along with the pdf assembled books.

Please note that in discussions with the Retail Quadrants EC chairs and vice chairs, it has been determined that all Retail EC meetings for 2010 will be conference call/web casts in recognition of the small number of in-person attendance from the 2009/2010 records, and also in recognition of the reduced travel budgets for 2010 of many of the Retail EC members. However, since NAESB staff will be on location to provide support for the retail EC meetings, any Retail EC participant may choose to join the staff and participate in-person.

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 could be allotted to other agenda items at the discretion of the chair.

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There are other NAESB subcommittee meetings being held in conjunction with the EC meetings. They are held in various locations, and available via conference call and web cast. The details are:

Date	Time	Meeting/Location
Monday, August 16	12 pm to 1 pm MT	REQ/RGQ Glossary Meeting Location: El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO Conference Call Number: 866-740-1260 Access Code: 7133560 Security Code: 1221 Web Cast: http://www.readytalk.com (please use same codes) NAESB web page: http://www.naesb.org/RGQ/rgq_glossary.asp
	1 pm to 4 pm MT	Retail BPS Meeting – Day 1 of 2 Location: El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO Conference Call Number: 866-740-1260 Access Code: 7133560 Security Code: 1221 Web Cast: http://www.readytalk.com (please use same codes) NAESB web page: http://www.naesb.org/retail_bps.asp
Tuesday August 17	10 am to 4 pm MT	WEQ EC Meeting Location: El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO Conference Call Number: 866-740-1260 Access Code: 7133562 Security Code: 8724 Web Cast: http://www.readytalk.com (please use same codes) NAESB web page: http://www.naesb.org/weq/weq_ec.asp
	9 am to 3 pm MT	Retail BPS Meeting – Day 2 of 2 Location: El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO Conference Call Number: 866-740-1260 Access Code: 7133560 Security Code: 1221 Web Cast: http://www.readytalk.com (please use same codes) NAESB web page: http://www.naesb.org/retail_bps.asp
	9 am to 4 pm MT	WGQ IR/Technical Subcommittees Meeting – Day 1 of 2 Location: El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO Conference calling and web casting not available unless requested in advance with subcommittee chair approval NAESB web page: http://www.naesb.org/WGQ/ir.asp

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Date	Time	Meeting/Location
Wednesday, August 18	10 am to 4 pm MT	Retail EC Meeting by phone/web cast/ for in person attendance, please join NAESB staff Location: El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO Conference Call Number: 866-740-1260 Access Code: 7133562 Security Code: 7318 Web Cast: http://www.readytalk.com (please use same codes) NAESB web page: http://www.naesb.org/REQ/req_ec.asp
	9 am to 4 pm MT	WEQ OASIS Subcommittee – Day 1 of 2 Location: El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO Conference Call Number: 866-740-1260 Access Code: 7133564 Security Code: 3521 Web Cast: http://www.readytalk.com (please use same codes) NAESB web page: http://www.naesb.org/WEQ/weq_oasis.asp
	9 am to 4 pm MT	WGQ IR/Technical Subcommittees Meeting – Day 2 of 2 Location: El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO Conference calling and web casting not available unless requested in advance with subcommittee chair approval NAESB web page: http://www.naesb.org/WGQ/ir.asp
Thursday, August 19	9 am to 3 pm MT	WGQ EC Meeting Location: El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO Conference Call Number: 866-740-1260 Access Code: 7133562 Security Code: 2843 Web Cast: http://www.readytalk.com (please use same codes) NAESB web page: http://www.naesb.org/WGQ/ec.asp
	9 am to 12 pm MT	WEQ OASIS Subcommittee – Day 2 of 2 Location: El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO Conference Call Number: 866-740-1260 Access Code: 7133564 Security Code: 3521 Web Cast: http://www.readytalk.com (please use same codes) NAESB web page: http://www.naesb.org/WEQ/weq_oasis.asp

Please feel free to call the NAESB office should you have any questions or comments. Instructions for dialing in or participating on the web casts follow.

Best Regards, *Rae*

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CONFERENCE CALLING AND WEB CONFERENCING INSTRUCTIONS

FOR THE EXECUTIVE COMMITTEE AND RELATED SUBCOMMITTEE MEETINGS

AUGUST 16-19, 2010

This conference call, as all NAESB meetings and conference calls, is open to any interested party.

To join the conference call:

- Dial the 11-digit toll free phone number (provided in the preceding chart – specific to the meeting and date)
- An automated attendant will ask you to enter a seven-digit access code (provided in the preceding chart – specific to the meeting and date)
- The automated attendant will ask you to record your name.
- Please note, if the conference leader has not yet initiated the conference call, you will be placed on hold until the conference leader starts the conference.
- The automated attendant will then ask you for a four-digit security code (provided in the preceding chart – specific to the meeting and date)

Please place your phone on mute unless you are speaking. For those participants that do not have a mute feature on your phone, please press (*6) to mute your phone and (*7) to un-mute your phone. Putting the conference call on hold may cause music to be played over the discussion and if so, the NAESB office will contact the conference call administrator to have the line disconnected.

To join the web conference, go to www.readytalk.com and enter the same access code and security code. Please note that if the conference leader has not yet initiated the web conference, you will view a screen that states, "The Chairperson has not yet arrived. Please standby for your web conference to begin."

ReadyTalk recommends that you test your browser and network connections for compatibility prior to participating in a web conference. To do so, go to http://test.callinfo.com. If you have problems joining a conference call or need technical assistance, please contact ReadyTalk Customer Care, 1-800-843-9166. Please contact the NAESB Office (713-356-0060 or naesb@naesb.org) should you need any additional information or have questions or comments.

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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
WHOLESALE ELECTRIC QUADRANT DRAFT AGENDA

Tuesday, August 17, 2010 – 10:00 am to 4:00 pm MT
El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO

#	Agenda Item
1.	Welcome
	a. Antitrust Guidelines http://www.naesb.org/misc/antitrust_guidance.doc
	b. Welcome to members and attendees
	c. Quorum Establishment: Roll Call of WEQ EC Members and Alternates: http://www.naesb.org/pdf4/ec_terms.pdf (EC) and http://www.naesb.org/pdf4/alt_ec_members.pdf (EC Alt)
	d. Adoption of WEQ Agenda (simple majority) http://www.naesb.org/pdf4/ec081710a.doc
2.	Adoption of Wholesale Electric Quadrant Draft Minutes (simple majority to approve):
	a. May 4, 2010 Draft Minutes: http://www.naesb.org/pdf4/weq_ec050410rm.doc
	b. June 4, 2010 WEQ/WGQ Draft Minutes: http://www.naesb.org/pdf4/weq_wgq_ec060410rm.doc
	c. June 16, 2010 WEQ/REQ Draft Minutes: http://www.naesb.org/pdf4/weq_req_ec061610rm.doc
	d. July 7, 2010 Draft Minutes: http://www.naesb.org/pdf4/weq_ec070710rm.doc
3.	Consideration and Vote on Minor Corrections (simple majority to approve):
	a. Minor Correction MC10019, Submitted by D. Davis, Williams Gas Pipeline for NAESB WGQ Version 1.9: Joint NAESB WEQ Version 002.1 Standard WEQ-014-A and WGQ Version 1.0 Standard No. 11.4.1 (Implementation Guide for Electronic Tariff Filing): http://naesb.org/pdf4/wgq_weq_mc10019.doc - for WEQ EC consideration August 17, 2010 *(Notational Ballot sent to WGQ EC on July 23 – Due August 6, 2010)* Comments provided on August 11, 2010 by E Skiba, Midwest ISO: http://www.naesb.org/pdf4/wgq_mc081110_miso.doc
	b. WEQ-001 Minor Correction to be applied to Version 002.2, Submitted by M. Goldberg, ISO New England Inc.: http://www.naesb.org/pdf4/weq_ec081710w1.doc - for WEQ EC consideration August 17, 2010.
4.	Update on efforts for Parallel Flow Visualization: Recommendation with Comments Due August 30, 2010 http://www.naesb.org/pdf4/weq_072910_reqcom.doc, Letter from NERC: http://www.naesb.org/pdf4/weq_bps071510w1.pdf Comments received to date: submitted by E. Skiba on August 11, 2010 on behalf of the WEQ BPS; http://www.naesb.org/pdf4/weq_072910_weq_bps.doc
5.	Review and vote to approve scoping effort for coordination of service across multiple transmission systems: http://www.naesb.org/pdf4/weq_ec_samts_061810a6.doc, http://www.naesb.org/pdf4/weq_ec_samts_061810a4.doc, http://www.naesb.org/pdf4/weq_ec_samts_061810a5.doc
6.	Update on WEQ/REQ efforts for smart grid standards for NIST PAPs 3,4 and 9: http://www.naesb.org/pdf4/smart_grid_ssd072210w1.xls (Working papers for developing data requirements for PAPs 3, 4, and 9 as a basis for the draft recommendation for phase 2)
7.	Update on WEQ/REQ efforts for smart grid standards for NIST PAP 10 and OpenADE: http://www.naesb.org/pdf4/smart_grid_pap10_080610a.doc (Invitation to Participate), http://www.naesb.org/pdf4/smart_grid_pap10_081010reqcom_a1.doc, http://www.naesb.org/pdf4/smart_grid_pap10_081010reqcom_a2.doc, http://www.naesb.org/pdf4/smart_grid_pap10_081010w6.doc (Draft Recommendations out for informal comment and core model from Bill Cox), and http://www.naesb.org/pdf4/r10008.doc OpenADE Request
8.	Subcommittee Updates (meeting materials for updates will be provided by leadership as they are available):
	a. Triage Subcommittee: April 30 Report: http://www.naesb.org/pdf4/tr043010disposition.doc, Actions Pending: http://www.naesb.org/pdf4/tr080210agenda.doc
	b. Business Practices Subcommittee (BPS) TLR and Parallel Flow Visualization: http://www.naesb.org/pdf4/weq_ec081710w3.ppt (Presentation)

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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
WHOLESALE ELECTRIC QUADRANT DRAFT AGENDA

Tuesday, August 17, 2010 – 10:00 am to 4:00 pm MT
El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO

#	Agenda Item
	c. Demand Side Management – Energy Efficiency (DSM-EE) Subcommittee
	d. OASIS Subcommittee
	e. Joint Electric Scheduling Subcommittee (JESS)
	f. Standards Review Subcommittee (SRS): http://www.naesb.org/pdf4/weq_ec081710w4.ppt (Presentation)
	g. Glossary Efforts
	h. Publication Schedule: WGQ Publication Schedule: http://www.naesb.org/misc/wgq_publication_schedule_072910.doc, WEQ Publication Schedule: http://www.naesb.org/misc/weq_publication_schedule_072910.doc, Retail Publication Schedule: http://www.naesb.org/misc/retail_publication_schedule_072910.doc (Retail and WGQ provided for context)
9.	Review, discuss, identify changes and vote to approve changes to the 2010 Annual Plan to be proposed to the Board of Directors: http://www.naesb.org/misc/weq_2010_annual_plan_redlined_080210.doc (simple majority vote for EC endorsement of proposed changes to be forwarded for Board approval)
10.	Board of Directors, Board Committee and Regulatory Updates (no votes or action to be taken):
	a. Board Updates – Board Meeting June 24, 2010 http://www.naesb.org/pdf4/bd062410dm.doc
	b. Board Critical Infrastructure Committee: http://www.naesb.org/pdf4/bd_cic_071910notes.doc
	c. Quadrant Updates: Wholesale Gas and Retail key activities – WGQ Annual Plan, Retail Annual Plan http://www.naesb.org/pdf4/wgq_2010_annual_plan.doc (WGQ), http://www.naesb.org/pdf4/retail_2010_annual_plan.doc (Retail)
	d. Regulatory Efforts: http://www.naesb.org/pdf4/ferc070810_samts_progress_report.pdf
	e. EIR Administrator RFP
11.	Other Business 2010 Schedule: http://www.naesb.org/misc/2010_schedule.pdf
12.	Adjourn

Attire – Business Casual

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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
RETAIL QUADRANTS DRAFT AGENDA
Wednesday, August 18, 2010 – 10:00 am to 4:00 pm MT
El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO

#	Agenda Item

1. Welcome
   a. Antitrust Guidelines http://www.naesb.org/misc/antitrust_guidance.doc (Guidance)
   b. Welcome to members and attendees
   c. Quorum Establishment: Roll Call of Retail EC Members and Alternates: http://www.naesb.org/pdf4/ec_terms.pdf (EC) and http://www.naesb.org/pdf4/alt_ec_members.pdf (EC Alt)
   d. Adoption of Retail Agenda (simple majority) http://www.naesb.org/pdf4/ec081710a.doc
2. Adopt Retail Quadrants February 3, 2010 Draft Minutes (simple majority to approve): http://www.naesb.org/pdf4/retail_ec020310dm.doc
   a. May 5, 2010 Draft Minutes: http://www.naesb.org/pdf4/retail_ec050510dm.doc
   b. June 16, 2010 WEQ/REQ Draft Minutes: http://www.naesb.org/pdf4/weq_req_ec061610rm.doc
3. Review and Discuss REQ/RGQ Request for Formal Comments on 2009 Retail Annual Plan Item No. 10 (a) and (c): Service Request, Disconnection and Reconnection in the Registration Agent Model http://www.naesb.org/pdf4/retail_2009_ap_10a_10c_rec.doc (Recommendation) for Vote (supermajority to approve)
   Comments Due May 7, 2010: http://www.naesb.org/pdf4/retail_040710_reqcom.doc
   Comments submitted by J. Cargas, City of Houston - http://naesb.org/pdf4/retail_040710cityofhouston.doc
4. Review and Discuss REQ/RGQ Request for Formal Comments on 2010 Retail Annual Plan Item No. 4 - Billing and Payments: Recommendation: http://naesb.org/pdf4/retail_2010_ap4_rec.doc and Attachment: http://naesb.org/pdf4/retail_2010_ap4_rec_attachment.ppt (Models) for Vote (supermajority to approve)
   Comments Due July 15, 2010, 2010: http://www.naesb.org/pdf4/retail_061510_reqcom.doc
   No comments received
5. Consideration and Vote on Minor Corrections (simple majority to approve):
   Minor Correction MC10025 - Version 1.9 (Errata) for NAESB WGQ Internet Electronic Transport (Internet ET) Manual and NAESB RXQ Internet ET Manual, Version 1.2, Submitted by C. Burden, Joint WGQ Information Requirements/Technical Subcommittee http://www.naesb.org/pdf4/wgq_req_rgq_mc10025.doc - for Retail EC consideration August 18, 2010 *(Notational Ballot sent to WGQ EC on July 23 – Due August 6, 2010)*
6. Update on WEQ/REQ efforts for smart grid standards for NIST PAPs 3,4 and 9: http://www.naesb.org/pdf4/smart_grid_ssd072210w1.xls (Working papers for developing data requirements for PAPs 3, 4, and 9 as a basis for the draft recommendation for phase 2)
7. Update on WEQ/REQ efforts for smart grid standards for NIST PAP 10 and OpenADE: http://www.naesb.org/pdf4/smart_grid_pap10_080610a.doc (Invitation to Participate), http://www.naesb.org/pdf4/smart_grid_pap10_081010reqcom_a1.doc, http://www.naesb.org/pdf4/smart_grid_pap10_081010reqcom_a2.doc, http://www.naesb.org/pdf4/smart_grid_pap10_081010w6.doc (Draft Recommendations out for informal comment and core model from Bill Cox), and http://www.naesb.org/pdf4/r10008.doc OpenADE Request
8. Discuss Retail Publication Schedule: WGQ Publication Schedule: http://www.naesb.org/misc/wgq_publication_schedule_072910.doc, WEQ Publication Schedule: http://www.naesb.org/misc/weq_publication_schedule_072910.doc, Retail Publication Schedule: http://www.naesb.org/misc/retail_publication_schedule_072910.doc (WEQ and WGQ provided for context)
9. Update on Subcommittee Activities (meeting materials for updates will be provided by leadership as they are available):
   a. Triage Subcommittee: April 30 Report: http://www.naesb.org/pdf4/tr043010disposition.doc, Actions Pending:

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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
RETAIL QUADRANTS DRAFT AGENDA
Wednesday, August 18, 2010 – 10:00 am to 4:00 pm MT
El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO

#	Agenda Item

http://www.naesb.org/pdf4/tr080210agenda.doc

b. Business Practices Subcommittee (BPS) and Texas Task Force: http://www.naesb.org/pdf4/retail_ec081810w1.doc

c. DSM-EE Subcommittee

d. Information Requirements Subcommittee (IR – Not Active)

e. Technical Electronic Implementation Subcommittee (TEIS)

f. Glossary Efforts

g. Smart Grid Standards Subcommittee and Smart Grid PAP 10 Standards Subcommittee

10. Review, discuss, identify changes and vote to approve changes to the 2010 Annual Plan to be proposed to the Board of Directors: http://www.naesb.org/misc/retail_2010_annual_plan_redlined_080210.doc (simple majority vote for EC endorsement of proposed changes to be forwarded for Board approval)

11. Board of Directors, Board Committee and Regulatory Updates (no votes or action to be taken):

a. Board Updates – Board Meeting June 24, 2010 http://www.naesb.org/pdf4/bd062410dm.doc

b. Board Critical Infrastructure Committee: http://www.naesb.org/pdf4/bd_cic_071910notes.doc

c. Regulatory Efforts

d. Membership - http://www.naesb.org/misc/membership_slide_061110.ppt, http://www.naesb.org/misc/membership_report_061110.doc (Membership Profile and Report)

e Wholesale Gas and Wholesale Electric key activities – WGQ Annual Plan, WEQ Annual Plan - http://www.naesb.org/pdf4/wgq_2010_annual_plan.doc (WGQ), http://www.naesb.org/pdf4/weq_2010_annual_plan.doc (WEQ)

12. Other Business
2010 Schedule: http://www.naesb.org/misc/2010_schedule.pdf

13. Adjourn

Attire – Business Casual

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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
WHOLESALE GAS QUADRANT DRAFT AGENDA
Thursday, August 19, 2010 – 9:00 am to 3:00 pm MT
El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO

#	Agenda Item

1. Welcome
   a. Antitrust Guidelines http://www.naesb.org/misc/antitrust_guidance.doc (Guidance)
   b. Welcome to members and attendees
   c. Quorum Establishment: Roll Call of WGQ Members and Alternates: http://www.naesb.org/pdf4/ec_terms.pdf (EC) and http://www.naesb.org/pdf4/alt_ec_members.pdf (EC Alt)
   d. Adoption of WGQ Agenda (simple majority) http://www.naesb.org/pdf4/ec081710a.doc
2. Adopt WGQ Draft Minutes (simple majority to approve):
   a. February 4, 2010 Draft Minutes: http://www.naesb.org/pdf4/wgq_ec020410dm.doc, http://www.naesb.org/pdf4/wgq_ec081910w3.doc
   b. June 4, 2010 Draft WEQ/WGQ Minutes: http://www.naesb.org/pdf4/weq_wgq_ec060410rm.doc
3. Review and Discuss for Possible Vote: Recommendation R09006 - Add a new data element "Contract" in the following Transaction Datasets for the NAESB WGQ Version 1.8 release: NAESB WGQ Standard No. 3.4.2, Payment Remittance and NAESB WGQ Standard No. 3.4.4, Service Requester / Charge Allowance Invoice Recommendation: http://naesb.org/pdf4/r09006_rec.doc (Super majority Vote to Approve)

   Comments Due February 26, 2010: http://www.naesb.org/pdf4/wgq_012710reqcom.doc
   No Comments Received
4. Review and Discuss for Possible Vote Recommendation: R08028/2010 WGQ Annual Plan Item 3/2009 WGQ Annual Plan Item 4/2008 WGQ Annual Plan Item 3 – Eliminate Standards 5.4.4. (Replacement Capacity);
   Recommendation: http://www.naesb.org/pdf4/r08028_wgq_2010_api_3_rec_071410.doc,
   Attachment 1 Offer: http://www.naesb.org/pdf4/r08028_wgq_2010_api_3_rec_071410_attach1.doc,
   Attachment 2 Bid: http://www.naesb.org/pdf4/r08028_wgq_2010_api_3_rec_071410_attach2.doc,
   Attachment 3 Award Download: http://www.naesb.org/pdf4/r08028_wgq_2010_api_3_rec_071410_attach3.doc,
   Attachment 4 Withdrawal Download: http://www.naesb.org/pdf4/r08028_wgq_2010_api_3_rec_071410_attach4.doc,
   Attachment 5 Business Documentation: http://www.naesb.org/pdf4/r08028_wgq_2010_api_3_rec_071410_attach5.doc, and
   Attachment 6 Principles/Standards/Interpretations as modified in redline:
   http://www.naesb.org/pdf4/r08028_wgq_2010_api_3_rec_071410_attach6.doc (Super majority Vote to Approve)

   Comments Due August 13, 2010: http://www.naesb.org/pdf4/wgq_012710reqcom.doc
   Comments Received To Date:
   http://www.naesb.org/pdf4/wgq_071410williams_gas_pipeline.doc submitted by Dale Davis, Williams Gas Pipeline
   http://www.naesb.org/pdf4/wgq_071410williams_gas_pipeline_additional_comments.doc submitted by Dale Davis, Williams Gas Pipeline
5. Review and Discuss for Possible Vote: Recommendation R99033/R96018/R04028 – Redesign of Operationally Available and Unsubscribed data set; Recommendation: http://www.naesb.org/pdf4/r99033_r96018_r04038_rec_051710.doc, Attachment 1: http://www.naesb.org/pdf4/r99033_r96018_r04038_rec_051710_attach1.doc, and Attachment 2: http://www.naesb.org/pdf4/r99033_r96018_r04038_rec_051710_attach2.doc (Super majority Vote to Approve)

   Comments Due June 17, 2010: http://www.naesb.org/pdf4/wgq_051810reqcom.doc
   Comments Received: http://www.naesb.org/pdf4/wgq_051810_r99033_r96018_r04038_sscgp.doc submitted by D. Field, Southern Star Central Gas Pipeline

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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
WHOLESALE GAS QUADRANT DRAFT AGENDA
Thursday, August 19, 2010 – 9:00 am to 3:00 pm MT
El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO

#	Agenda Item

Request from leadership to consider and review a revised recommendation instead of the one sent out for comment: Revised recommendation for R99033 et al: http://www.naesb.org/pdf4/r99033_r96018_r04038_rec_072210.doc, Attachment 1: http://www.naesb.org/pdf4/r99033_r96018_r04038_rec_072210_attach1.doc, Attachment 2: http://www.naesb.org/pdf4/r99033_r96018_r04038_rec_072210_attach2.docAttachment 3: http://www.naesb.org/pdf4/r99033_r96018_r04038_rec_072210_attach3.rtf,and Attachment 4: http://www.naesb.org/pdf4/r99033_r96018_r04038_rec_072210_attach4.rtf (Simple majority vote)

Request from leadership to consider a shortened comment period – August 23 to September 6: Request for Comment on Revised Recommendation: http://www.naesb.org/misc/wgq_082310reqcom.doc (Simple majority vote)

6. Review and Discuss for Possible Vote Recommendation R09021/R09022 – Modifications to the Invoice (NAESB WGQ Standard No. 3.4.1) and Service Requester Level Charge/Allowance Invoice (NAESB WGQ Standard No. 3.4.4); Recommendation: http://www.naesb.org/pdf4/r09021_r09022_rec_051710.doc (Super majority Vote to Approve)

   Comments Due June 17, 2010: http://www.naesb.org/pdf4/wgq_051810reqcom.doc
   No Comments Received

7. Review and Discuss for Possible Vote Recommendation R09025 – Create a new EDM standard; Recommendation: http://naesb.org/pdf4/r09025_rec_052510.doc (Super majority Vote to Approve)

   Comments Due June 24, 2010: http://www.naesb.org/pdf4/wgq_052510reqcom.doc
   No Comments Received

8. Review and Discuss for Possible Vote Recommendation R09014/2010 WGQ Annual Plan Item 6 - Create a section/heading under Informational Postings called Regulatory to include all filings made to the FERC; Recommendation: http://naesb.org/pdf4/r09014_wgq_2010_api_6_rec_052510.doc (Super majority Vote to Approve)

   Comments Due June 24, 2010: http://www.naesb.org/pdf4/wgq_052510reqcom.doc
   No Comments Received

9. Review and Discuss for Possible Vote Recommendation 2010 WGQ Annual Plan Item 5 – Review minimum technical characteristics in Appendices B, C, and D of the WGQ QEDM Manual, and make changes as appropriate; Recommendation: http://naesb.org/pdf4/wgq_2010_api_5_rec_052510.doc (Super majority Vote to Approve)

   Comments Due June 24, 2010: http://www.naesb.org/pdf4/wgq_052510reqcom.doc
   No Comments Received

10. Review and Discuss for Possible Vote Recommendation R10001 - Update the NAESB Wholesale Gas Quadrant (WGQ) Quadrant Electronic Delivery Mechanism (QEDM) Manual to add the ability to provide Informational Postings reports downloads in a CSV file format; Recommendation: http://www.naesb.org/pdf4/wgq_r10001_rec.doc (Super majority Vote to Approve)

    Comments Due August 5, 2010: http://www.naesb.org/pdf4/wgq_070610reqcom.doc
    No Comments Received To Date

11. Review and Discuss for Possible Vote Recommendation R08008 - Develop customer security administration standards; Recommendation: http://www.naesb.org/pdf4/r08008_rec.doc (Super majority Vote to Approve)

    Comments Due August 5, 2010: http://www.naesb.org/pdf4/wgq_071610reqcom.doc
    No Comments Received To Date

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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
WHOLESALE GAS QUADRANT DRAFT AGENDA
Thursday, August 19, 2010 – 9:00 am to 3:00 pm MT
El Paso Western Pipeline Offices, 2 North Nevada Avenue, Colorado Springs, CO

#	Agenda Item

12. Consideration and Possible Vote on Minor Corrections if recommendations are available by August 18, 2010 – materials will be posted as they are available (simple majority to approve) – Minor Corrections that may be prepared for vote based on efforts by the Information Requirements /Technical Subcommittees at their meetings on August 17-18, 2010

    MC10018 – Submitted on April 9, 2010 by Submitted D. Davis and C. Burden, Williams Gas Pipeline, Version 2.0: to add code values to NAESB WGQ Standard 2.4.3 – Allocation, NAESB WGQ Standard 2.4.4 – Shipper Imbalance and NAESB WGQ Standard 3.4.1 – Transportation/Sales Invoice, http://www.naesb.org/pdf4/wgq_mc10018.doc

    MC10019 -- Submitted on April 22, 2010 by D. Davis, Williams Gas Pipeline for NAESB WGQ Version 1.9: Joint NAESB WEQ Version 002.1 Standard WEQ-014-A and WGQ Version 1.0 Standard No. 11.4.1 (Implementation Guide for Electronic Tariff Filing): http://naesb.org/pdf4/wgq_weq_mc10019.doc - for WEQ EC consideration August 17, 2010 *(Notational Ballot sent to WGQ EC on July 23 – Due August 6, 2010)*
    Comments provided on August 11, 2010 by E Skiba, Midwest ISO: http://www.naesb.org/pdf4/wgq_mc081110_miso.doc

    MC10022 -- Submitted on June 28, 2010 by T. Gwilliam, Iroquois Gas Transmission System, L.P., to add code value description "Deferred Asset Surcharge" with code value "DAS" to the list of standardized code values for the following datasets and data elements: 3.4.1, 5.4.1, 5.4.2, 5.4.3, 5.4.7, 5.4.8, 5.4.18, 5.4.19, 5.4.20, 5.4.21, 5.4.22, http://www.naesb.org/pdf4/wgq_mc10022.doc

    MC10024 – Submitted on June 11, 2010 as R10006, by Submitted by R. Hogge, Dominion Transmission, to add , Reduction Reason code value(s) to NAESB WGQ Standard 1.4.6, http://www.naesb.org/pdf4/wgq_mc10024.doc

    MC10026– Submitted on July 12, 2010 by K. Brooks, Williston Basin Interstate Pipeline Company, to add a Code Value for the data element "Transaction Type" to the following Transaction Data Sets: Nomination (1.4.1), Scheduled Quantity (1.4.5), Pre-determined Allocation (2.4.1), Allocation (2.4.3), Shipper Imbalance (2.4.4), and Transportation/Sales Invoice (3.4.1), http://www.naesb.org/pdf4/wgq_mc10026.doc

    MC10028– Submitted on July 23, 2010 by M. Mahle, Transcanada to add back the Code Value for the data element "Surcharge Indicator" to the following Transaction Data Sets: Offer Download (5.4.1), Bid Download (5.4.2) and Award Download (5.4.3), http://www.naesb.org/pdf4/wgq_mc10028.doc

    MC10029– Submitted on July 27, 2010 by K. Brooks, Williston Basin Interstate Pipeline Company to correct NAESB WGQ Standard 4.3.54 for Full Name and Abbreviation from "Site Maps" (plural) to "Site Map" (singular) to be consistent with Standards 4.3.42 and 4.3.25. http://www.naesb.org/pdf4/wgq_mc10029.doc

    MC10030– Submitted on August 9, 2010 D. Davis, Joint WGQ Information Requirements/Technical Subcommittee to correct the NAESB WGQ Version 1.9 Standard No.5.4.7 (Offer Upload) data dictionary for the condition of the data element Special Terms and Miscellaneous Notes – Storage Inventory Conditions, http://www.naesb.org/pdf4/wgq_mc10030.doc

13. Review and Discuss Recommendation R10004 – Modify the usage of beginning time and ending time as used in several of the nominations, flowing gas and invoicing data sets, Recommendation: http://www.naesb.org/pdf4/wgq_r10004_rec_080210.doc *(Comments Due September 3, Vote to be taken at a subsequent meeting or to be taken notationally after the comment period concludes)*

14. Discuss WGQ Publication Schedule: WGQ Publication Schedule: http://www.naesb.org/misc/wgq_publication_schedule_072910.doc,
    WEQ Publication Schedule: http://www.naesb.org/misc/weq_publication_schedule_072910.doc,
    Retail Publication Schedule: http://www.naesb.org/misc/retail_publication_schedule_072910.doc (Retail and WEQ provided for context)

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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
WHOLESALE GAS QUADRANT DRAFT AGENDA
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15. Update on Subcommittee Activities (meeting materials for updates will be provided by leadership as they are available):
    a. Triage Subcommittee: April 30 Report: http://www.naesb.org/pdf4/tr043010disposition.doc, Actions Pending: http://www.naesb.org/pdf4/tr080210agenda.doc
    b. Business Practices Subcommittee (BPS)
    c. Joint Information Requirements and Technical Subcommittee
    d. Electronic Delivery Mechanisms (EDM) Subcommittee
    e. Interpretations Subcommittee

16. Review, discuss, identify changes and vote to approve changes to the 2010 Annual Plan to be proposed to the Board of Directors: http://www.naesb.org/misc/wgq_2010_annual_plan_redlined_080210.doc (simple majority vote for EC endorsement of proposed changes to be forwarded for Board approval)

17. Board of Directors, Board Committee and Regulatory Updates (no votes or action to be taken):
    a. Board Updates – Board Meeting June 24, 2010 http://www.naesb.org/pdf4/bd062410dm.doc
    b. Board Critical Infrastructure Committee: http://www.naesb.org/pdf4/bd_cic_071910notes.doc
    c. Quadrant Updates: Wholesale Electric and Retail key activities – WEQ Annual Plan, Retail Annual Plan http://www.naesb.org/pdf4/weq_2010_annual_plan.doc (WEQ), http://www.naesb.org/pdf4/retail_2010_annual_plan.doc (Retail)
    d. Regulatory Efforts

18. Other Business
    2010 Schedule: http://www.naesb.org/misc/2010_schedule.pdf

19. Adjourn

Attire – Business Casual

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July 29, 2010

TO: NAESB Quadrant Executive Committee Members, Alternates and Interested Industry Participants

FROM: Cory Galik Cummings, Staff Attorney

RE: Retail Executive Committee Meeting Draft Minutes

NORTH AMERICAN ENERGY STANDARDS BOARD
RETAIL EXECUTIVE COMMITTEE MEETING
May 5, 2010
DRAFT MINUTES

1. Welcome

Mr. Novak called the meeting to order and welcomed the Retail Electric (REQ) and Retail Gas (RGQ) Executive Committee (EC) members and other participants. Ms. Cummings gave the antitrust guidance and REQ and RGQ members and other participants introduced themselves. Quorum was established. Mr. Jones moved to adopt the agenda and Ms. Marino seconded the motion. The motion passed without opposition.

2. Retail Quadrant Draft Minutes

The February 3, 2010 Retail EC meeting minutes were reviewed. Mr. Jones moved, seconded by Ms. Munson, to adopt the minutes as drafted. The motion passed unanimously.

3. Presentation on NAESB Retail Activities

Mr. Jones presented a power point presentation on NAESB retail activities. The presentation covered the purpose and overview of NAESB and the retail quadrants. While discussing the work accomplished in Book 8, Ms. McQuade referred to an effort underway on energy usage (PAP 10) and noted there may be some synergies. In discussing the glossary efforts, Ms. McQuade asked if the terms that are contextually specific would be embedded in Book 0 and in the definitions for a particular book. Mr. Precht said that they would be. He also added that there are technical definitions embedded in the technical implementation guidelines that are contextual, but not business definitions. Those definitions would appear in the definition section of the book but not in Book 0. Ms. McQuade noted that the attendees for the monthly update calls would appreciate this presentation, as it would allow them to realize the extent of the work accomplished. Ms. Marino agreed and suggested outreach to the state commissions to make them aware of this presentation. Ms. McQuade noted that she would discuss this with NARUC.

4. Review and Discuss for Possible Notational Vote in mid-May: REQ/RGQ Request for Formal Comments on 2009 Retail Annual Plan Item No. 10 (a) and (c): Service Request, Disconnection and Reconnection in the Registration Agent Model

Mr. Precht reviewed the recommendation for the registration agent model, which currently only resides in Texas. The recommendation contains four parts, the first relates to service requests; the second is the model business practices for disconnection for non-payment; the third relates to reconnection after disconnection of non-payment; and the fourth relates to disconnection initiated by the distribution company for reasons other than non –payment. Ms. McQuade asked if this work word apply to the smart grid efforts. Ms. Munson answered that this work had not been addressed in relation to the smart meters because Texas is relatively new in implementing them. Ms. McQuade suggested that this item be considered for addition to the 2011 annual plan when drafting begins for that effort later this year. The formal comment deadline is May 7, 2010.

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5. Update on WEQ/REQ Recommendations for smart grid standards for NIST PAPs 3,4 and 9

Mr. Booe provided an update on the recommendations. The smart grid task force developed four recommendations related to the assignments received from NIST on PAP03, PAP04 and PAP09. The wholesale and retail recommendations for PAP03 and PAP04 are identical, while the recommendations for PAP09 differ between the two quadrants. The retail PAP09 recommendation is more detailed and broader in its application than the WEQ PAP09 recommendation. The recommendations have gone out for formal comment. The task force will review the comments received and will provide changes to the Executive Committees in the form of late comments. Mr. Booe is preparing a matrix for the comments. Two conference calls will be scheduled for the WEQ and REQ Executive Committees, a single topic conference call to provide EC members with the opportunity to discuss the recommendations with the subject matter experts, and a second call to vote on the recommendations. The second phase of standards development now underway will add granularity to the data requirements.

Mr. Booe provided an overview on PAP10. NAESB was initially asked to develop an industry survey to gather the existing practices for usage communications between energy suppliers and consumers. A report was produced to consolidate the use cases. NIST expressed an interest in a single standard for this item and would like a standards development organization to develop the standard. This work may be assigned to NAESB, or it may be assigned to the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE). Ms. McQuade encouraged participants to stay involved in this effort, regardless of which organization is assigned the work.

6. Discuss Retail Version 1.3, scheduled for publication in 1st Q 2011: Publication Schedule: WGQ Publication Schedule

At yesterday's WEQ EC meeting, the publication schedule for the WEQ was pushed back from August to September or October to allow time for the completion of NITS. The WGQ will publish their next publication in late November. The retail publication will be published in the first quarter of 2011. In order to be published in the next retail publication, the standards will have to pass through the subcommittee by the end of January so the EC can approve them by the end of February and be ratified by membership by the end of March.

7. Update on Subcommittee Activities

Triage Subcommittee: Two requests were triaged. R10001 was a request for WGQ and was assigned to WGQ BPS and EDM. R10002 was a request from Endeavor Engineering to develop common interfaces and data structure necessary for enrolling customers into demand response programs. This item is predominantly retail, but may also have an impact on the WEQ. It was assigned to the WEQ/REQ DSM-EE subcommittee.

Business Practices Subcommittee (BPS) and Texas Task Force: The Retail BPS voted the billing and payments model business practices out of the subcommittee and it will be sent out for formal comment shortly. The BPS is also working on creating a user's guide for Book 0.

DSM-EE Subcommittee: Mr. Precht provided the update. The retail demand response work group is working on completing its phase 2 efforts. The work group has continued to review the formal comments from the first phase of standards development. Once that effort is completed, the work will be sent out for an informal comment period prior to consideration by the DSM-EE subcommittee. The retail and wholesale demand response glossaries will be compared against each other to ensure consistency.

The retail energy efficiency group has been considering phasing the standards development in a manner similar to the demand response work. That work group is finalizing the scope of their work product.

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Glossary Efforts: Mr. Eynon noted that the glossary subcommittee has not met since the last EC meeting. They will be involved in the glossary work that the DSM-EE subcommittee will be engaging in as they complete their standards development efforts.

8. Review, discuss, identify changes and vote to approve changes to the 2010 Annual Plan to be proposed to the Board of Directors

Participants reviewed the 2010 Retail Annual Plan and made changes accordingly. Mr. Minneman moved, seconded by Mr. Jones, to approve the annual plan. The motion passed unanimously.

9. Board of Directors, Board Committee and Regulatory Updates

Board Updates: Ms. McQuade urged participants to review the minutes from the March 25 Board meeting. She noted the discussion surrounding a request from a board member to extend the NAESB demand response standards to become more detailed in regards to program design. It was determined not to pursue those standards development efforts at this time.

The Retail Structure Review Committee informed the board of the efforts taken to increase retail membership. The REQ has seen an increase in membership, mostly due to the work being addressed on the smart grid, demand response and energy efficiency. There has also been increased participation by state commission staff.

Advisory Council Updates: Ms. McQuade asked participants to review the notes from the February 13, 2010 Advisory Council meeting. She urged participants to attend this meeting, held every year in conjunction with the winter NARUC meeting.

Board Critical Infrastructure Committee: Ms. McQuade asked participants to review the notes from the March 22, 2010 Critical Infrastructure Committee meeting.

Wholesale Gas and Wholesale Electric activities: The WGQ 2010 Annual Plan and the WEQ 2010 Annual Plan were briefly reviewed.

Regulatory Actions: On April 8, 2010 the NAESB office filed comments on FERC's Draft National Action Plan on Demand Response. These comments highlighted the work accomplished by NAESB in demand response and to assure the industry that this is an important work paper.

10. Other Business

Ms. McQuade noted that the next EC meeting would be held on August 18 in Colorado Springs, CO, hosted by El Paso Western Pipeline.

11. Adjourn

Mr. Precht moved to adjourn the meeting. The meeting adjourned at 1:55 PM Eastern.

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12. Attendance and Vote Record

RETAIL GAS QUADRANT EXECUTIVE COMMITTEE		ATTENDANCE
SERVICE PROVIDERS/SUPPLIERS SEGMENT		
Richard Zollars	Dominion Retail, Inc.	
DISTRIBUTION SEGMENT		
Dan Jones	Duke Energy	In Person
Michael Novak	National Fuel Gas Distribution Corporation	In Person
END USER SEGMENT/PUBLIC AGENCIES SEGMENT		
RETAIL ELECTRIC QUADRANT EXECUTIVE COMMITTEE		**ATTENDANCE**
SERVICE PROVIDERS/SUPPLIERS SEGMENT		
Bill Barkas	Dominion Retail, Inc.	
Jim Minneman	PPL Solutions, LLC	In Person
B. Siegel for Jennifer Teel	EC Power	In Person
Susan Munson	Electric Reliability Council of Texas	Phone
UTILITIES SEGMENT		
Phil Precht	Baltimore Gas and Electric Company	Phone
Patrick Eynon	Ameren Services	Phone
Judy Ray	Alabama Power Company	Phone
Michael Jesensky	Dominion Virginia Power	Phone
END USER/PUBLIC AGENCIES SEGMENT		
Annunciata Marino	Pennsylvania Public Utility Commission	In Person
Christopher Kotting	Public Utility Commission of Ohio	

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Other Participant Attendance

Participant	Organization	Attendance
Jonathan Booe	NAESB	Phone
Sharon Chaffin	Columbia Gas of Ohio	Phone
Christina Crable	Direct Energy	Phone
Cory Cummings	NAESB	In Person
Patricia Krise Burket	PA Public Utility Commission	In Person
Rae McQuade	NAESB	In Person
Denise Rager	NAESB	Phone
Debi Rednik	Hess Corporation	Phone
Teresa Ringenbach	Direct Energy	Phone
Diane Slifer	Viauna	Phone
Veronica Thomason	NAESB	In Person
Bob Tullio	National Fuel Resources, Inc.	Phone
Jill Vaughn	Court Reporter	In Person

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June 16, 2010

TO: NAESB Wholesale Electric Quadrant (WEQ) & Retail Electric Quadrant (REQ) Executive Committees and Interested Industry Participants

FROM: Jonathan Booe, NAESB Staff Attorney

RE: WEQ & REQ Executive Committees Single Topic Conference Call - Draft Minutes

NORTH AMERICAN ENERGY STANDARDS BOARD
WHOLESALE & RETAILELECTRIC QUADRANTS
EXECUTIVE COMMITTEES
SINGLE TOPIC CONFERENCE CALL
Wednesday, June 16, 2010 – 10:00 am to 4:00 pm Mountain
DRAFT MINUTES

1. Welcome

Mr. Precht called the meeting to order and welcomed the Retail Electric Quadrant ("REQ") and Wholesale Electric Quadrant ("WEQ") Executive Committee ("EC") members, alternates and other participants. Mr. Booe provided the anti-trust guidance and called the roll of the REQ and WEQ EC members and alternates. Quorum was established for the REQ EC but not the WEQ EC. The WEQ EC agreed to deem the meeting a working session until quorum can be established. Mr. Skiba asked if Mr. Kotting would be allowed to vote on both the REQ and WEQ recommendations, as he holds a seat in both Quadrants. Ms. McQuade responded that Mr. Kotting will only be allowed to vote in one Quadrant on the joint recommendations but will be allowed to vote on both Priority Action Plan ("PAP") nine recommendations. Mr. Skiba moved to adopt the agenda and Mr. Kotting seconded the motion. The motion passed without opposition.

Mr. Hodges provided a brief overview of the recommendations and noted that the PAP 3 and PAP 4 recommendations were created jointly; however, the PAP 9 recommendations separated to reflect the market structure and initial work products.

2. Retail Electric Quadrant Recommendations

2010 REQ Annual Plan Item 9(a): Ms. Marino made a motion to adopt the recommendation for 2010 Retail Annual Plan Item 9(a) - Requirements Specification for Common Electricity Product and Pricing Definition for NIST PAP 3. Mr. Kotting seconded the motion and offered a friendly amendment to adopt the recommendation incorporating the modifications proposed by the Smart Grid Standards Task Force. Ms. Marino accepted the friendly amendment. Ms. Marino noted that she submitted a set of late comments on the recommendation and presented her comments to the participants. Ms. McQuade noted that Ms. Marino's comments could be categorized as substantive and non-substantive or grammatical and noted that the substantive comments could either be addressed in this meeting or forwarded for consideration in the Smart Grid Standards Task Force phase two effort. Ms. Marino and Mr. Kotting supported acceptance of the grammatical changes and forwarding her other comments on for consideration in phase two.

Mr. Skiba stated that he submitted a set of late comments on the PAP 3 recommendation and presented his proposed modifications. He noted that the purpose of the proposed modifications is to provide a level of consistency across the other recommendations and other NAESB business practices. Ms. McQuade asked Mr. Skiba to highlight the portions of the recommendation, as proposed, that would be included in the published standards. Mr. Skiba stated that portions of the Executive Summary he proposed be moved to the Summary section of the recommendation would be included in the final action but not the published standard. He also noted that sections he proposed to move to section 4.e of the recommendation would not be part of the published standards. Mr. Kotting stated that the sentence concerning the electricity rate design process should not be struck from the recommendation as proposed in Mr. Skiba's comments. Ms. Marino supported Mr. Kotting's statement. After discussion, the REQ EC supported

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addressing Mr. Skiba's substantive comments in the phase two effort with Ms. Marino's substantive comments. Mr. Kotting made a friendly amendment to adopt Mr. Skiba's proposed grammatical changes and to consider the substantive comments in the Smart Grid Standards Task Force phase two effort. Ms. Marino accepted the friendly amendment. Mr. Winkler confirmed that the motion precludes the adoption of Mr. Skiba's proposed shifting of sections of the recommendation. Mr. Precht confirmed. Mr. Coe noted that he supports Mr. Skiba's proposed modifications to Appendix A of the recommendation. The REQ EC voted on the motion and the motion passed a super majority balanced vote. [Vote 1].

2010 Retail Annual Plan Item 9(b): Mr. Kotting made a motion to adopt the recommendation for 2010 Retail Annual Plan Item 9(b) - Requirements Specifications for Common Scheduling Mechanism for Energy Transactions incorporating the modifications proposed by the Smart Grid Standards Task Force. Mr. Miyagi seconded the motion. Mr. Precht noted that Mr. Skiba provided late comments on the PAP 4 recommendation and asked Mr. Skiba if the comments could be separated into substantive and non-substantive or grammatical categories. Mr. Skiba replied affirmatively and Ms. Marino made a friendly amendment to incorporate the non-substantive comments, similar to those incorporated into the PAP 3 recommendation, into the PAP 4 recommendation. Mr. Kotting and Mr. Miyagi accepted the friendly amendment. The REQ EC voted on the motion and the motion passed a super majority balanced vote. [Vote 2].

2010 Retail Annual Plan Item 9(c): Mr. Kotting made a motion to adopt the recommendation for 2010 Retail Annual Plan Item 9(c) - Requirements Specifications for Retail Standard DR Signals for NIST PAP09 incorporating the modifications proposed by the Smart Grid Standards Task Force. Mr. Jesensky seconded the motion. Ms. Marino made a friendly amendment to incorporate the non-substantive comments proposed by Mr. Skiba, similar to those incorporated into the PAP 3 and 4 recommendations, into the PAP 9 recommendation. Mr. Kotting and Mr. Jesensky accepted the friendly amendment. The REQ EC voted on the motion and the motion passed a super majority balanced vote. [Vote 3].

3. Wholesale Electric Quadrant Recommendations

Ms. York noted that the WEQ EC had established quorum and could now take action on the recommendations.

2010 WEQ Annual Plan Item 6(a): Mr. Winkler made a motion to adopt the recommendation for 2010 WEQ Annual Plan Item 6(a) - Requirements Specification for Common Electricity Product and Pricing Definition for NIST PAP 3. Mr. True seconded the motion. Mr. Gallagher offered a friendly amendment to incorporate the modifications proposed by the Smart Grid Standards Task Force late comments. Mr. Winkler and Mr. True accepted the amendment. Mr. Skiba reviewed his proposed modifications and offered a friendly amendment to accept the non-substantive or grammatical corrections proposed in late comments as adopted by the REQ EC. Mr. Winkler and Mr. True accepted the amendment. Mr. Skiba offered a friendly amendment to accept the proposed modification to the definition of Load Serving Entity ("LSE") contained in his late set of comments in an effort to remain consistent with the definition previously adopted by the WEQ EC and contained in the WEQ glossary. Mr. Winkler and Mr. True accepted the amendment. Ms. McQuade asked if the Task Force considered the current definition for LSE and intentionally recommended the modification. Ms. Pratt noted that the Task Force made an effort to ensure that the definitions in the recommendation were consistent with those in the NAESB glossary and that the definition for LSE must have been unintentionally omitted. Mr. Kotting and Mr. Skiba supported Ms. Pratt's summation.

Next, Mr. Skiba offered an amendment to remove 016-1.2.2 Product and Pricing Attributes Considered for Use Cases and include the section in the supporting documentation so that the recommendation remains consistent with the recommendations for PAPs 4 and 9. He stated that the Task Force removed the data requirements sections from the PAP 9 recommendations and included them in the supporting documentation and that the PAP 4 data requirements sections were removed from the recommendation and not included elsewhere. Ms. York confirmed that the proposed action was not taken by the REQ EC. Ms. Pratt stated that she recommended that the data requirements be removed from the recommendations during the Task Force's consideration so that they could be more fully developed as part of the phase two effort. The WEQ EC took a simple majority vote to accept the amendment and the amendment passed without opposition. Mr. Skiba stated the remainder of his comments would

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not be considered friendly amendments and offered the remainder of his proposed modifications en banc as an amendment to the main motion. Mr. Gallagher asked if there is a second to Mr. Skiba's motion to amend. Ms. Wesley seconded Mr. Skiba's motion to amend. Mr. Winkler stated that he considered the portions of the standards Mr. Skiba purposes to shift to the supporting documentation as informational and therefore supports the amendment. Ms. Crockett noted that Mr. Skiba's proposed modifications are extensive and that she would feel more comfortable moving the proposed modifications into the phase two effort as the EC members were only given one night to digest the comments. Which span a considerable number of redlined pages. Ms. York recommended that the participants take a roll call vote on the amendment. The amendment passed a simple majority roll call vote. [Vote 4].

The WEQ EC voted on the motion as amended; however, enough votes were not garnered to make a determination. [Vote 5]. The motion was distributed for a notational ballot period.

2010 WEQ Annual Plan Item 6(b): Mr. Winkler made a motion to adopt the recommendation for 2010 Wholesale Annual Plan Item 6(b) - Requirements Specifications for Common Scheduling Mechanism for Energy Transactions. Ms. Wesley seconded the motion. Mr. Gallagher offered a friendly amendment to incorporate the modifications proposed by the Smart Grid Standards Task Force late comments. Mr. Winkler and Ms. Wesley accepted the amendment. Mr. Skiba offered a friendly amendment to accept the non-substantive or grammatical corrections proposed in late comments as adopted by the REQ EC. Mr. Winkler and Ms. Wesley accepted the amendment. Mr. Skiba offered an amendment to move the Executive Summary contained in the recommended standards into section three of the recommendation. Mr. Winkler confirmed that this is the same action that was taken with respect to the PAP 3 recommendation. Mr. True seconded Mr. Skiba's proposed amendment. The amendment passed a simple majority vote of the WEQ EC. [Vote 6]. Mr. Winkler asked if the Task Force would be aware that these modifications were made and that they can be reviewed as part of the phase two effort. Mr. Skiba stated that the WEQ Annual Plan can be modified to ensure that the resulting final actions are considered and reviewed as part of the phase two effort. Ms. McQuade and Mr. Gallagher noted that the Annual Plan would not have to be changed as the action can be taken as a directive from the WEQ EC. The WEQ EC voted on the motion as amended; however, enough votes were not garnered to make a determination [Vote 7]. The motion will be distributed for a notational ballot period.

2010 WEQ Annual Plan Item 6(c): Mr. Winkler made a motion to adopt the recommendation for 2010 WEQ Annual Plan Item 6(c) - Requirements Specifications for Retail Standard DR Signals for NIST PAP09. Ms. Wesley seconded the motion. Mr. Gallagher offered a friendly amendment to incorporate the modifications proposed by the Smart Grid Standards Task Force late comments. Mr. Winkler and Ms. Wesley accepted the amendment. Mr. Skiba offered a friendly amendment to accept the non-substantive or grammatical corrections proposed in late comments as adopted by the REQ EC and to add the term "use" to a sentence in the scope section of the recommendation. Mr. Winkler and Ms. Wesley accepted the amendment. Mr. Skiba offered an amendment to move the Executive Summary contained in the recommended standards into section three of the recommendation. Mr. True seconded Mr. Skiba's proposed amendment. The amendment passed a simple majority vote. [Vote 8] The WEQ EC voted on the motion as amended; however, enough votes were not garnered to make a determination. [Vote 9]. The motion will be distributed for a notational ballot period.

4. Other Business

Ms. York noted that the Task Force should be made aware that the WEQ EC has directed them to review the items noted above as part of the phase two effort. She also noted that NAESB has received new assignments through PAP 10 from NIST and that the WEQ EC membership should participate as the issues will be in font of them for vote this year.

5. Adjourn

Mr. True moved, seconded by Mr. Skiba, to adjourn the meeting at 3:15 PM Central.

6. Voting Record and Attendance

NORTH AMERICAN ENERGY STANDARDS BOARD
REQ/WEQ EXECUTIVE COMMITTEE
Voting Record from June 16, 2010

VOTES: S – indicates an affirmative vote, O – indicates a vote in opposition, A – indicates an abstention, NB – indicates a vote cast through notational ballot and a blank cell indicates that the voter did not vote. The motions fro which the voting results are detailed below are noted in the minutes.

V1	V2	V3	V4[1]	V5	V6[2]	V7	V8[3]	V9			
									WEQ TRANSMISSION SEGMENT	SUBSEGMENT:	WEQ TRANSMISSION SEGMENT
			S	A	S	S	S	S	Patrick McGovern	Georgia Transmission Corporation	Muni/Coop
			O	S	S	S	S	S	Chuck Feagans alt. for Wendy Weathers	Tennessee Valley Authority	Fed/State/Prov.
			O	S	S	S	S	S	Daryl McGee	Southern Company Services	IOU
									Edward Davis	Entergy Services, Inc.	IOU
				S (NB)		S (NB)		S (NB)	Marceline Otondo	Arizona Public Service	at large
				S (NB)		S (NB)		S (NB)	Bob Harshbarger	Puget Sound Energy	at large
			S	S	S	S	S	S	Hasnah Mat-Amin for Michelle Mizumori	Western Electricity Coordinating Council	At-Large
									WEQ GENERATION SEGMENT		
			O	S	S	S	S	S	William J. Gallagher	Vermont Public Power Supply Authority	Muni/Coop
			O	S	S	S	S	S	Kathy York	Tennessee Valley Authority	Fed/State/Prov.
			O	S	S	S	S	S	John Ciza	Southern Company Services	IOU
				A		A		A	Alan Johnson	NRG Energy, Inc.	Merchant
			S	S	S	S		S (NB)	Trent Carlson	RRI Energy Services, Inc.	at large

[1] V4 is a simple majority vote that passed for the WEQ EC.
[2] V6 is a simple majority vote that passed for the WEQ EC.
[3] V8 is a simple majority vote that passed for the WEQ EC.

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North American Energy Standards Board

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Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD

REQ/WEQ EXECUTIVE COMMITTEE

Voting Record from June 16, 2010

VOTES											
S – indicates an affirmative vote, O – indicates a vote in opposition, A – indicates an abstention, NB – indicates a vote cast through notational ballot and a blank cell indicates that the voter did not vote. The motions fro which the voting results are detailed below are noted in the minutes.											
V1	V2	V3	V4[1]	V5	V6[2]	V7	V8[3]	V9			
				S (NB)		S (NB)		S (NB)	Shah Hossain	Westar Energy, Inc.	at large
									WEQ MARKETERS/BROKERS SEGMENT		
				S (NB)		S (NB)		S (NB)	Chris Norton	American Municipal Power, Inc.	Muni/Coop
			O	S	S	S	S	S	Valerie Crockett alt. for B. Thornton	Tennessee Valley Authority	Fed/State/Prov.
									Richard Lehman	Salt River Project	at large
									John Apperson	PacifiCorp Energy	IOU
			O	S	S	S	S	S	Roy True	ACES Power Marketing	at large
			S	S	S	S	S	S	Barry Green	Electric Power Supply Association (EPSA)	at large
									WEQ DISTRIBUTION/LOAD SERVING ENTITIES (LSE) SEGMENT		SUBSEGMENT:
				S (NB)		S (NB)		S (NB)	Ray Phillips	Alabama Municipal Electric Authority	Muni/Coop
									Alan Pritchard	Duke Energy Corporation	IOU
									Rufus D. Gladney	Consumers Energy Company	IOU
			S	S	S	S	S	S	Robert Martinko	FirstEnergy Service Company	at large
									Syd Berwager	Bonneville Power Administration	Other
									Andy Rodriquez	NERC	At-Large
									WEQ END USERS SEGMENT		
									Aaron Breidenbaugh	EnerNOC, Inc.	at large
				O (NB)		O (NB)		O (NB)	Lou Ann Westerfield	Idaho Public Utilities Commission, rep. National Association of Regulatory Utility Commissioners	Regulator
							S	S	Christopher Kotting	Public Utility Commission of Ohio	at large
									Paul Sorenson	Open Access Technology International, Inc.	At-Large

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NORTH AMERICAN ENERGY STANDARDS BOARD

REQ/WEQ EXECUTIVE COMMITTEE

Voting Record from June 16, 2010

VOTES										
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V1	V2	V3	V4[1]	V5	V6[2]	V7	V8[3]	V9		
									WEQ INDEPENDENT GRID OPERATORS/PLANNERS SEGMENT	
			S	S	S	S	S	S	Cathy Wesley alt. for Thomas Bowe	PJM Interconnection
				S (NB)		S (NB)		S (NB)	Jim Castle	New York Independent System Operator, Inc.
			S	S	S	S	S	S	Eric Winkler alt. for Matt Goldberg	ISO New England, Inc.
				S (NB)		S (NB)		S (NB)	Nancy Traweek	California ISO
			S	S	S	S	S	S	Paul Wattles alt. for J. Mickey	Electric Reliability Council of Texas
			S	S	S	S	S	S	Ed Skiba	Midwest ISO
			S	S	S	S	S	S	Jimmy Wolmack alt. for Charles Yeung	Southwest Power Pool
									WEQ TECHNOLOGY AND SERVICES	
			O	S	S	S		S	Jim Buccigross	8760, INC
									REQ SERVICE PROVIDERS/SUPPLIERS SEGMENT	
									Bill Barkas	Dominion Retail, Inc.
									Jim Minneman	PPL Solutions, LLC
S	S	S							Jennifer Teel	ista
S	S	S							Susan Munson	Electric Reliability Council of texas
									REQ UTILITIES SEGMENT	
S	S	S							Phil Precht	Baltimore Gas and Electric Company
A	A	A							Patrick Eynon	Ameren Services
S	S	S							Judy Ray	Alabama Power Company

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NORTH AMERICAN ENERGY STANDARDS BOARD

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Voting Record from June 16, 2010

VOTES										
S – indicates an affirmative vote, O – indicates a vote in opposition, A – indicates an abstention, NB – indicates a vote cast through notational ballot and a blank cell indicates that the voter did not vote. The motions fro which the voting results are detailed below are noted in the minutes.										
V1	V2	V3	V4[1]	V5	V6[2]	V7	V8[3]	V9		
S	S	S							Michael J. Jesensky	Dominion Resources Services, Inc.
									END USER/PUBLIC AGENCIES SEGMENT	
S	S	S							Annunciata E. Marino	Pennsylvania Public Utility Commission
S	S	S							Christopher Kotting	Public Utility Commission of Ohio

Voting Results for Supermajority Votes

	Votes Possible	Votes Cast	Percentage Affirmative Votes Cast	Reaching the 40% Segment Affirmative Vote Threshold?	Motion Passing
V1 - SUPERMAJORITY	REQ – 10	7 affirmative 1 abstention 0 opposed	70%	Y	Passes Super Majority Vote
V2 - SUPERMAJORITY	Votes Possible	Votes Cast	Percentage Affirmative Votes Cast	Reaching the 40% Segment Affirmative Vote Threshold?	Motion Passing
	REQ – 10	7 affirmative 1 abstention 0 opposed	70%	Y	Passes Super Majority Vote
V3 - SUPERMAJORITY	Votes Possible	Votes Cast	Percentage Affirmative Votes Cast	Reaching the 40% Segment Affirmative Vote Threshold?	Motion Passing

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Voting Results for Supermajority Votes

	REQ – 10	7 affirmative 1 abstention 0 opposed	70%	Y	Passes Super Majority Vote
V5 - SUPERMAJORITY	Votes Possible	Votes Cast	Percentage Affirmative Votes Cast	Reaching the 40% Segment Affirmative Vote Threshold?	Motion Passing
	WEQ – 37	24 affirmative 2 abstention 1 opposed	65%	Y	Fails Super Majority Vote
V7- SUPERMAJORITY	Votes Possible	Votes Cast	Percentage Affirmative Votes Cast	Reaching the 40% Segment Affirmative Vote Threshold?	Motion Passing
	WEQ – 37	25 affirmative 1 abstention 1 opposed	67.5%	Y	Passes Super Majority Vote
V9 - SUPERMAJORITY	Votes Possible	Votes Cast	Percentage Affirmative Votes Cast	Reaching the 40% Segment Affirmative Vote Threshold?	Motion Passing
	WEQ – 37	25 affirmative 1 abstention 1 opposed	67.5%	Y	Passes Super Majority Vote

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7. Other Participants

Participant	Organization
Jonathan Booe	NAESB
Ernie Cardone	New York ISO
Scott Coe	UISOL
Brent Hodges	Reliant
Rae McQuade	NAESB
Ed Murrell	FERC
Josh Phillips	Southwest Power Pool
Donna Pratt	New York ISO
Peter Sergejewich	Independent Electricity System Operator
Veronica Thomason	NAESB
Jill Vaughn	Court Reporter

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters: Joint REQ/RGQ Business Practices Subcommittee
Request No.: 2009 Retail Annual Plan Item No. 10 (a) and (c)
Request Title: Service Request, Disconnection and Reconnection in the Registration Agent Model

1. RECOMMENDED ACTION:

__X__Accept as requested
___Accept as modified below
___Decline

EFFECT OF EC VOTE TO ACCEPT RECOMMENDED ACTION:

__X__Change to Existing Practice
___Status Quo

2. TYPE OF DEVELOPMENT/MAINTENANCE

Per Request:	**Per Recommendation:**
__X__Initiation	__X__Initiation
___Modification	___Modification
___Interpretation	___Interpretation
___Withdrawal	___Withdrawal
__X__Principle	__X__Principle
__X__Definition	__X__Definition
__X__Business Practice Standard	__X__Business Practice Standard
___Document	___Document
___Data Element	___Data Element
___Code Value	___Code Value
___X12 Implementation Guide	___X12 Implementation Guide
___Business Process Documentation	___Business Process Documentation

3. RECOMMENDATION

SUMMARY:

The Joint Retail Electric (REQ) and Retail Gas (RGQ) Quadrants' Business Practices Subcommittees (BPS) submit this Rwecommendation for 2009 Retail Annual Plan Item No. 10 (a) and (c) – Service Request, Disconnection and Reconnection in the Registration Agent Model. These Model Business Practices detail the processes in the Registration Agent model for a Service Request as defined within the Model Business Practices, Disconnection for either non-payment or when initiated by the Distribution Company for safety or other reasons, and for Reconnection when Disconnected for non-payment.

RECOMMENDED STANDARDS:

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

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SERVICE REQUEST, DISCONNECTION AND RECONNECTION IN THE REGISTRATION AGENT MODEL

Tab 1 -Executive Summary

This section presents a summary of the Model Business Practices for Service Request, Disconnection and Reconnection in a competitive energy market where there is a Registration Agent. In this model, alternative energy providers, known as Suppliers, sell gas and/or electricity to end use Customers. The Supplier provides the energy by purchasing it and arranging for its delivery by the Distribution Company to the Retail Customer.

Service Request, Disconnection and Reconnection processing where there is a Registration Agent encompasses a variety of interactions between Suppliers and Distribution Companies.. In a business environment where best practices are voluntary, Model Business Practices such as those included in this documentation may be applied within the context of regulatory or other market requirements and agreements.

Tab 2 -Version Notes

(Insert initial publication date)

Tab 3 –Introduction

The North American Energy Standards Board (NAESB) is a voluntary non-profit organization comprised of members from all aspects of the natural gas and electric industries. Within NAESB, the Retail Electric Quadrant (REQ) and the Retail Gas Quadrant (RGQ) focus on issues impacting the retail sale of energy to end-use customers. REQ / RGQ Model Business Practices are intended to provide guidance to Distribution Companies, Suppliers, and other Market Participants involved in providing competitive energy service to end-use Customers. The focus of these Model Business Practices is the processing of Service Requests, Disconnections and Reconnections where there is a Registration Agent.

These Model Business Practices are voluntary and do not address policy issues that are the subject of state legislation or regulatory decisions. These Model Business Practices have been adopted with the realization that as the industry evolves, additional and amended Model Business Practices may be necessary. Any industry participant seeking additional or amended Model Business Practices (including principles, definitions, data elements, process descriptions, and technical implementation instructions) should submit a request to the NAESB office, detailing the change, so that the appropriate process may take place to amend the Model Business Practice.

Tab 4 -Business Processes and Practices

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters: Joint REQ/RGQ Business Practices Subcommittee
Request No.: 2009 Retail Annual Plan Item No. 10 (a) and (c)
Request Title: Service Request, Disconnection and Reconnection in the Registration Agent Model

RXQ.14 Overview

RXQ.14.1 Principles

RXQ.14.1.1 The processes for Service Requests, Disconnections and Reconnections where there is a Registration Agent should be efficient to minimize the time and effort needed to accomplish these operational details.

RXQ.14.1.2 The processes for Service Requests, Disconnections and Reconnections where there is a Registration Agent should be consistent with the requirements set forth by the Applicable Regulatory Authority.

RXQ.14.1.3 The processes for Service Requests, Disconnections and Reconnections where there is a Registration Agent should minimize the occurrence of unauthorized activity in the marketplace.

RXQ.14.1.4 A contract or agreement between Market Participants may establish different processes, timeframes, or operational requirements. Any conflict between these recommended processes and an applicable contract shall be resolved according to the provisions of the contract.

RXQ.14.1.5 These processes do not address contractual obligations between Market Participants and their Customers.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
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Request Title: Service Request, Disconnection and Reconnection in the Registration Agent Model

RXQ.14.2 Definitions

RXQ.14.2.A Business Definitions

RXQ.0.2.16 **Customer**: Any Entity that takes gas and/or electric service for its own consumption.

RXQ.0.2.xxx **Disconnection**: The process of turning off energy service to a Customer.

RXQ.0.2.xxx **Disconnection Acknowledgement**: The Uniform Electronic Transaction used in the Registration Agent model to notify the Distribution Company that their Disconnection Notification has been received.

RXQ.0.2.xxx **Disconnection Completion**: The Uniform Electronic Transaction used in the Registration Agent model to notify the Supplier that their Disconnection Request has been fulfilled.

RXQ.0.2.xxx **Disconnection Notification**: The Uniform Electronic Transaction used in the Registration Agent model to notify the Supplier that a Disconnection has been made by the Distribution Company for safety or other easons.

RXQ.0.2.xxx **Disconnection Rejection**: The Uniform Electronic Transaction used in the Registration Agent model to notify the Supplier that their Disconnection Request has been denied.

RXQ.0.2.xxx **Disconnection Request**: The Uniform Electronic Transaction used by the Supplier in the Registration Agent model to initiate a Disconnection for non-payment.

RXQ.0.2.17 **Distribution Company**: A regulated Entity which provides distribution services and may provide energy and/or transmission/transportation services in a given area.

RXQ.0.2.45 **D-U-N-S® Number**: The D-U-N-S® Number is a 9-digit number assigned to companies by the Dun & Bradstreet Corporation .The D-U-N-S®+4 Number is a 10- to 13-digit number, where characters 10 through 13 are arbitrarily assigned by the owner of the D-U-N-S® Number.

RXQ.0.2.124 **ESI ID (Electric Service Identifier)**: A unique, intelligent alphanumeric identifier assigned by the Distribution Company for a single service delivery point.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
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RXQ.0.2.xxx **Reconnection**: The process of turning on energy service to a Customer after a Disconnection has been made.

RXQ.0.2.xxx **Reconnection Completion**: The Uniform Electronic Transaction used in the Registration Agent model to notify the Supplier that their Reconnection Request has been fulfilled.

RXQ.0.2.xxx **Reconnection Rejection**: The Uniform Electronic Transaction used in the Registration Agent model to notify the Supplier that their Reconnection Request has been denied.

RXQ.0.2.xxx **Reconnection Request**: The Uniform Electronic Transaction used by the Supplier in the Registration Agent model to initiate a Reconnection after a Disconnection has been made for non-payment.

RXQ.0.2.xxx **Service Request**: The process by which a Supplier communicates to the Distribution Company in the Registration Agent model the need for an investigation of the status of the equipment used to deliver energy and/or measure usage at the Customer's premise.

RXQ.0.2.xxx **Service Request Completion**: The Uniform Electronic Transaction used in the Registration Agent model to inform the Supplier that their Service Request Notification has been fulfilled.

RXQ.0.2.xxx **Service Request Notification**: The Uniform Electronic Transaction used by the Supplier in the Registration Agent model to initiate a Service Request

RXQ.0.2.xxx **Service Request Rejection**: The Uniform Electronic Transaction used in the Registration Agent model to notify the Supplier that their Service Request Notification has been denied.

RXQ.0.2.39 **Supplier**: Persons engaged in the competitive sale of energy to end-users.

RXQ.0.2.42 **Uniform Electronic Transaction**: Standard data arrangements for trading information, making business requests and exchanging other information, encompassing a number of electronic media and utilizing specified transport protocols.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
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RXQ.14.3 Model Business Practices

RXQ.14.3.1 Service Request

RXQ.14.3.1.1 Either the Customer or Supplier can identify the need for a Service Request. If the Customer identifies the need for a Service Request, the Customer should contact the Supplier.

RXQ.14.3.1.2 The Supplier should send the Service Request Notification via Uniform Electronic Transaction to the Distribution Company.

RXQ.14.3.1.3 In addition to the ESI ID, a Service Request Notification should contain the data elements found in RXQ.14.6. At a minimum, the following information should be included:

- Distribution Company name and D-U-N-S® Number;
- Supplier name and D-U-N-S® Number;
- Customer name;
- Customer service address;
- Customer zip code;
- Contact name;
- Customer contact number;
- Purpose code;
- Meter number;
- Priority code;
- Special needs indicator;
- Service requested date;
- Action code, and;
- Transaction type code.

RXQ.14.3.1.4 The Distribution Company should send a Service Request Rejection via Uniform Electronic Transaction to the Supplier if any of the following conditions exists:

- The ESI ID in the Service Request Notification does not exist, or:
- The Service Request Notification does not contain the required elements, or:
- The Supplier was not able to be verified as the current Supplier for the ESI ID.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

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RXQ.14.3.1.5 A Service Request Rejection should contain the data elements found in RXQ.14.6. At a minimum, the following information should be included:

- Distribution Company name and D-U-N-S® Number;
- Supplier name and D-U-N-S® Number;
- Action or status indicator;
- ESI ID;
- Status reason;
- Purpose code;
- Rejection reason code, and;
- Rejection reason, if applicable.

RXQ.14.3.1.6 The Distribution Company should process the Service Request Notification and send a Service Request Completion via Uniform Electronic Transaction to the Supplier if all of the following conditions exist:

- The ESI ID exists in the Distribution Company's system, and;
- The Service Request Notification has the required elements, and;
- The Supplier was verified as the current Supplier for the ESI ID.

RXQ.14.3.1.7 A Service Request Completion should contain the data elements found in RXQ.14.6. At a minimum, the following information should be included:

- Distribution Company name and D-U-N-S® Number;
- Supplier name and D-U-N-S® Number;
- Action or status indicator;
- ESI ID;
- Meter number;
- Distribution Company service order number;
- Disconnect location, if applicable;
- Actual date and time of completion;
- Last known meter reading, if applicable;
- Status reason, and;
- Purpose code.

RXQ.14.3.1.8 Once the Supplier receives the Service Request Completion, the Supplier should contact the Customer with the results of the Service Request, if applicable.

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RXQ.14.3.2 Disconnection for Non-Payment

RXQ.14.3.2.1 If the Supplier determines the Customer should be subject to Disconnection, then the Supplier should send a Disconnection Request via Uniform Electronic Transaction to the Distribution Company.

RXQ.14.3.2.2 In addition to the ESI ID, a Disconnection Request should contain the data elements found in RXQ.14.6. At a minimum, the following information should be included:

- Distribution Company name and D-U-N-S® Number;
- Supplier name and D-U-N-S® Number;
- Customer name;
- Customer service address;
- Customer zip code;
- Contact name;
- Customer contact number;
- Purpose code;
- Meter number;
- Priority code;
- Special needs indicator;
- Service requested date;
- Action code, and;
- Transaction type code.

RXQ.14.3.2.3 The Distribution Company should send a Disconnection Rejection via Uniform Electronic Transaction to the Supplier if any of the following conditions exists:

- The ESI ID in the Disconnection Request does not exist;
- The Disconnection Request does not contain the required elements, or;
- The Supplier was not able to be verified as the current Supplier for the ESI ID.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
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RXQ.14.3.2.4 A Disconnection Rejection should contain the data elements found in RXQ.14.6. At a minimum, the following information should be included:

- Distribution Company name and D-U-N-S® Number;
- Supplier name and D-U-N-S® Number;
- Action or status indicator;
- ESI ID;
- Status reason;
- Purpose code;
- Rejection reason code, and;
- Rejection reason, if applicable.

RXQ.14.3.2.5 The Distribution Company should process the Disconnection Request and send a Disconnection Completion via Uniform Electronic Transaction to the Supplier if all of the following conditions exist:

- The ESI ID exists in the Distribution Company's system, and;
- The Disconnection Request has the required elements, and;
- The Supplier was verified as the current Supplier for the ESI ID.

RXQ.14.3.2.6 A Disconnection Completion should contain the data elements found in RXQ.14.6. At a minimum, the following information should be included:

- Distribution Company name and D-U-N-S® Number;
- Supplier name and D-U-N-S® Number;
- Action or status indicator;
- ESI ID;
- Meter number;
- Distribution Company service order number;
- Disconnect location, if applicable;
- Actual date and time of completion;
- Last known meter reading, if applicable;
- Status reason, and;
- Purpose code.

RXQ.14.3.2.7 If the Customer remedies the reason for Disconnection, then the Supplier should send a Reconnection Request via Uniform Electronic Transaction to the Distribution Company.

RXQ.14.3.2.8 If the Distribution Company receives a Reconnection Request while the Disconnection Request is pending, then the Distribution Company

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters: Joint REQ/RGQ Business Practices Subcommittee
Request No.: 2009 Retail Annual Plan Item No. 10 (a) and (c)
Request Title: Service Request, Disconnection and Reconnection in the Registration Agent Model

should cancel the Disconnection Request in its system and send a Disconnection Completion with an un-executable status reason via Uniform Electronic Transaction to the Supplier.

RXQ.14.3.2.9 If the Distribution Company receives a Reconnection Request after the Disconnection Request has been completed, then the Distribution Company should process the Reconnection Request and send a Reconnection Completion via Uniform Electronic Transaction to the Supplier.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

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Request No.: 2009 Retail Annual Plan Item No. 10 (a) and (c)
Request Title: Service Request, Disconnection and Reconnection in the Registration Agent Model

RXQ.14.3.3 Reconnection When Disconnected for Non-Payment

RXQ.14.3.3.1 If the Customer contacts the Supplier to remedy the reason for Disconnection and the Supplier confirms that the Customer should be reconnected, then the Supplier should send a Reconnection Request via Uniform Electronic Transaction to the Distribution Company.

RXQ.14.3.3.2 In addition to the ESI ID, a Reconnection Request should contain the data elements found in RXQ.14.6. At a minimum, the following information should be included:

- Distribution Company name and D-U-N-S® Number;
- Supplier name and D-U-N-S® Number;
- Customer name;
- Customer service address;
- Customer zip code;
- Contact name;
- Customer contact number;
- Purpose code;
- Pole number;
- Meter number;
- Priority code;
- Special needs indicator;
- Service requested date;
- Action code, and;
- Transaction type code.

RXQ.14.3.3.3 The Distribution Company should send a Reconnection Rejection via Uniform Electronic Transaction to the Supplier if any of the following conditions exists:

- The ESI ID in the Reconnection Request does not exist, or:
- The Reconnection Request does not contain the required elements, or:
- The Supplier was not able to be verified as the current Supplier for the ESI ID.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
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Requesters: Joint REQ/RGQ Business Practices Subcommittee
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Request Title: Service Request, Disconnection and Reconnection in the Registration Agent Model

RXQ.14.3.3.4 A Reconnection Rejection should contain the data elements found in RXQ.14.6. At a minimum, the following information should be included:

- Distribution Company name and D-U-N-S® Number;
- Supplier name and D-U-N-S® Number;
- Action or status indicator;
- ESI ID;
- Status reason;
- Purpose code;
- Rejection reason code, and;
- Rejection reason.

RXQ.14.3.3.5 The Distribution Company should process the Reconnection Request and send a Reconnection Completion via Uniform Electronic Transaction to the Supplier if all of the following conditions exist:

- The ESI ID exists in the Distribution Company's system, and;
- The Reconnection Request has the required elements, and;
- The Supplier was verified as the current Supplier for the ESI ID.

RXQ.14.3.3.6 A Reconnection Completion should contain the data elements found in RXQ.14.6. At a minimum, the following information should be included:

- Distribution Company name and D-U-N-S® Number;
- Supplier name and D-U-N-S® Number;
- Action or status indicator;
- ESI ID;
- Meter number;
- Distribution Company service order number;
- Reconnect location;
- Actual date and time of completion;
- Meter reading;
- Status reason, and;
- Purpose code.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters: Joint REQ/RGQ Business Practices Subcommittee
Request No.: 2009 Retail Annual Plan Item No. 10 (a) and (c)
Request Title: Service Request, Disconnection and Reconnection in the Registration Agent Model

RXQ.14.3.4 Disconnection Initiated by Distribution Company

RXQ.14.3.4.1 If the Distribution Company identifies a need to disconnect a Customer's service for safety or other reasons, then the Distribution Company should send a Disconnection Notification via Uniform Electronic Transaction to the Supplier.

RXQ.14.3.4.2 In addition to the ESI ID, a Disconnection Notification should contain the data elements found in RXQ.14.6. At a minimum, the following information should be included:

- Distribution Company name and D-U-N-S® Number;
- Supplier name and D-U-N-S® Number;
- Meter number;
- Action code;
- Suspension code, and;
- Service suspension date and time.

RXQ.14.3.4.3 Upon reciept of a Disconnection Notification from the Distribution Company, the Supplier should send a Disconnection Acknowledgement via Uniform Electronic Transaction to the Distribution Company.

RXQ.14.3.4.4 In addition to the ESI ID, a Disconnection Acknowledgement should contain the data elements found in RXQ.14.6. At a minimum, the following information should be included:

- Distribution Company name and D-U-N-S® Number;
- Supplier name and D-U-N-S® Number, and;
- Action code.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters: Joint REQ/RGQ Business Practices Subcommittee
Request No.: 2009 Retail Annual Plan Item No. 10 (a) and (c)
Request Title: Service Request, Disconnection and Reconnection in the Registration Agent Model

RXQ.14.4 Models (see attachment link below)

RXQ.14.4.1 Service Request Applicable to Registration Agent Model Process Flow

RXQ.14.4.2 Disconnection for Non-Payment Applicable to Registration Agent Model Process Flow

RXQ.14.4.3 Reconnection When Disconnected for Non-Payment Applivable to Registration Agent Model Process Flow

RXQ.14.4.4 Disconnection Initiated by Distribution Company Applicable to Registration Agent Model Process Flow

(Attachment Link: http://www.naesb.org/pdf4/retail_2009_ap_10a_10c_rec_attach.ppt)

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters: Joint REQ/RGQ Business Practices Subcommittee
Request No.: 2009 Retail Annual Plan Item No. 10 (a) and (c)
Request Title: Service Request, Disconnection and Reconnection in the Registration Agent Model

4. SUPPORTING DOCUMENTATION

a. Description of Request:

2009 Retail Annual Plan Item No. 10 – Additional Registration Agent Processes

a. Review all existing Model Business Practices to determine if the Service Request process is already covered, and if necessary develop any new Model Business Practices required

c. Review all existing Model Business Practices to determine if the disconnection and reconnection processes are already covered, and if necessary develop any new Model Business Practices required

b. Description of Recommendation:

All existing Model Business Practices were reviewed and BPS determined that the Service Request, Disconnection, and Reconnectin processes were not covered. These Model Business Practices detail the processes in the Registration Agent model for a Service Request as defined within the Model Business Practices, Disconnection for either non-payment or when initiated by the Distribution Company for safety or other reasons, and for Reconnection when Disconnected for non-payment.

c. Business Purpose:

See above

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

These Model Business Practices were discussed by the Joint REQ/RGQ BPS at the following meetings and conference calls:

July 22, 2009	Conference Call
October 26 – 27, 2009	Face-to-Face Meeting
December 3, 2009	Confercne Call

The minutes of all meetings and conference calls are posted on the NAESB REQ and RGQ BPS wen pages.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters: Joint REQ/RGQ Business Practices Subcommittee
Request No.: 2009 Retail Annual Plan Item No. 10 (a) and (c)
Request Title: Service Request, Disconnection and Reconnection in the Registration Agent Model

On the December 3, 2009 BPS conference call by a vote of 7 In Favor and 0 Opposed, the Joint REQ/RGQ BPS voted to release the Service Request, Disconnection and Reconnection in the Registration Agent Model Process DFlows (Models) and Model Business Practices to the Joint REQ/RGQ Executive Committee for posting and approval, and to the Information Requirments Subcommittee for development of any technical implementation.

North American Energy Standards Board
801 Travis, Suite 1675, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

via email and posting

TO: NAESB Retail Electric Quadrant (REQ) and Retail Gas Quadrant (RGQ) Members and Interested Industry Participants

FROM: James Culliton, Staff Attorney

RE: Request for Formal Comments on the Service Request, Disconnection and Reconnection in the Registration Agent Model proposed Model Business Practices

DATE: April 7, 2010

Dear NAESB Retail Electric Quadrant (REQ), Retail Gas Quadrant (RGQ) Members and Interested Industry Participants,

An industry formal comment period begins today, April 7, 2010 and ends on May 7, 2010 for the Joint REQ/RGQ Business Practices Subcommittee recommendation below:

Recommendation:
2009 Retail Annual Plan Item No. 10 (a) and (c): Service Request, Disconnection and Reconnection in the Registration Agent Model Recommendation: http://www.naesb.org/pdf4/retail_2009_ap_10a_10c_rec.doc

All interested parties, regardless of membership status within NAESB, are eligible to submit comments for consideration. The REQ and RGQ Executive Committees will review the recommendation and consider it for vote during an upcoming Executive Committee meeting. The Executive Committees will review all submitted comments.

All comments received by the NAESB office by the end of business, May 7, 2010 will be posted on the Home Page http://naesb.org/retail_request.asp and forwarded to the REQ and RGQ Executive Committee members for their consideration. If you have difficulty downloading the recommendation, please call the NAESB office at (713) 356-0060.

Best Regards,

James Culliton

NAESB

cc: Rae McQuade, President

Comments Submitted by J. Cargas, City of Houston

From: Cargas, James P. – city of Houston
Sent: Wednesday, April 07, 2010 5:03 PM
To: Veronica Thomason
Subject: FW: REQ/RGQ Request for Formal Comments on 2009 Retail AP Item 10(a) and (c) - Due May 7, 2010

Veronica,
Please share this with James Culliton.
Thank you,
Jim

On page 4, there is a typo ...

RXQ.0.2.xxx Disconnection Notification: The Uniform Electronic Transaction used in the Registration Agent model to notify the Supplier that a Disconnection has been made by the Distribution Company for safety or other [r]easons.

James P. Cargas

Senior Assistant City Attorney
City of Houston, Legal Department

If you would like to receive periodic emails from Mayor Annise D. parker and the City of Houston on topics of interest to you and your neighborhood, please go to http://www.houstontx.gov and register with CitizensNet.

The information contained in this email is intended only for use by the individual or entity named above. If you are not the intended recipient, or the employee or agent responsible for delivering it to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication and/or any attachments is strictly prohibited. If you have received this communication in error, please contact the sender and destroy the original message and any attachments immediately. Thank you.

-----Original Message-----
From: naesbmail@naesb.org [mailto:naesbmail@naesb.org]
Sent: Wednesday, April 07, 2010 3:41 PM
To: Cargas, James P. - LGL
Subject: REQ/RGQ Request for Formal Comments on 2009 Retail AP Item 10(a) and (c) - Due May 7, 2010

via email and posting

Dear NAESB Retail Electric Quadrant (REQ), Retail Gas Quadrant (RGQ) Members and Interested Industry Participants,

Comments Submitted by J. Cargas, City of Houston

An industry formal comment period begins today, April 7, 2010 and ends on May 7, 2010 for the Joint REQ/RGQ Business Practices Subcommittee recommendation below:

Recommendation:

2009 Retail Annual Plan Item No. 10 (a) and (c): Service Request, Disconnection and Reconnection in the Registration Agent Model

Recommendation: http://www.naesb.org/pdf4/retail_2009_ap_10a_10c_rec.doc
All interested parties, regardless of membership status within NAESB, are eligible to submit comments for consideration. The REQ and RGQ Executive Committees will review the recommendation and consider it for vote during an upcoming Executive Committee meeting. The Executive Committees will review all submitted comments.

All comments received by the NAESB office by the end of business, May 7, 2010 will be posted on the Home Page http://naesb.org/retail_request.asp and forwarded to the REQ and RGQ Executive Committee members for their consideration. If you have difficulty downloading the recommendation, please call the NAESB office at (713) 356-0060.

Best Regards,
James Culliton
NAESB

cc: Rae McQuade, President

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters: **Joint REQ/RGQ Business Practices Subcommittee**
Request No.: **2010 Retail Annual Plan Item No. 4**
Request Title: **Billing and Payments**

1. RECOMMENDED ACTION:

__X__Accept as requested
___Accept as modified below
___Decline

EFFECT OF EC VOTE TO ACCEPT RECOMMENDED ACTION:
__X__Change to Existing Practice
___Status Quo

2. TYPE OF DEVELOPMENT/MAINTENANCE

Per Request:	**Per Recommendation:**
___Initiation	___Initiation
__X__Modification	__X__Modification
___Interpretation	___Interpretation
___Withdrawal	___Withdrawal
___Principle	___Principle
___Definition	___Definition
__X__Business Practice Standard	__X__Business Practice Standard
___Document	___Document
___Data Element	___Data Element
___Code Value	___Code Value
___X12 Implementation Guide	___X12 Implementation Guide
___Business Process Documentation	___Business Process Documentation

3. RECOMMENDATION

SUMMARY:

The Joint Retail Electric (REQ) and Retail Gas (RGQ) Quadrants' Business Practices Subcommittee (BPS) submit this Recommendation for 2010 Retail Annual Plan Item No. 4 – Billing and Payment which adds Models (Process Flows) for the Billing and Payments processes and 30 new or modified Model Business Practices (MBPs). Process Flows were not included in the original set of MBPs for Billing and Payment. In addition, during the development of the Process Flows several gaps were identified in the existing MBPs, and the new or revised MBPs fill these gaps.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters:	**Joint REQ/RGQ Business Practices Subcommittee**
Request No.:	**2010 Retail Annual Plan Item No. 4**
Request Title:	**Billing and Payments**

RECOMMENDED STANDARDS:

Billing and Payment

RXQ.3.3 Model Business Practices

RXQ.3.3.2 Dual Billing

RXQ.3.3.2.3 When meter usage is cancelled:

- Usage for all applicable periods should be cancelled by metering period; ~~and~~
- The usage sent via Uniform Electronic Transaction in the cancellation ~~transaction~~ notification should match the usage sent in the original ~~transaction~~ Uniform Electronic Transaction, and:
- The Distribution Company and Supplier should cancel the charges in their billing systems for the incorrect usage.

RXQ.3.3.2.4 When meter usage is restated:

- Usage for all applicable periods should be restated by metering period; ~~and~~
- Unless there has been a product or rate change, the restated usage ~~transaction~~should be sent via Uniform Electronic Transaction at the same level of detail as the original usage transaction~~.~~, and:
- The Distribution Company and Supplier should calculate and send a corrected bill based on the restated usage.

RXQ.3.3.4 Consolidated Billing - Bill Ready Billing

RXQ.3.3.4.3 If, upon examination, it is determined that the Non-Billing Party's file cannot be processed then the Billing Party should reject it. Rejection, accompanied by appropriate uniform error code(s), should be communicated via Uniform Electronic Transaction within one (1) Business Day of receipt of the file. The Non-Billing Party should correct the error and resubmit the file within the appropriate timeframe.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters:	**Joint REQ/RGQ Business Practices Subcommittee**
Request No.:	**2010 Retail Annual Plan Item No. 4**
Request Title:	**Billing and Payments**

RXQ.3.3.4.9 When a Bill Ready consolidated bill is to be cancelled:

- Usage for all applicable periods should be cancelled by metering period; and
- The usage sent via Uniform Electronic Transaction in the cancellation ~~transaction~~ notification should match the usage sent in the original Uniform Electronic Transaction ~~transaction~~.
- The Billing Party and Non-Billing Party should cancel the charges in their billing systems for the incorrect charges

RXQ.3.3.4.10 When a cancelled Bill Ready consolidated bill is to be re-billed:

- Usage for all applicable periods should be restated by metering period. Unless there has been a product or rate change, the restated usage ~~transaction~~ should be sent via Uniform Electronic Transaction at the same level of detail as the ~~original usage~~ original Uniform Electronic ~~T~~transaction;~~;and~~
- The Billing Party and Non-Billing Party should calculate corrected bills based on the restated usage and the Non-Billing Party should send its corrected bill via Uniform Electronic Transaction to the Billing Party within the appropriate timeframe;
- The Billing Party should receive the Non-Billing Party's restated billing information via Uniform Electronic Transaction within two (2) Business Days following the transmission of valid restated usage information; and
- The Billing Party should send the corrected bill to the Customer containing the restated charges of both the Billing Party and the Non-Billing Party.

RXQ.3.3.4.18 If the Non-Billing Party cancels its charges and the Customer is in receipt of the original charges, then the Billing Party should either:

- Display the cancelled charges and the corrected charges if received within the same appropriate timeframe; or
- Display only the cancelled charges if the corrected charges are not received within the appropriate timeframe. The corrected charges should be displayed if submitted by the Non-Billing Party during an appropriate Billing Party timeframe.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters:	**Joint REQ/RGQ Business Practices Subcommittee**
Request No.:	**2010 Retail Annual Plan Item No. 4**
Request Title:	**Billing and Payments**

RXQ.3.3.5 Consolidated Billing - Rate Ready Billing

RXQ.3.3.5.3 The Billing Party should calculate the Non-Billing Party's charges using the appropriate Rate Code(s) and ~~will~~send ~~a~~ Uniform Electronic Transaction(s) indicating the usage and amount so billed for each Customer account when accounts of the Non-Billing Party are ~~billed thus notifying the Non-Billing Party that its Customers have been billed and indicating the usage and amount so billed for each Customer account~~.

RXQ.3.3.5.4 When a Rate Ready consolidated bill is to be cancelled:

- Usage and charges for all applicable periods should be cancelled by metering period; ~~and~~
- The usage and charges sent via Uniform Electronic Transaction(s) in the cancellation ~~transaction~~notification(s) should match the usage and charges sent in the original ~~transaction~~Uniform Electronic Transaction(s); and~~.~~
- The Billing Party and Non-Billing Party should cancel the usage and charges in their billing systems for the incorrect data.

RXQ.3.3.5.5 When a cancelled Rate Ready consolidated bill is to be re-billed:

- Usage and charges for all applicable periods should be restated by metering period. Unless there has been a product or rate change, the restated usage ~~transaction~~and charges should be sent via Uniform Electronic Transaction(s) at the same level of detail as the original usage and charges Uniform Electronic T~~t~~ransaction(s); and
- The Billing Party should calculate and send a corrected bill to ~~re-bill~~ the Customer by applying the proper usage and proper Billing and Non-Billing Party Rate Code(s) as necessary to correct the previously rendered bill~~; and~~.
- ~~After the cancel/re bill event has taken place, the Billing Party should transmit notice of restated usage and the credit, debit, or the net amount, to the Non Billing Party so that the accounts receivable of the Customer will be properly stated.~~

RXQ.3.3.5.7 If Non-Billing Party needs to correct its previously billed charges, then the Non-Billing Party should follow the processes specified in the Governing Documents.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters:	**Joint REQ/RGQ Business Practices Subcommittee**
Request No.:	**2010 Retail Annual Plan Item No. 4**
Request Title:	**Billing and Payments**

RXQ.3.3.6 Single Retail Supplier Billing

RXQ.3.3.6.2 When meter usage is cancelled:

- Usage for all applicable periods should be cancelled by metering period; ~~and~~
- The usage sent via Uniform Electronic Transaction in the cancellation ~~transaction~~notification should match the usage sent in the original ~~transaction~~Uniform Electronic Transaction~~.~~, and:
- The Distribution Company and Supplier should cancel the charges in their billing systems for the incorrect usage.

RXQ.3.3.6.3 When meter usage is restated:

- Usage for all applicable periods should be restated by metering period; ~~and~~
- Unless there has been a product or rate change, the restated usage ~~transaction~~should be sent via Uniform Electronic Transaction at the same level of detail as the original usage transaction~~.~~, and:
- The Distribution Company and Supplier should calculate and send a corrected bill based on the restated usage.

RXQ.3.3.6.5 After the meter(s) is read or the usage is otherwise determined, the Distribution Company should calculate its charges and render an invoice that separately identifies the delivery system charges and billing determinants for each Service Delivery Point or Customer account served by the Supplier. ~~Invoices should be transmitted via Uniform Electronic Transaction.~~ The Distribution Company should send its invoice via Uniform Electronic Transaction to the Supplier.

RXQ.3.3.6.9 Upon receipt of the original usage data or any applicable restated usage data, the Registration Agent should forward such usage data via Uniform Electronic Transaction to the Supplier.

RXQ.3.3.6.10 After receiving the original usage data or any applicable restated usage data from the Registration Agent, the Supplier should process such usage data in its system.

RXQ.3.3.6.11 If the Supplier does not accept the original usage data or any applicable restated usage data, the Supplier should send separate rejection notices for each usage type, as applicable, via Uniform Electronic Transaction to the Registration Agent.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters:	**Joint REQ/RGQ Business Practices Subcommittee**
Request No.:	**2010 Retail Annual Plan Item No. 4**
Request Title:	**Billing and Payments**

The Registration Agent should forward the rejection notice via Uniform Electronic Transaction to the Distribution Company.

RXQ.3.3.6.12 If the Supplier accepts the original usage data or any applicable restated usage data, the Supplier should analyze the usage data and the Distribution Company's invoice.

RXQ.3.3.6.13 If the Supplier does not accept the original invoice or any applicable cancelled or corrected invoices, the Supplier should send separate rejection notices for each invoice type, as applicable, via Uniform Electronic Transaction to the Distribution Company.

RXQ.3.3.6.14 If the Distribution Company receives a rejection notice(s) from the Supplier, the Distribution Company should evaluate the reason(s) for the notice(s).

RXQ.3.3.6.15 If after the Distribution Company has evaluated the reason(s) for the rejection notice(s) and it has determined that it would be inappropriate to recalculate its charges, then the Distribution Company should contact and work with the Supplier to address the reason(s) for the rejection of the invoice(s).

RXQ.3.3.6.16 If the Supplier accepts the Distribution Company's original invoice or any applicable cancelled or corrected invoices, the Supplier should prepare and send a bill to the Customer including the Distribution Company's related charges.

RXQ.3.3.8 Payment Processing – Consolidated Billing – Assumption of Receivables

RXQ.3.3.8.4 The Billing Party forwards payment for all undisputed charges to the Non-Billing Party within five (5) Business Days of the due date stated on the Customer's bill or as specified in the Billing Services Agreement. The Non-Billing Party should re-state the Customer accounts receivable in its system.

RXQ.3.3.8.10 If the Billing Party cancels and/or rebills charges, the Billing Party should produce and send the corrected bill to the Customer.

RXQ.3.3.8.11 When the Billing Party cancels and/or rebills charges, the Billing Party should adjust the next routine notification of account-specific payments to the Non-Billing Party by the net effect of the corrected bill.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters:	**Joint REQ/RGQ Business Practices Subcommittee**
Request No.:	**2010 Retail Annual Plan Item No. 4**
Request Title:	**Billing and Payments**

RXQ.3.3.9 Payment Processing – Consolidated Billing – Pay as You Get Paid

RXQ.3.3.9.8 If the Billing Party cancels and/or rebills charges, the Billing Party should produce and send the corrected bill to the Customer.

RXQ.3.3.9.9 When the Billing Party cancels and/or rebills charges, the Billing Party should adjust the next routine notification of account-specific payments to the Non-Billing Party by the net effect of the corrected bill.

RXQ.3.3.10 Payment Processing – Single Retail Supplier Billing

RXQ.3.3.10.3 If the Distribution Company does not receive payment for undisputed charges from the Supplier within the appropriate time–frame, then the Distribution Company should calculate its interest charges or late fees and send notification via Uniform Electronic Transaction to the Supplier of the interest and/or late fees, if any, applicable to the un-remitted amount. Such notification should be sent ~~via Uniform Electronic Transaction and~~in accordance with the terms and conditions of the Billing Services Agreement or pursuant to the requirements of the Applicable Regulatory Authority. Remittance of interest and/or fees, if any, should be made via~~by~~ Uniform Electronic Transaction~~electronic means~~ to a financial institution designated by the Distribution Company.

RXQ.3.3.10.5 After the Supplier analyzes the invoice from the Distribution Company and does not reject it, the Supplier should perform a financial reconciliation and initiate its process to pay the Distribution Company.

RXQ.3.3.10.6 If the Supplier disputes any interest charges or late fees' notification from the Distribution Company, they should contact the Distribution Company to initiate an inquiry. The Distribution Company should work with the Supplier to address any such inquiry.

RXQ.3.3.10.7 After the Distribution Company's financial institution receives payment from the Supplier, the Distribution Company should perform a financial reconciliation and resolve any discrepancies.

RXQ.3.4 Models (See Attachment for the following new Models (Process Flows): http://naesb.org/pdf4/retail_2010_ap4_rec_attachment.ppt)

RXQ.3.4.1 Dual Billing Process Flow

RXQ.3.4.2 Consolidated Billing – Bill Ready Process Flow

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters:	**Joint REQ/RGQ Business Practices Subcommittee**
Request No.:	**2010 Retail Annual Plan Item No. 4**
Request Title:	**Billing and Payments**

RXQ.3.4.3 Consolidated Billing – Rate Ready Process Flow

RXQ.3.4.4 Single Retail Supplier Billing Process Flow

RXQ.3.4.5 Consolidated Billing – Payment Processing - Assumption of Receivables Process Flow

RXQ.3.4.6 Consolidated Billing – Payment Processing – Pay As You Get Paid Process Flow

RXQ.3.4.7 Single retail Supplier Billing – Payment Processing Remittance from Supplier Process Flow

The following model agreements can be found in RXQ.6 – Contracts:

RXQ.6.4 Billing Services Agreement For Consolidated Billing

4. SUPPORTING DOCUMENTATION

a. Description of Request:

2010 Retail Annual Plan Item No. 4 – Billing and Payment

a. Develop Process Flows to be included as Models in Book 3 – Billing and Payments

b. If the development of Process Flows indicate a gap in the Model Business Practices, then develop new Model Business Practices to address the gap.

b. Description of Recommendation:

The Billing and Payment processes were reviewed in detail and Process Flows were developed. During the development of the Process Flows several gaps were identified in the existing Model Business Practices (MBPs), and 30 new or revised MBPs were developed to fill these gaps.

c. Business Purpose:

See above

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE
For Quadrant: Joint Retail Electric and Retail Gas Quadrants

Requesters:	**Joint REQ/RGQ Business Practices Subcommittee**
Request No.:	**2010 Retail Annual Plan Item No. 4**
Request Title:	**Billing and Payments**

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

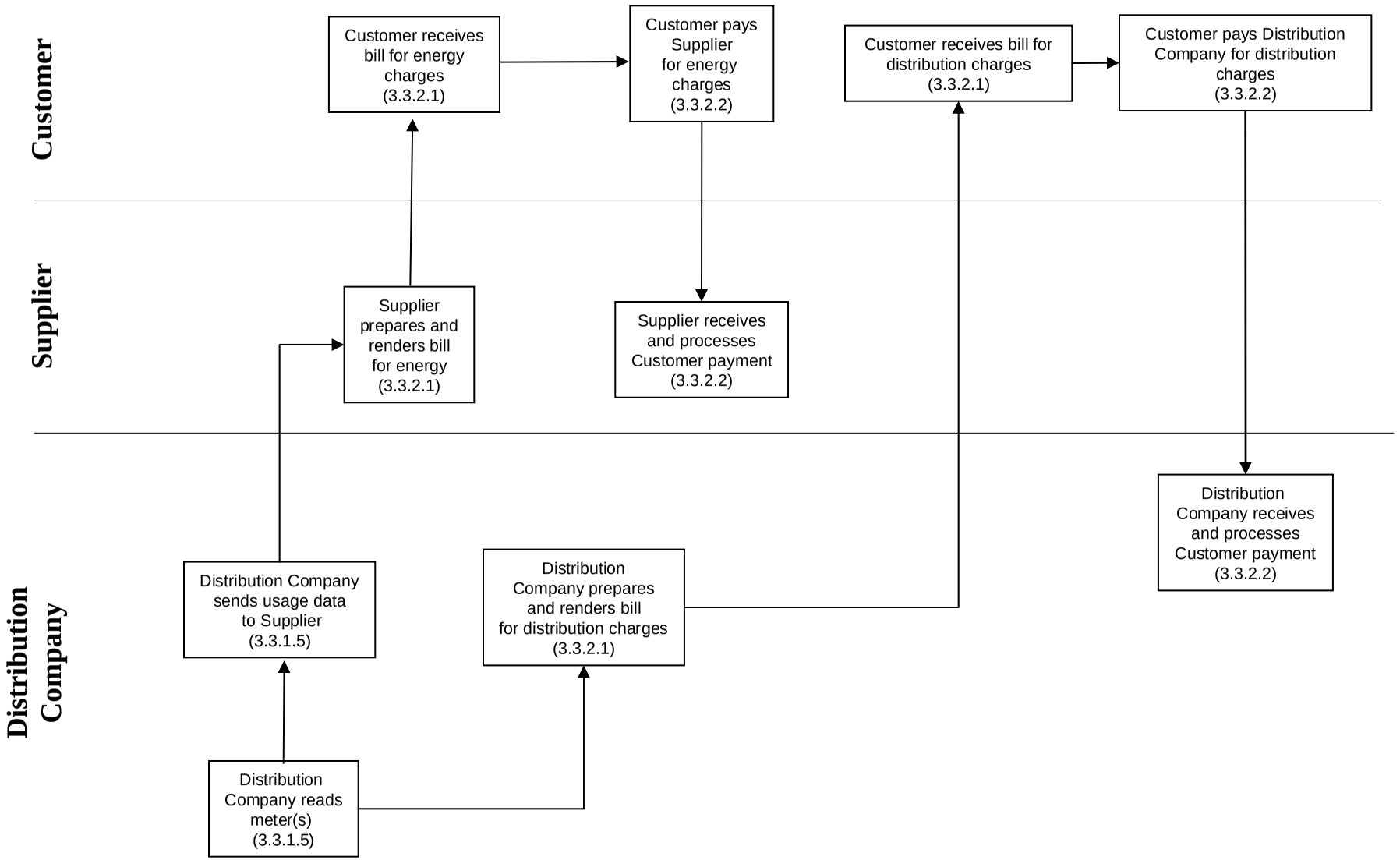
The Process Flows and new or modified Model Business Practices were discussed by the Joint REQ/RGQ BPS at the following meetings and conference calls:

June 3, 2009	Conference Call
July 22, 2009	Conference Call
October 26 - 27, 2009	Face-to-Face Meeting
March 16, 2010	Conference Call
March 30, 2010	Conference Call
May 3 – 4, 2010	Face-to-Face Meeting

The minutes of all meetings and conference calls are posted on the NAESB REQ and RGQ BPS web pages.

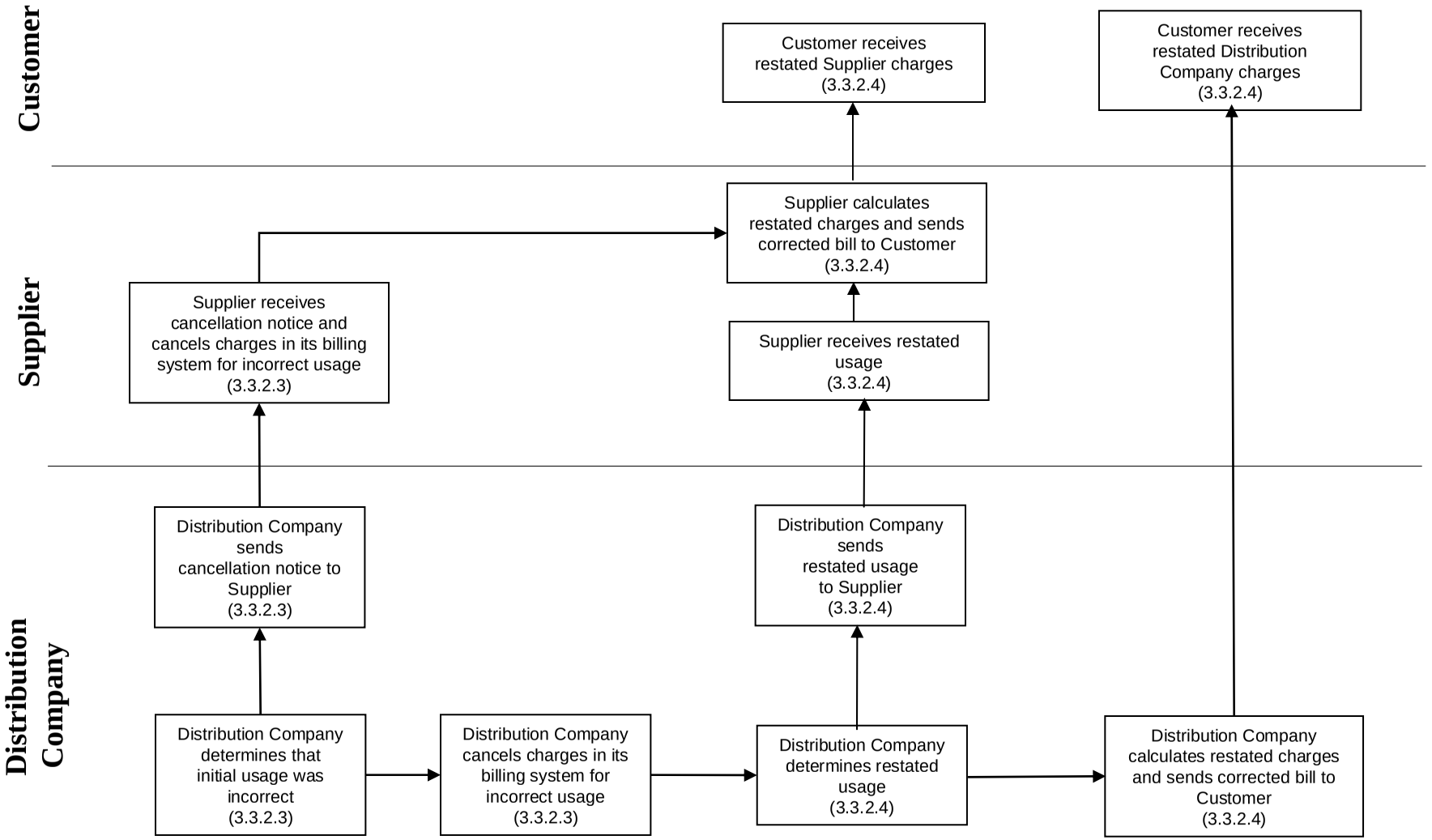
At the May 3 – 4, 2010 BPS meeting, by a vote of 11 In Favor and 0 Opposed, the Joint REQ/RGQ BPS voted to release the Models (Process Flows) and new and modified Model Business Practices to the Joint REQ/RGQ Executive Committee for formal comment and subsequent approval, and to the Information Requirements Subcommittee for development of any technical implementation.

RXQ.3.4.1 Dual Billing Process Flow

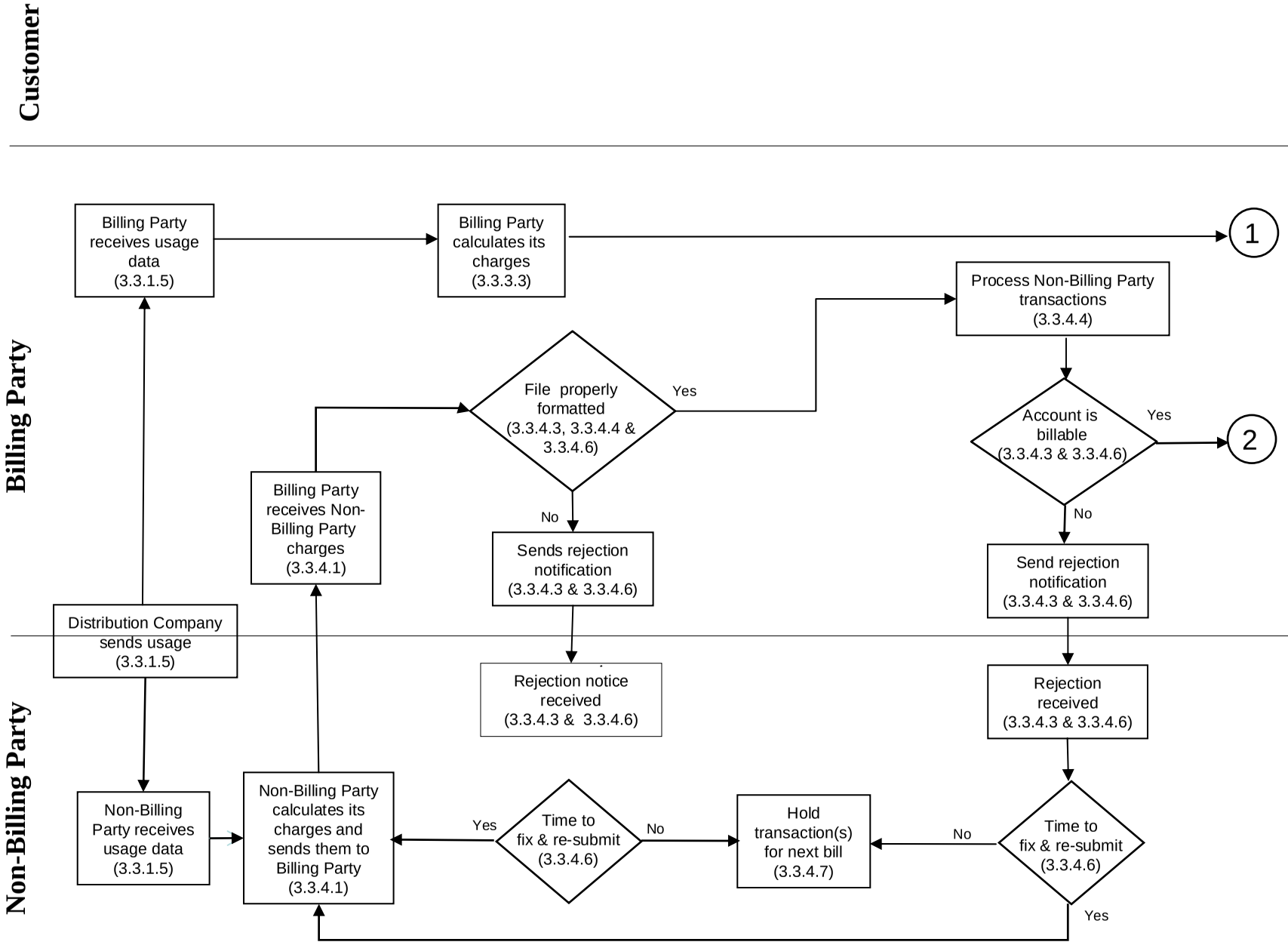


RXQ.3.4.1 Dual Billing Process Flow

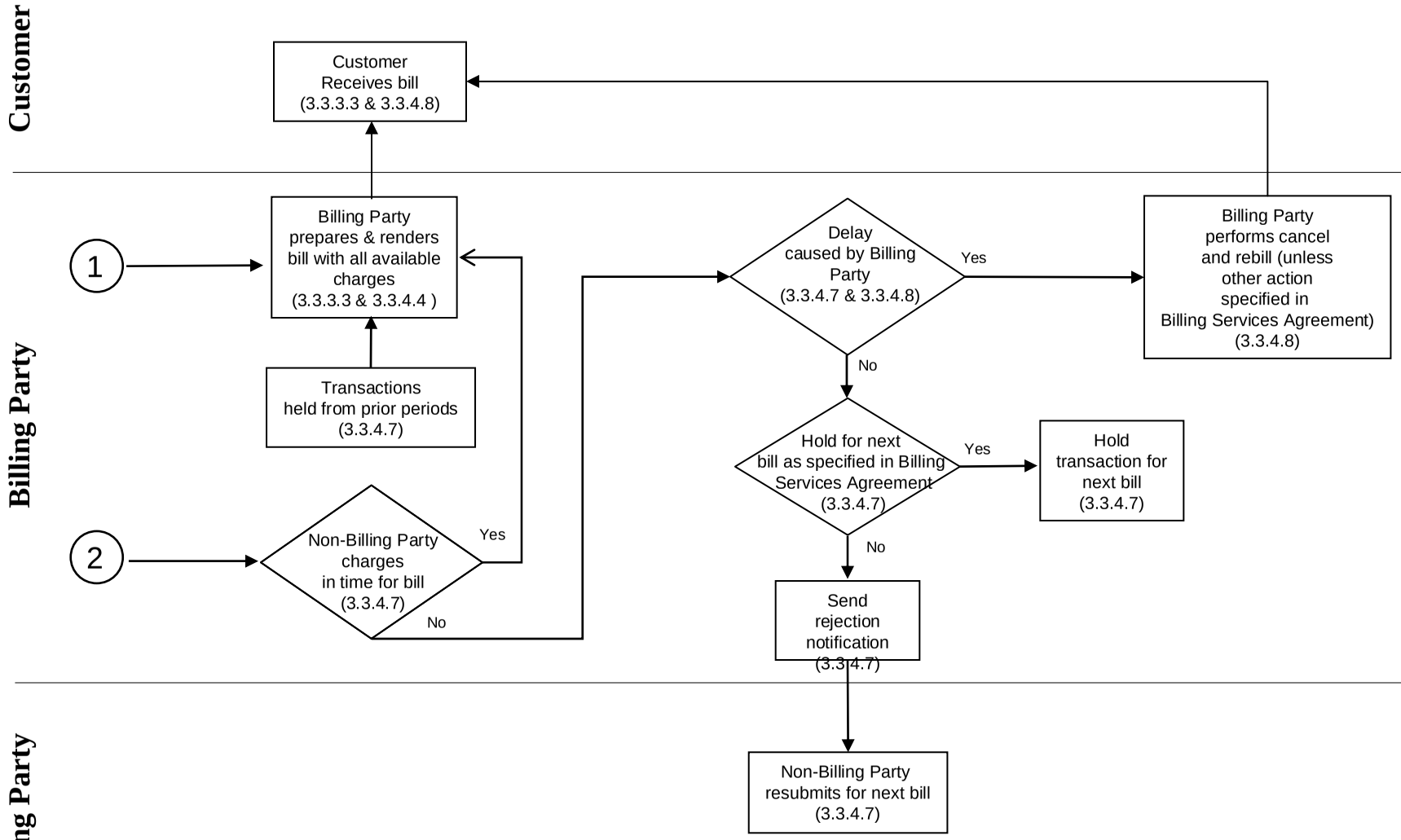
Meter Usage Cancellation and Rebilling Process



RXQ.3.4.2 Consolidated Billing - Bill Ready Process Flow

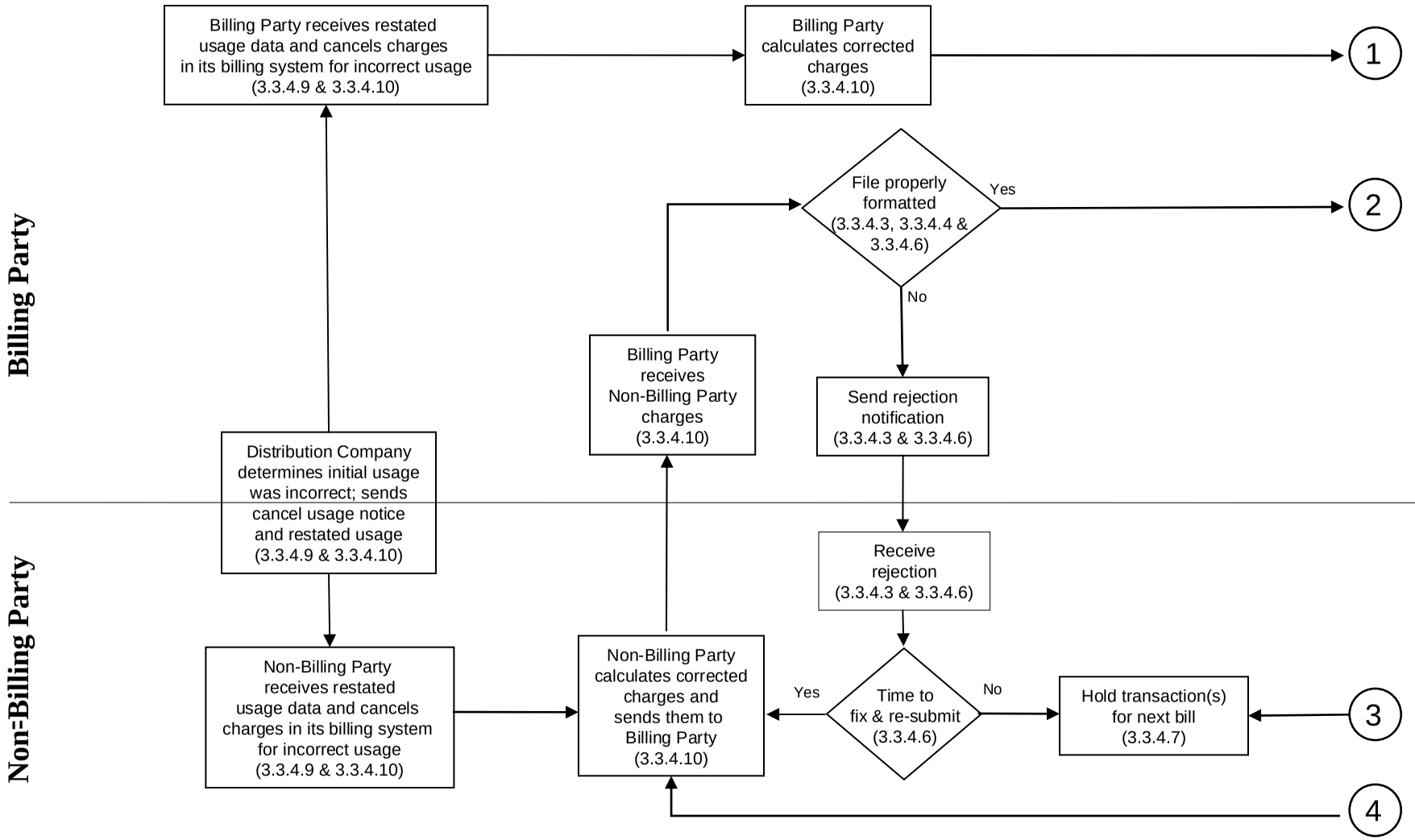


RXQ.3.4.2 Consolidated Billing - Bill Ready Process Flow



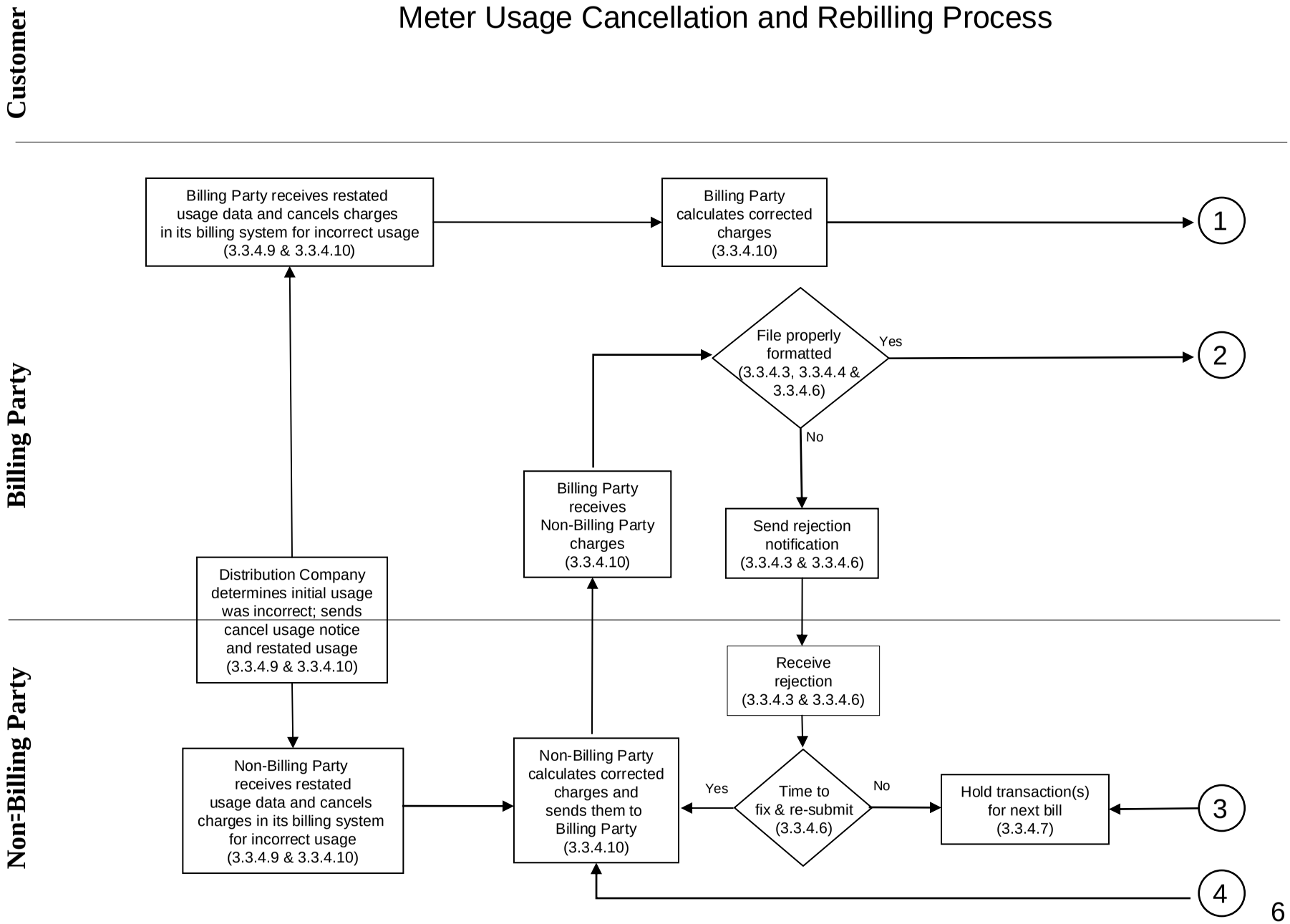
RXQ.3.4.2 Consolidated Billing - Bill Ready Process Flow

Meter Usage Cancellation and Rebilling Process



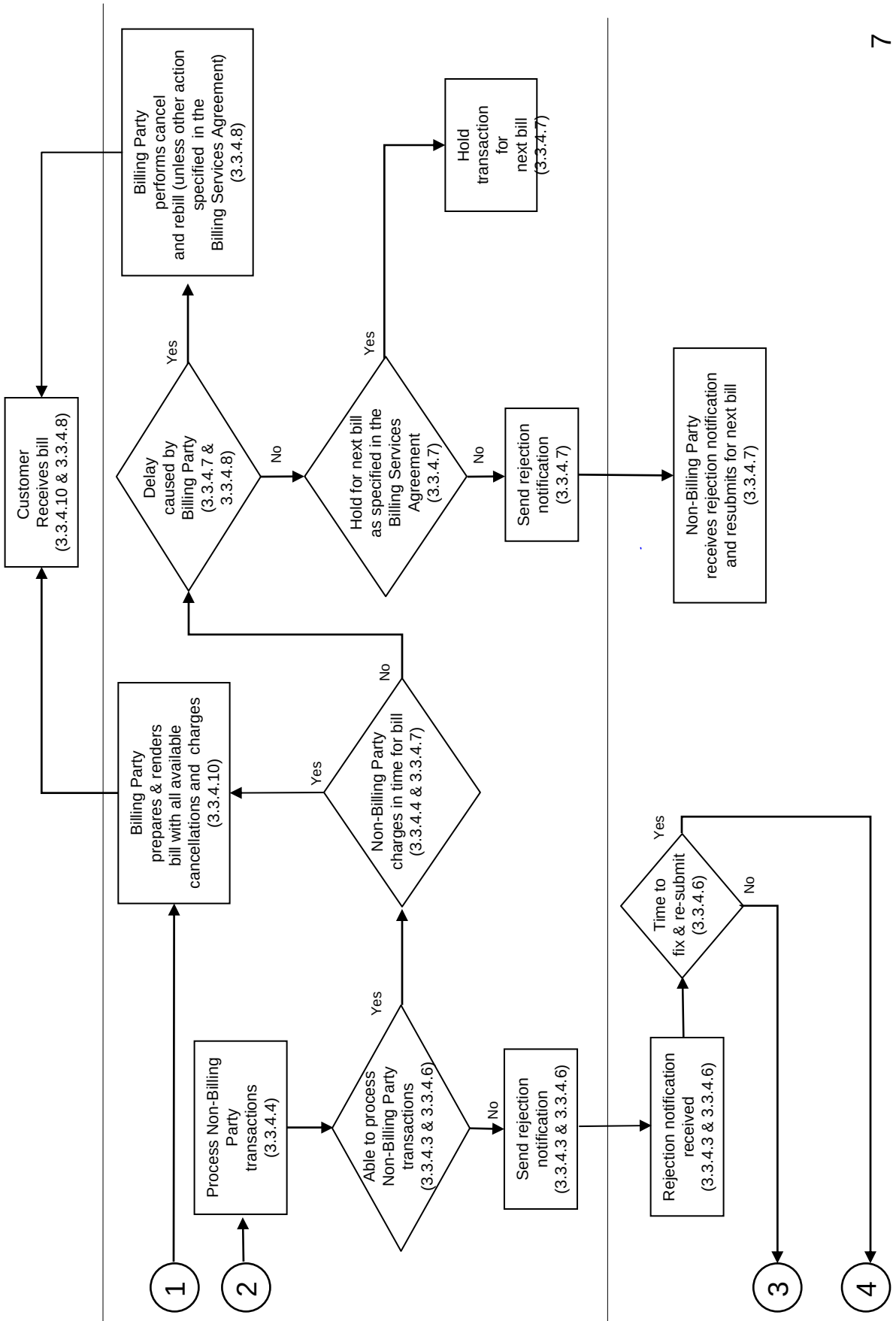
RXQ.3.4.2 Consolidated Billing - Bill Ready Process Flow

Meter Usage Cancellation and Rebilling Process



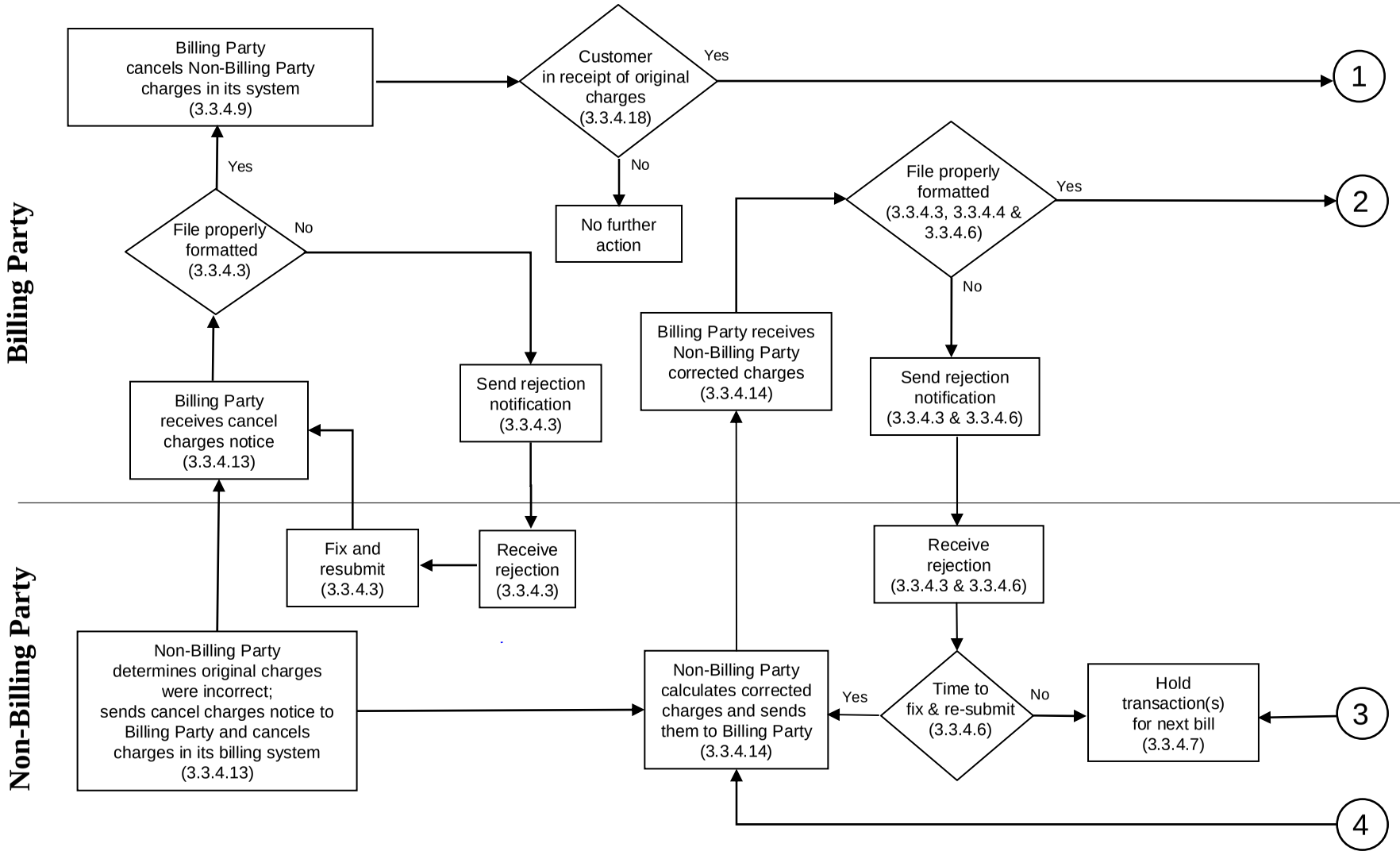
RXQ.3.4.2 Consolidated Billing - Bill Ready Process Flow

Meter Usage Cancellation and Rebilling Process



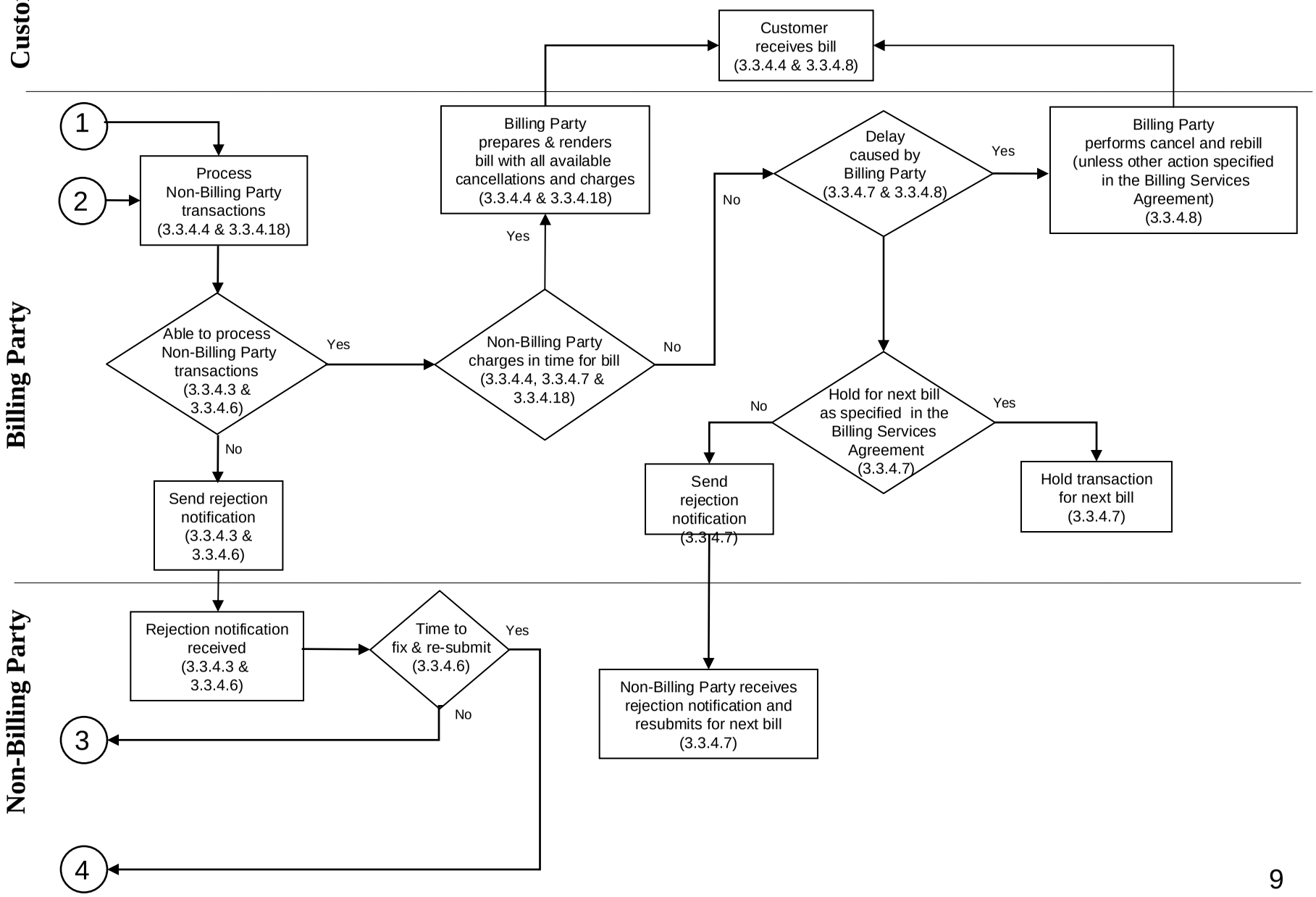
RXQ.3.4.2 Consolidated Billing - Bill Ready Process Flow

Non-Billing Party Bill Cancellation and Rebilling Process

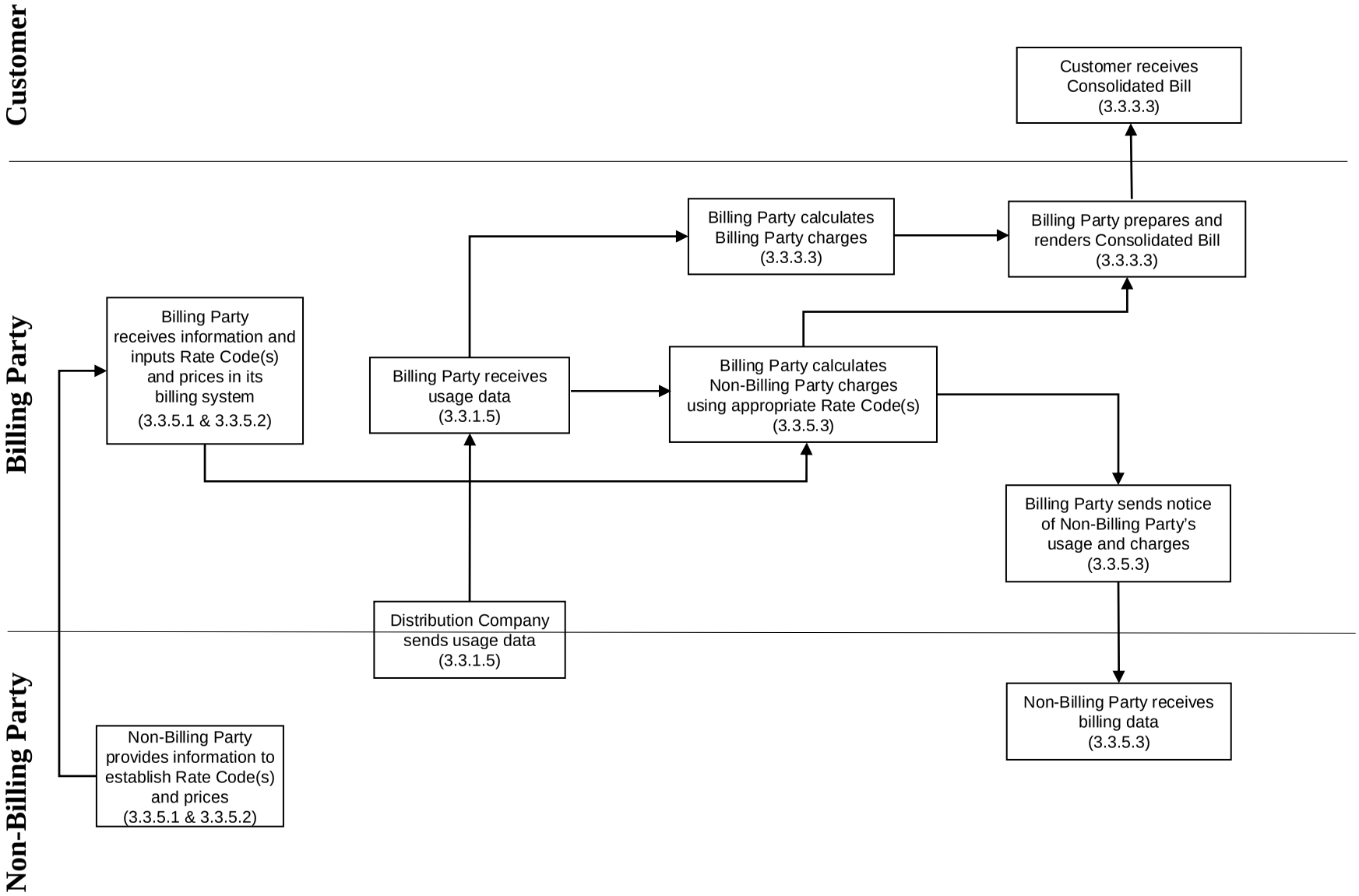


RXQ.3.4.2 Consolidated Billing - Bill Ready Process Flow

Non-Billing Party Bill Cancellation and Rebilling Process

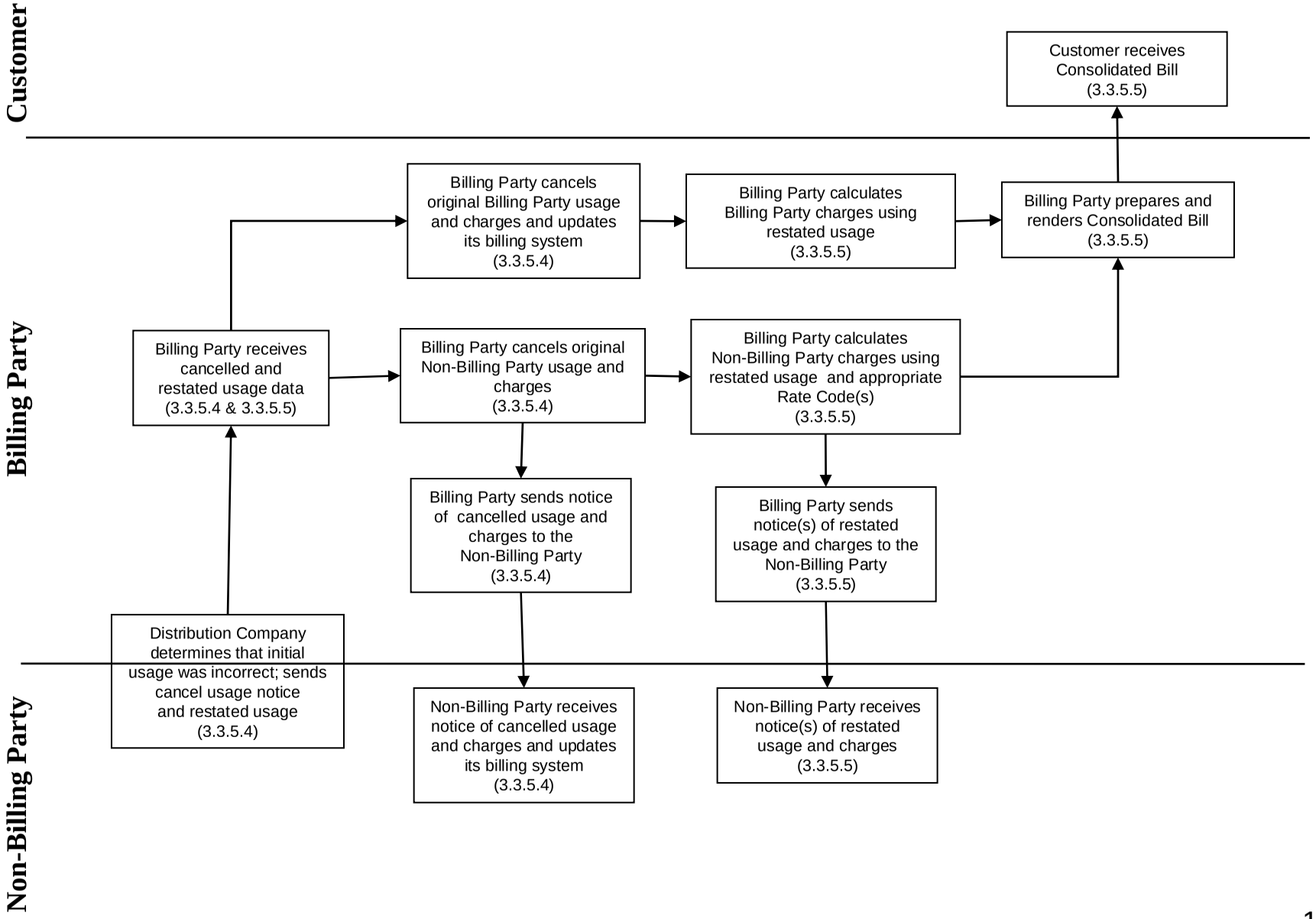


RXQ.3.4.3 Consolidated Billing - Rate Ready Process Flow

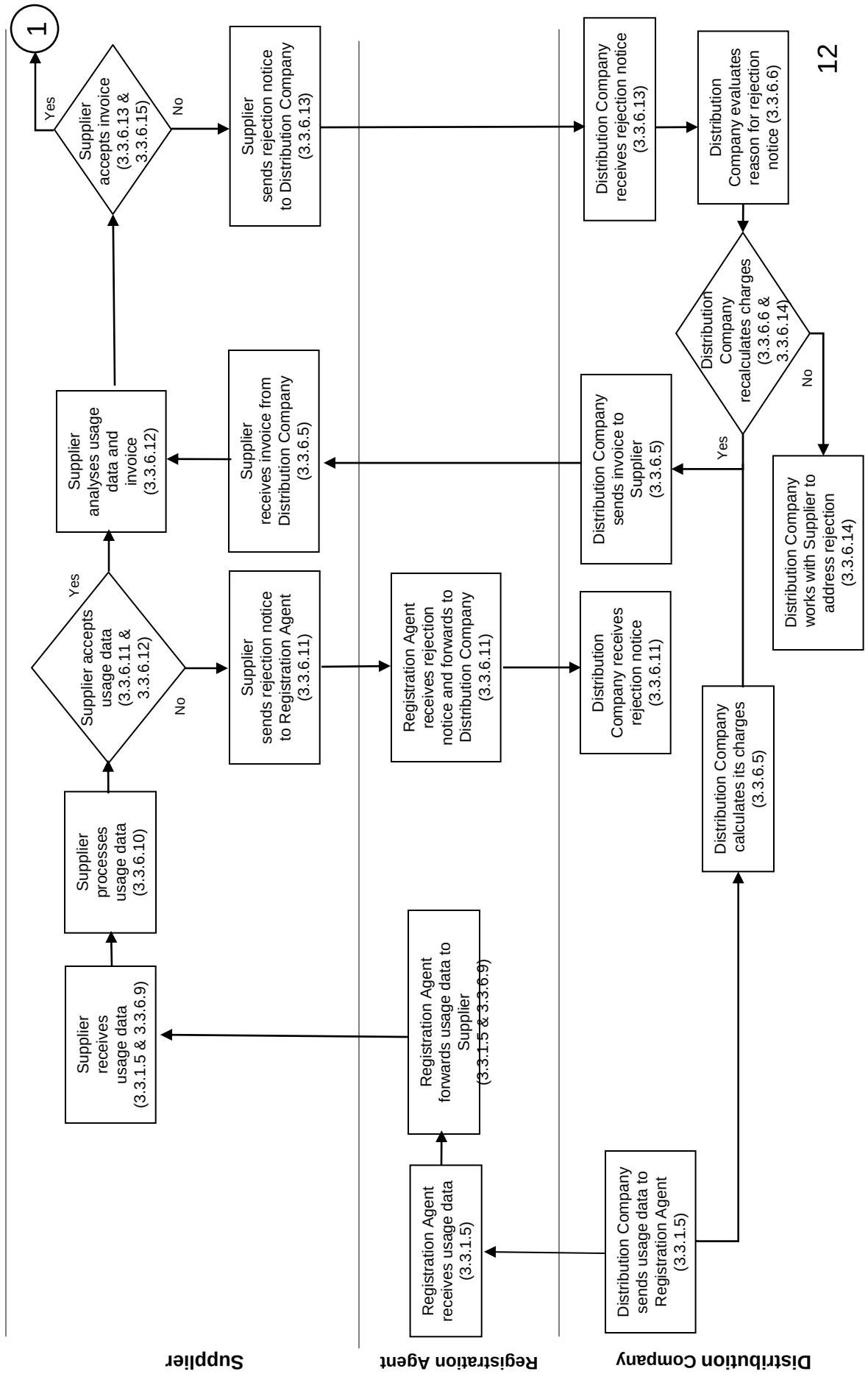


RXQ.3.4.3 Consolidated Billing - Rate Ready Process Flow

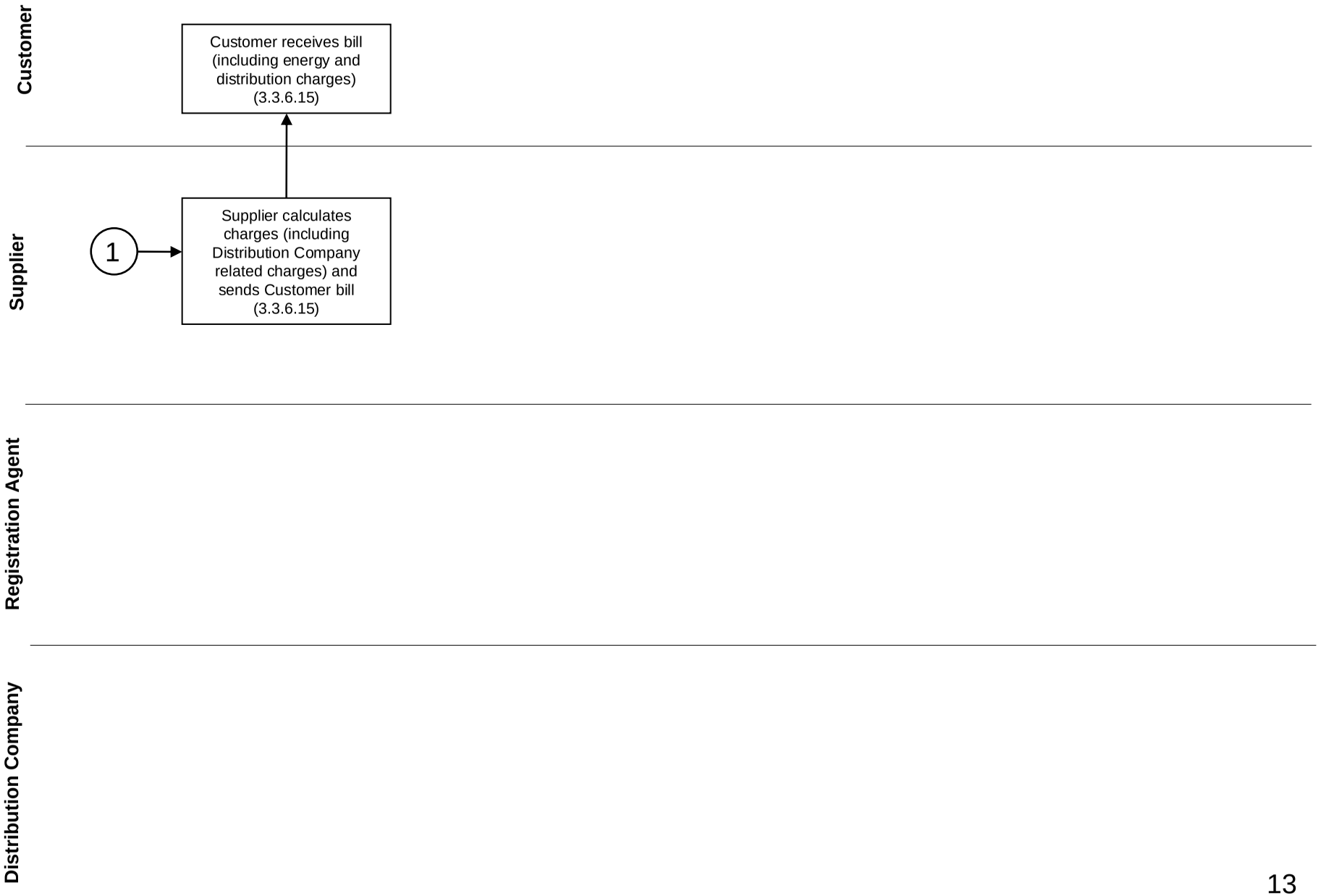
Meter Usage Cancellation and Rebilling Process



RXQ.3.4.4 Single Retail Supplier Billing Process Flow

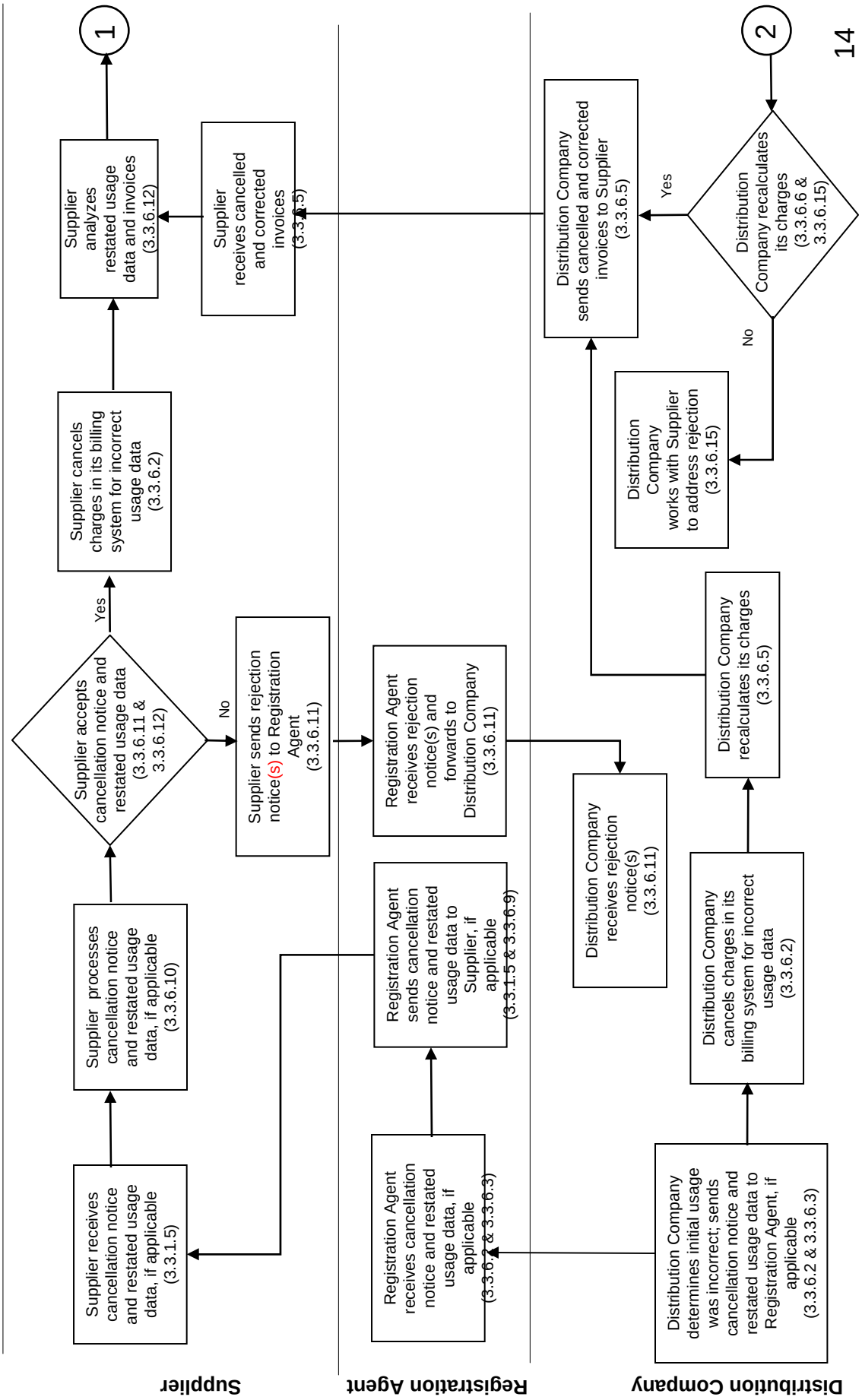


RXQ.3.4.4 Single Retail Supplier Billing Process Flow



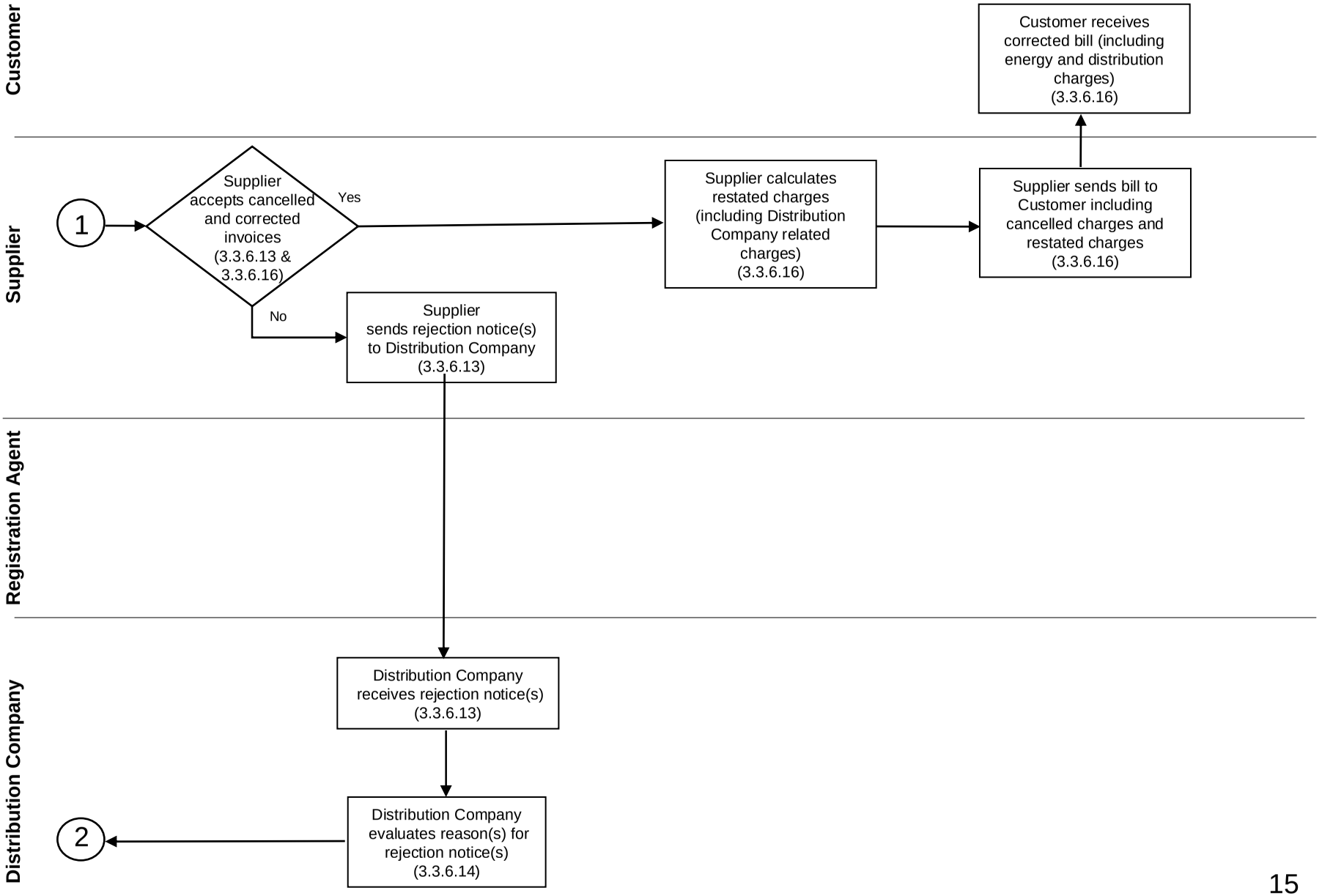
RXQ.3.4.4 Single Retail Supplier Billing Process Flow

Meter Usage Cancellation and Rebilling Process

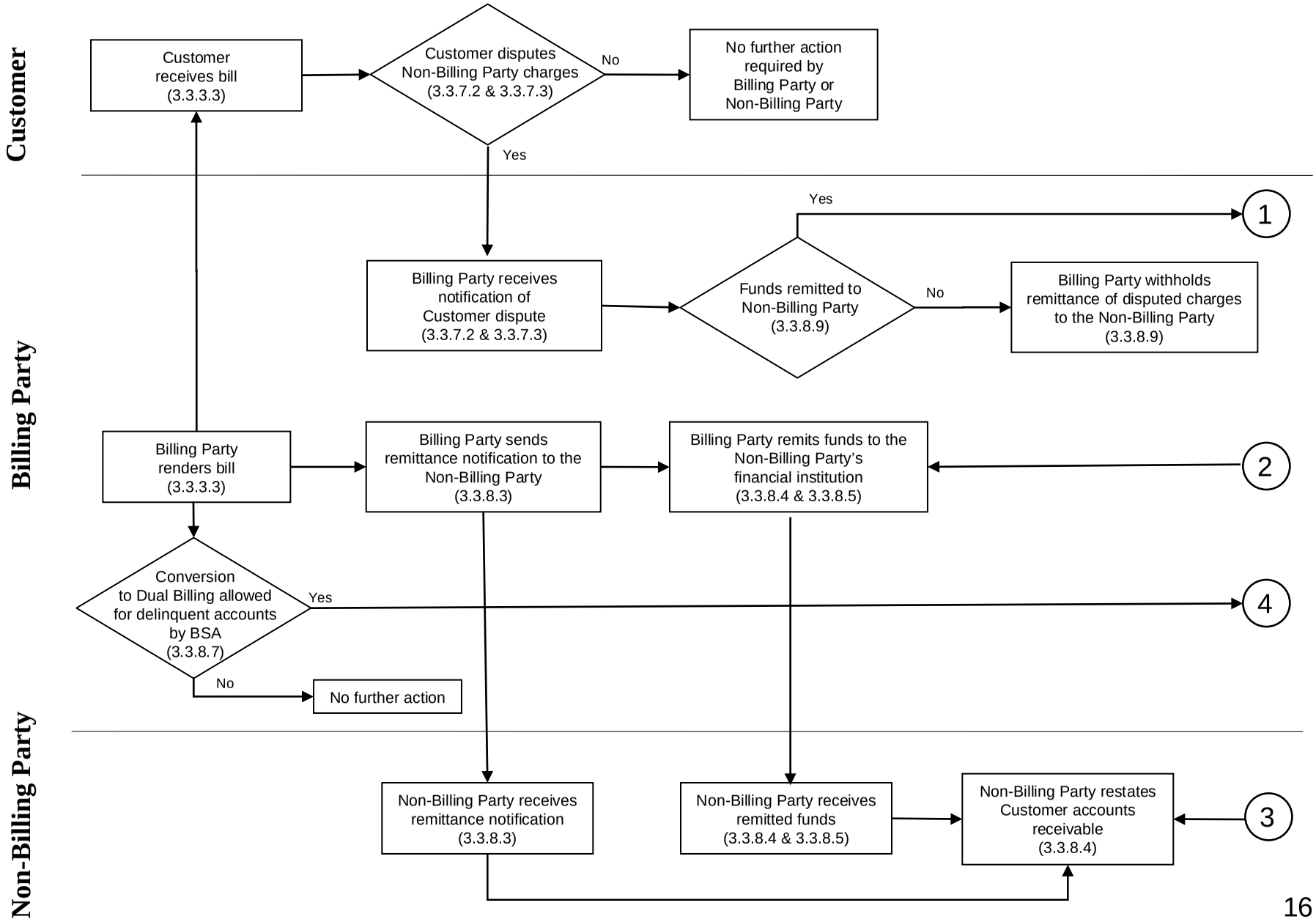


RXQ.3.4.4 Single Retail Supplier Billing Process Flow

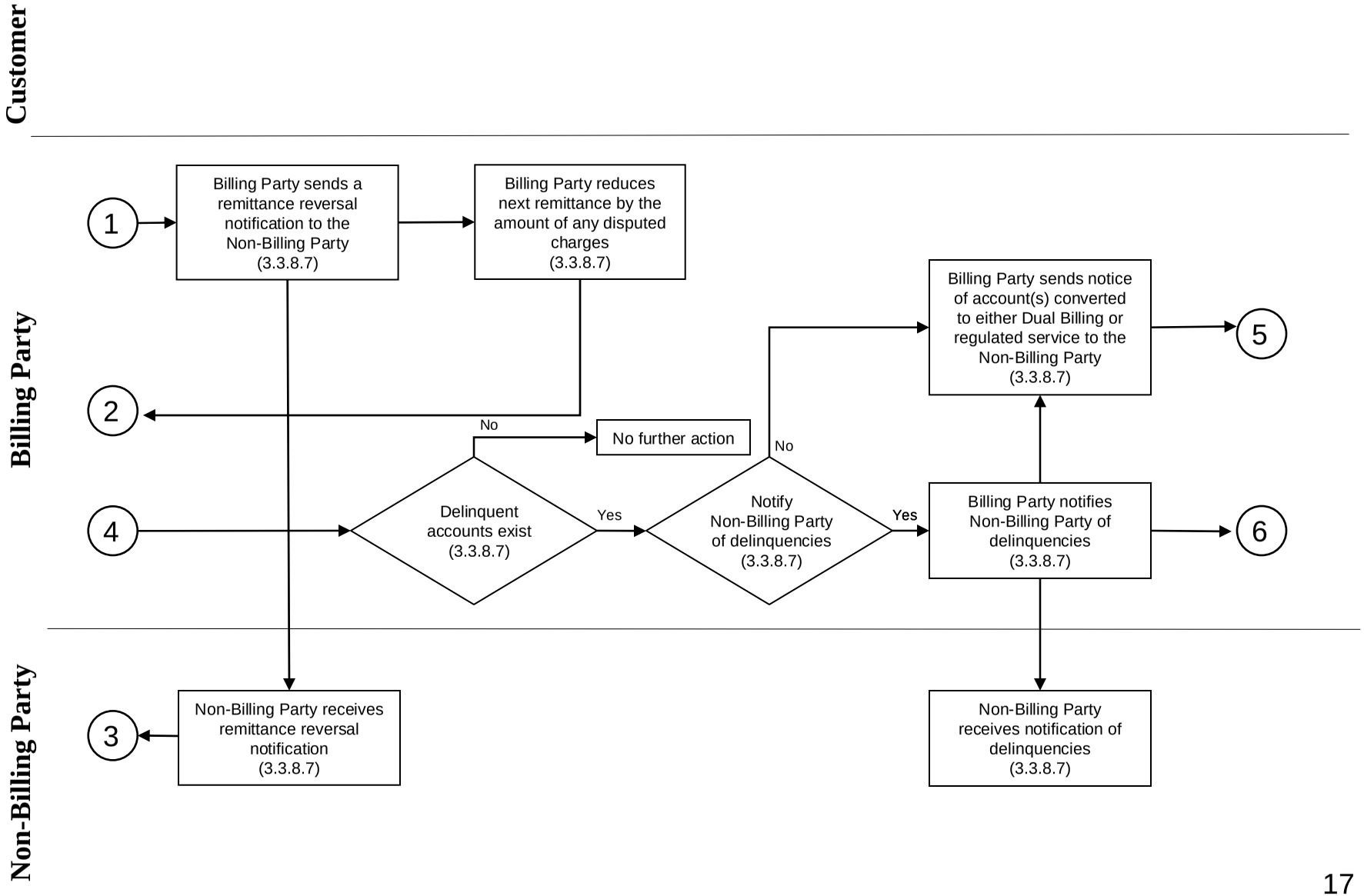
Meter Usage Cancellation and Rebilling Process



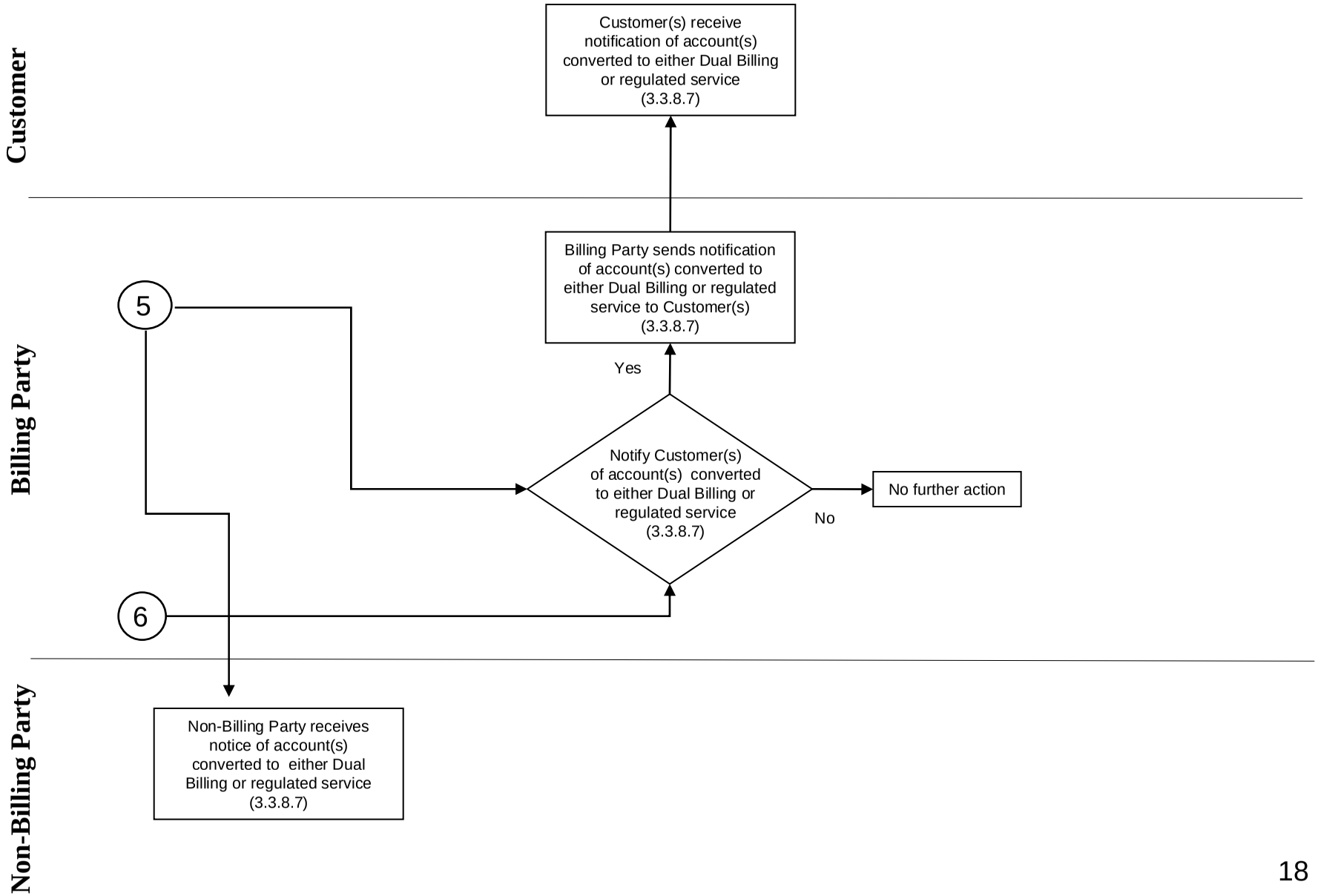
RXQ.3.4.5 Consolidated Billing – Payment Processing Assumption of Receivables Process Flow



RXQ.3.4.5 Consolidated Billing – Payment Processing Assumption of Receivables Process Flow

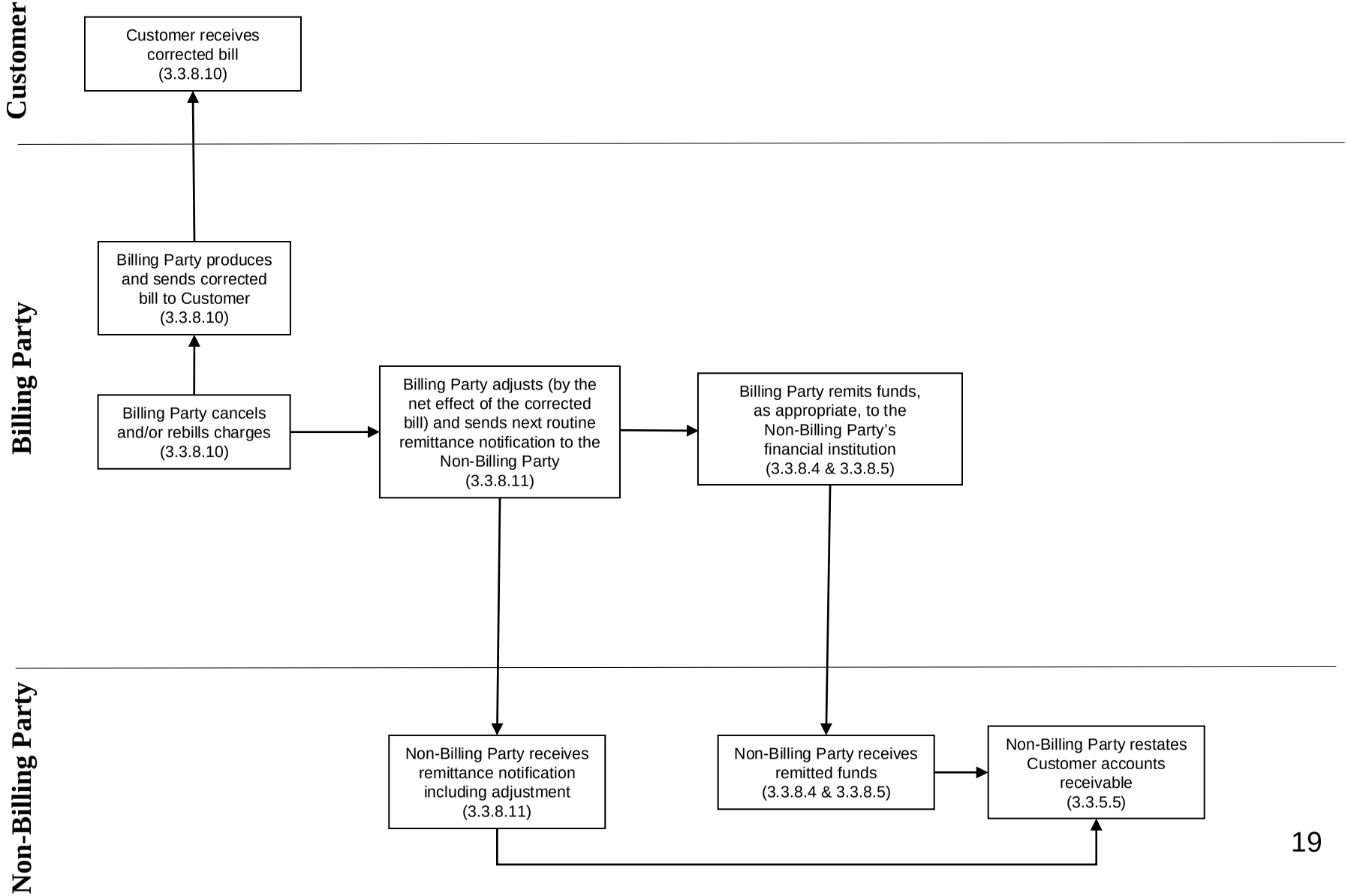


RXQ.3.4.5 Consolidated Billing – Payment Processing Assumption of Receivables Process Flow

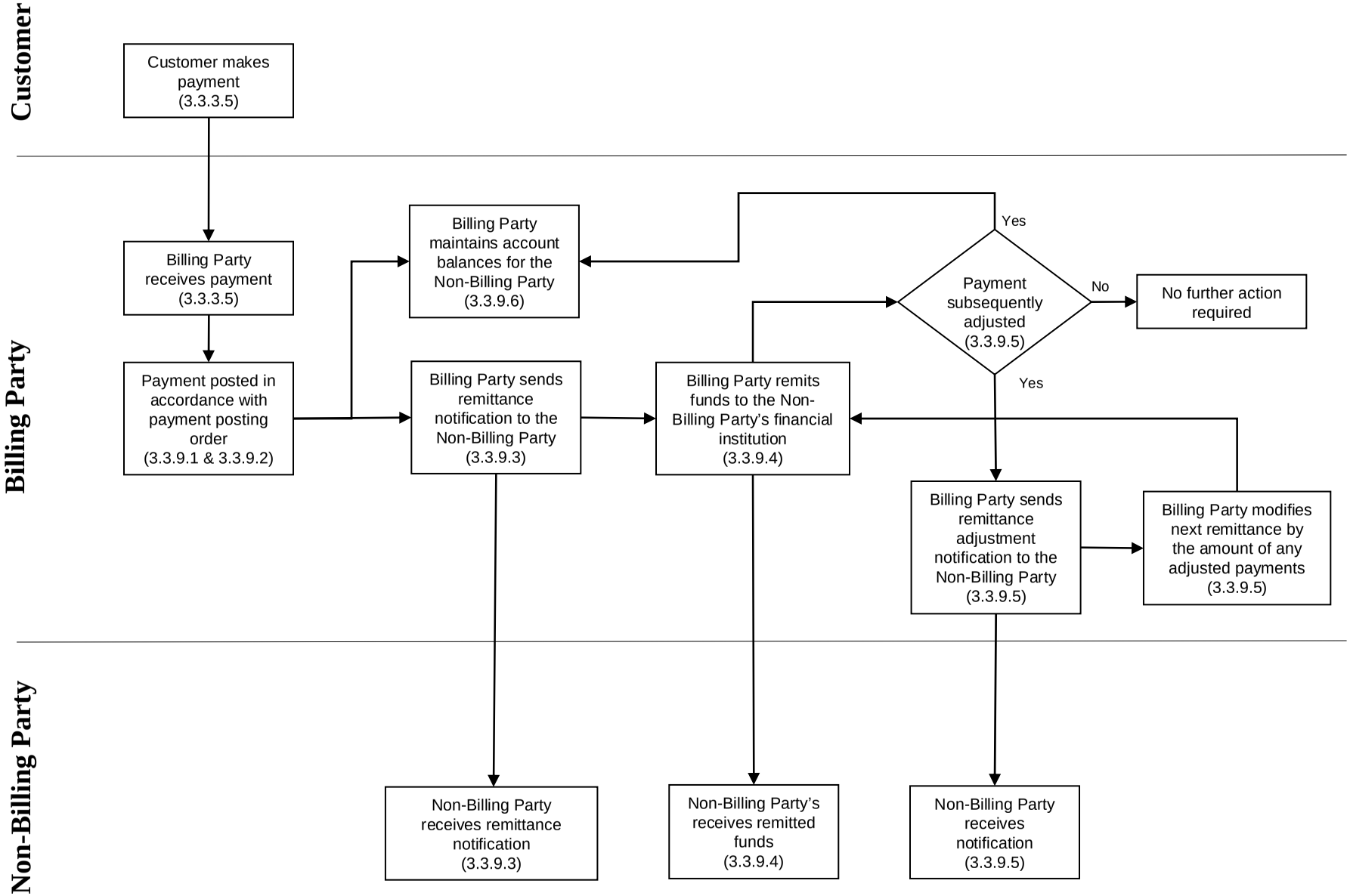


RXQ.3.4.5 Consolidated Billing – Payment Processing Assumption of Receivables Process Flow

Bill Cancellation and Rebilling Process

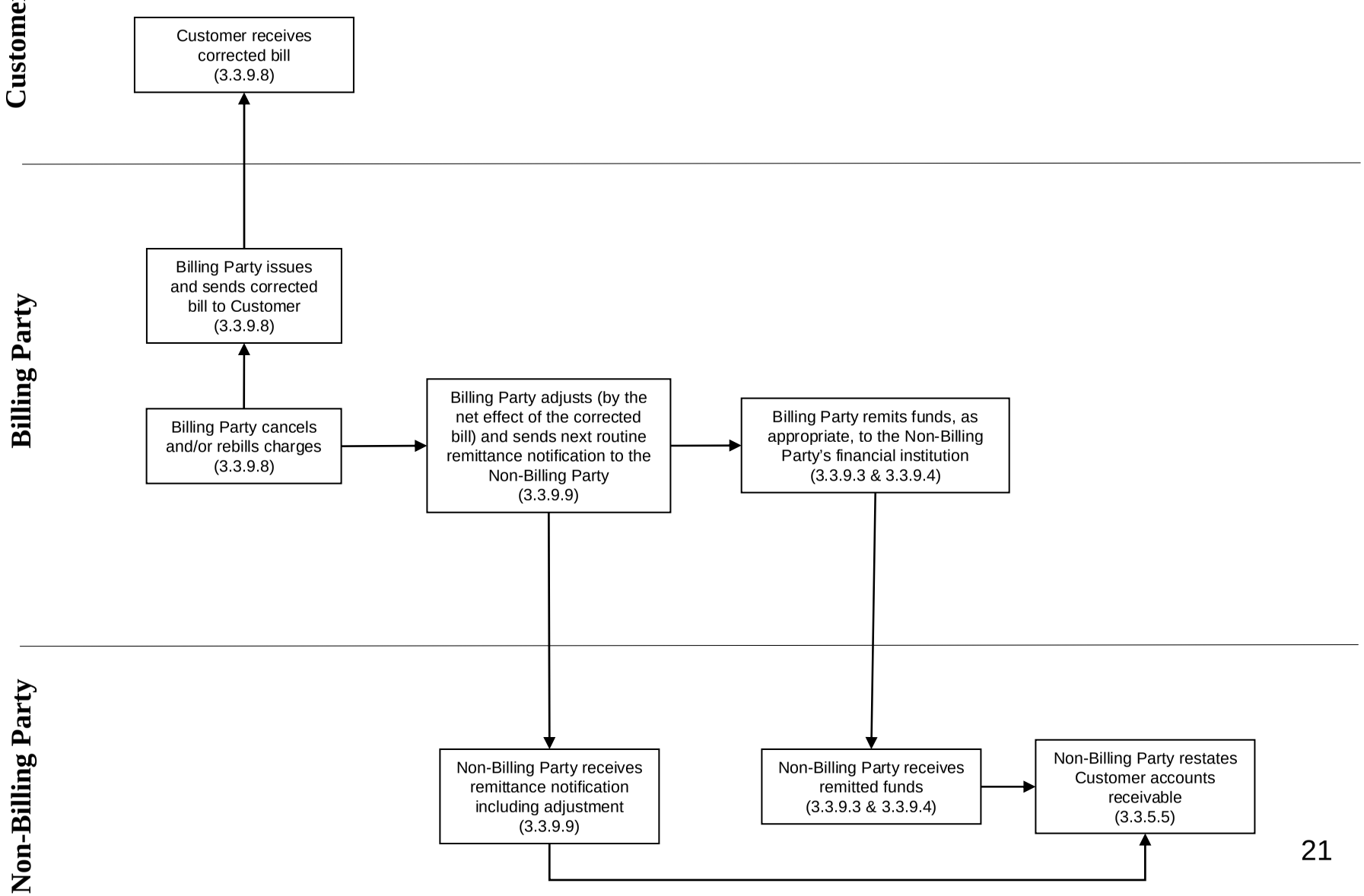


RXQ. 3.4.6 Consolidated Billing
Payment Processing-Pay As You Get Paid Process Flow



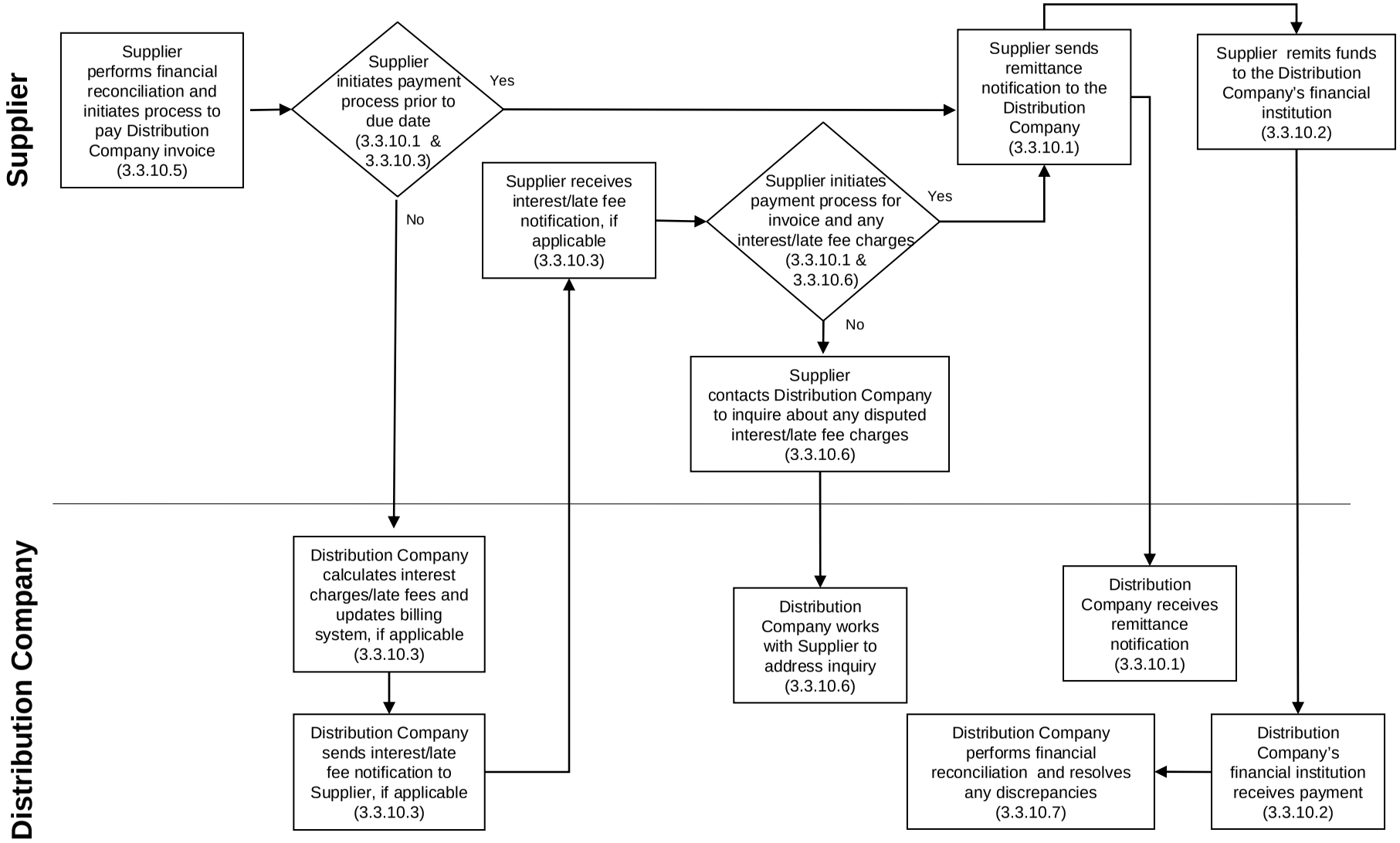
RXQ.3.4.6 Consolidated Billing- Payment Processing
Pay As You Get Paid Process Flow

Bill Cancellation and Rebilling Process



RXQ. 3.4.7 Single Retail Supplier Billing – Payment Processing Remittance from Supplier Process Flow

(includes payment(s) for cancelled and/or rebilled charges)



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Home Page: www.naesb.org

via email and posting

TO: NAESB Retail Electric Quadrant (REQ) and Retail Gas Quadrant (RGQ) Members and Interested Industry Participants

FROM: James Culliton, Staff Attorney

RE: Request for Formal Comments on Recommendation 2010 Retail Annual Plan Item No. 4 – Billing and Payments

DATE: June 15, 2010

Dear NAESB Retail Electric Quadrant (REQ), Retail Gas Quadrant (RGQ) Members and Interested Industry Participants,

An industry formal comment period begins today, June 15, 2010 and ends on July 15, 2010 for the Joint REQ/RGQ Business Practices Subcommittee recommendation below:

Recommendation:
2010 Retail Annual Plan Item No. 4: Billing and Payments Recommendation: http://naesb.org/pdf4/retail_2010_ap4_rec.doc Attachment: http://naesb.org/pdf4/retail_2010_ap4_rec_attachment.ppt *(Models)*

All interested parties, regardless of membership status within NAESB, are eligible to submit comments for consideration. The REQ and RGQ Executive Committees will review the recommendation and consider it for vote during an upcoming Executive Committee meeting. The Executive Committees will review all submitted comments.

All comments received by the NAESB office by the end of business, July 15, 2010 will be posted on the Home Page http://naesb.org/retail_request.asp and forwarded to the REQ and RGQ Executive Committee members for their consideration. If you have difficulty downloading the recommendation, please call the NAESB office at (713) 356-0060.

Best Regards,

James Culliton

NAESB

cc: Rae McQuade, President

MC10025

North American Energy Standards Board

Request for Minor Correction/Clarification of a NAESB Business Practice Standard, Model Business Practice or Electronic Transaction

Instructions:

1. **Please fill out as much of the requested information as possible. It is mandatory to provide a contact name, phone number and fax number to which questions can be directed. If you have an electronic mailing address, please make that available as well.**

2. **Attach any information you believe is related to the request. The more complete your request is, the less time is required to review it.**

3. **Once completed, send your request to:**

   Rae McQuade
   NAESB, Executive Director
   1301 Fannin, Suite 2350
   Houston, TX 77002

   Phone: 713-356-0060
   Fax: 713-356-0067

   by either mail, fax, or to NAESB's email address, naesb@naesb.org

Once received, the request will be routed to the appropriate subcommittees for review.

MC10025

North American Energy Standards Board

Request for Minor Correction/Clarification of a NAESB Business Practice Standard, Model Business Practice or Electronic Transaction

NAESB Correction/Clarification Procedure

Minor Clarifications and Corrections to Standards

Minor clarifications and corrections to existing standards include: (a) clarifications or corrections made by a regulatory agency to standards that are of a jurisdictional nature, or by the American National Standards Institute or its successor; (b) clarifications or corrections to the format, appearance, or descriptions of standards in standards documentation; (c) clarifications or corrections to add code values to tables; and (d) clarifications and corrections that do not materially change a standard. Any request for a minor clarification or correction to an existing standard should be submitted in writing to the executive director. This request shall include a description of the minor clarification or correction and the reason the clarification or correction should be implemented.

1. Processing of Requests

The executive director shall promptly notify the EC and any appropriate subcommittee(s) of the receipt of the request. The members of the applicable quadrant's EC shall promptly determine whether the request meets the definition of a minor clarification or correction. Through the decision of the vice chair of the applicable quadrant, this determination may be delegated to one of the quadrant's subcommittees, with the concurrence of the subcommittee chair, in which case the subcommittee shall make a prompt decision.
If the request is determined to meet the definition of minor clarification or correction, the applicable quadrant's EC, with input from any subcommittee(s) to which the request has been forwarded, shall act on the request within one month of its receipt. A meeting to discuss the request is not required; the decision may be made by notational vote. A simple majority of the votes received shall determine the outcome. The members of the applicable quadrant's EC shall be given at least three working days to consider and vote on the request.

2. Public Notice

The results of the vote on the request for a minor clarification or correction shall be posted on the NAESB website and the members of the applicable quadrant shall be notified of the request by e-mail. If the request has been approved by the applicable quadrant's EC, the notification shall include a brief description of the request, the contact name and number of the requester so that further information can be obtained, and the proposed effective date of the clarification or correction. The proposed effective date of the minor clarification or correction shall normally be one month from the date of the public notice. Any interested party shall have an opportunity to comment on the request, and the comments shall be posted on the NAESB website. The comment period is two weeks.

3. Final Disposition of Approved Requests

If no comments are received on an approved request, the standard shall be clarified or corrected as specified in the approved request on the effective date proposed. If comments are received, they shall be forwarded to the members of the applicable quadrant's EC for consideration. Each comment requires a public written response from the applicable quadrant's EC. The applicable quadrant's EC shall determine whether changes are necessary as a result of the comments. Members of the applicable quadrant's EC shall be given three working days to consider the comments and determine the outcome, which shall be decided by a simple majority of the votes received. A meeting to discuss the request is not required; the decision may be made by notational vote. The standard shall be clarified or corrected in accordance with the outcome of the vote, effective with the completion of voting, and notice thereof shall be posted on the NAESB website.

MC10025

North American Energy Standards Board

Request for Minor Correction/Clarification of a NAESB Business Practice Standard, Model Business Practice or Electronic Transaction

Date of Request: 07/01/2010

1. Submitting Entity & Address:
   Joint WGQ Information Requirements / Technical Subcommittee

2. Contact Person, Phone #, Fax #, Electronic Mailing Address:

Name : Christopher Burden
Title : Industry Standards Consultant
Phone : 713.215.4322
Fax : 713.215.4595
E-mail : christopher.burden@williams.com

3. Version and Standard Number(s) suggested for correction or clarification:

   Errata for NAESB WGQ Internet Electronic Transport (Internet ET) Manual, Version 1.9 and NAESB RXQ Internet ET Manual Version 1.2.

4. Description of Minor Correction/Clarification including redlined standards corrections:

   The following language is in error (all modifications are highlighted, strikeout for deletions, underline for additions):

   NAESB WGQ Internet ET Standards Manual (PDF page 17)

   To establish an Internet ET trading partnership with another company, a company needs to exchange technical information about their Internet ET implementation. This may include:

   - Contact information
   - Public Keys, including key exchange and update policies
   - Test URLs
   - Production URLs, including alternative paths if available
   - Common Code Identifiers (e.g. DUNS number)
   - Use of 'time-c-qualifier' if in REQ or RGQ

   This may be exchanged using a ~~Technical Exchange~~ Trading Partner Worksheet (~~TEW~~TPW). ~~A sample TEW is in Appendix C. In some cases, this information may be exchanged with a Trading Partner Agreement.~~

MC10025

North American Energy Standards Board

Request for Minor Correction/Clarification of a NAESB Business Practice Standard, Model Business Practice or Electronic Transaction

NAESB WGQ Internet ET Standards Manual (PDF page 36)

The important characteristics of the form within the HTML document are:

- ENCTYPE= specifies the encoding type. The 'multipart/form-data' encoding type is identified as the standard encoding methodology.
- ACTION= specifies the URL that will receive the uploaded data. The TPEW ~~or TPA~~ identifies the URLs for both parties.
- METHOD= specifies the HTTP protocol method. 'POST' has been defined as the Internet ET standard method.
- <INPUT ...>. HTML INPUT elements include the required data elements such as 'from', 'to', and 'input-format'. Refer to the data dictionary for the complete list of required data elements.

NAESB WGQ Internet ET Standards Manual (PDF page 62-63)

Q2: Do I send my 'gisb-acknowledgement-receipt' before or after I decrypt the Internet ET package?

A: Either. If you decrypt packages after you have sent the 'gisb-acknowledgement-receipt', errors found must be communicated to your trading partners using the Error Notification transaction. You should indicate in your TPEW when you will decrypt packages.

Regardless of when you decrypt, the 'time-c' timestamp does not change. It is always the time the last byte was received by the Server from the Sender.

NAESB RXQ Internet ET Standards Manual (PDF page 58)

Q2: Do I send my 'gisb-acknowledgement-receipt' before or after I decrypt the Internet ET package?

A: Either. If you decrypt packages after you have sent the 'gisb-acknowledgement-receipt', errors found must be communicated to your trading partners using the Error Notification transaction. You should indicate in your TPEW when you will decrypt packages.

Regardless of when you decrypt, the 'time-c' timestamp does not change. It is always the time the last byte was received by the Server from the Sender.

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North American Energy Standards Board

Request for Minor Correction/Clarification of a NAESB Business Practice Standard, Model Business Practice or Electronic Transaction

5. Reason for of Minor Correction/Clarification:

During my review of the NAESB WGQ Version 1.9 and NAESB RXQ Internet ET standards manuals, I discovered some errant references to the TEW. Since NAESB WGQ and RXQ removed the TEW and created a document that was similar, the TPW, references to the TEW need to be updated.

Requirements Specifications for Common Scheduling Mechanism for Energy Transactio

Proposal: Data Requirements will reference common list of calendar/date&time related descriptions.

Must include all calendar related items defined in PAP03 and PAP09
Time definitions relative to DR.

Requirements for Date and Time Usage

Type of Representation	Representative Instance	Sample Data
Absolute date/time	Effective start date Effective start date and time	11/1/2009 2009-11-01T01:00:00-Z
Absolute Periods (range)	Deployment Period	2009-11-01T01:00:00-Z/ 2009-11-02T24:00:00-Z
Relative date/time (time-point)	Reduction Deadline	30 minutes from a specified point in time
Recurring date/time	Market Closing	Every day at 12:00 noon
Absolute Interval	Meter Data Recording Interval System Frequency	Every 5 minutes 60 cycles per second
Absolute Duration	Outage Duration Minimum Run Time	2 days 4 hours

Relative Interval?

Date and Time Based Data Elements Utilized in Demand Response Program

Representative Instances	Description
Adjustment Window	The period prior to a Demand Response Event used for calculating a Baseline Adjustment.
Advance Notification	One or more communications to Demand Resources of an impending Demand Response Event transmitted in advance of the actual event.
Baseline Window	The window of time preceding and optionally following, a Demand Response Event over which electricity consumption data is collected for the purpose of establishing a Baseline.

Demand Response Event	The periods, deadlines, and transitions during which Demand Resources perform. The Program Administrator should specify the duration and applicability of a Demand Response Event. Not all deadlines, periods, and transitions may be applicable to all Demand Response products or services.
Deployment	The time at which a Demand Resource begins reducing Demand on the system in response to an instruction.
Deployment Period	The time in a Demand Response Event beginning with the Deployment and ending with the Release/Recall
Meter Data Recording Interval	The time between electricity meter consumption recordings
Meter Data Reporting Deadline	The maximum allowed time from the end of a Demand Response Event (Normal Operations) to the time when meter data submission is required for performance evaluation and settlement. The Meter Data Reporting Deadline may be either relative (a number of hours/days after Normal Operations) or fixed (a fixed calendar time, such as end-of-month).
Normal Operations	The time following Release/Recall at which a Program Administrator may require a Demand Resource to have returned its Load consumption to normal levels, and to be available again for Deployment
Performance Window	The period in a Demand Response Event analyzed by the Program Administrator to measure and verify the Demand Reduction Value for a Demand Resource.
Ramp Period	The time between Deployment and Reduction Deadline, representing the period of time over which a Demand Resource is expected to achieve its change in Demand
Recovery Period	The time between Release/Recall and Normal Operations, representing the window over which Demand Resources are required to return to their normal Load.
Reduction Deadline	The time at the end of the Ramp Period when a Demand Resource is required to have met its Demand Reduction Value obligation
Release/Recall	The time when a Program Administrator notifies a Demand Resource that the Deployment Period has ended or will end
Sustained Response Period	The time between Reduction Deadline and Release/Recall, representing the window over which a Demand Resource is required to maintain its reduced net consumption of electricity

Telemetry Interval	The time unit between communications between a Demand Resource or Demand Response Provider and a Program Administrator

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Home Page: www.naesb.org

August 3, 2010

TO: Smart Grid PAP 10 Distribution List, WEQ Members, REQ Members, and Leadership

FROM: Rae McQuade, NAESB President

RE: Conference Call to Discuss Draft Recommendation for Smart Grid Priority Action Plan 10, "Standardized Energy Usage Information," based on the Tiger Team Report[1] issued on June 22, 2010 by the NIST SGIP PAP10 Committee

Dear All:

As requested by a co-chair of the Smart Grid Standards Subcommittee on PAP 10, a subsequent conference call has been scheduled on Friday August 6, 2010 from 3:30 pm to 4:30 pm Central to continue discussions concerning the applicability of the PAP 10 draft standards to the wholesale electric market, taking into account the requirements of the recent June board resolution.[2] This call should provide you with an opportunity to better understand the recommendation and its language. The outcome of this meeting should be the input of the wholesale electric market to the NAESB wholesale electric quadrant leaders[3] of the Smart Grid PAP 10 subcommittee, so they can best represent your interests.

If you, your company or your colleagues have interest in the NAESB standards to support standardized energy usage and you operate in the wholesale electric market, I urge you to set aside the time to attend this very important call. If you serve on the wholesale electric quadrant Executive Committee or serve as a designated alternate, I strongly urge you to attend this call, as you will be voting on this recommendation when the subcommittee completes its work, and it would benefit you to understand this recommendation and its impacts early on.

The schedule of meetings and deliverables is attached to the agenda for this conference call. As you can see from the schedule, it is extremely aggressive, so if you do have comments, you should get them in early and not wait until the wholesale electric quadrant Executive Committee meeting to submit changes for consideration. As many groups are depending on our work, you would provide a service to the industry by alerting us early in the process of your issues rather than towards the end of the process. By doing so, your issues can be addressed in sufficient time.

The draft recommendation should be complete in mid August after which an informal comment period will start. Try to get your issues addressed now as the recommendation is under development. Please feel free to call the NAESB office should you have any questions or comments.

With Best Regards,

Rae

[1] The Tiger Team report can be accessed from the following links and served as a basis for development: http://www.naesb.org/pdf4/smart_grid_pap10_062210w1.doc and http://www.naesb.org/pdf4/smart_grid_pap10_062210w4.doc

[2] The NAESB Board of Directors, on June 24, 2010, unanimously endorsed a four part resolution that may be accessed from the following link: http://www.naesb.org/pdf4/bd062410a4.doc.

[3] As the work products from this subcommittee are considered seed standards for other groups, NAESB determined that it was important to provide strong coordination with other related development groups and as such offered leadership roles them. The leaders of the NAESB Smart Grid Subcommittee for PAP 10 are: Brent Hodges (OpenADE), Sharon Dinges (ASHRAE), David Kaufman (EIS Alliance), Brad Ramsay (NARUC), Tobin Richardson (ZigBee), Ed Koch (OASIS), Phil Precht (Retail Electric Quadrant of NAESB), and Cathy Wesley/Heather Sanders (Wholesale Electric Quadrant of NAESB).

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Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD
Smart Grid Standards Subcommittee on Priority Action Plan 10 Conference Call
SPECIAL MEETING FOR WHOLESALE ELECTRIC PARTICIPANTS
August 6, 2010 – 3:30 PM to 4:30 PM C
DRAFT AGENDA

1. Introduction

   a. Antitrust Guidance

   b. Approval of Agenda

2. Continue Review PAP 10 Business Practices and Information Model v04 draft recommendation for applicability to Wholesale Electric Quadrant

   PAP 10 Business Practices and Information Model v04 (revised August 4, 2010):
   http://www.naesb.org/pdf4/smart_grid_pap10_080310a1.doc

3. Discuss necessary modifications to draft recommendation

4. Adjourn

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Home Page: www.naesb.org

CONFERENCE CALLING AND WEB CONFERENCING DETAILS

FOR THE SMART GRID STANDARDS SUBCOMMITTEE ON PRIORITY ACTION PLAN 10

AUGUST 6, 2010

This conference call, as all NAESB meetings and conference calls, is open to any interested party.

To join the conference call:

- Dial the 11-digit toll free phone number (866-740-1260)
- An automated attendant will ask you to enter a seven-digit access code (7133564)
- The automated attendant will ask you to record your name.
- Please note, if the conference leader has not yet initiated the conference call, you will be placed on hold until the conference leader starts the conference.
- The automated attendant will then ask you for a four-digit security code (1022)

Please place your phone on mute unless you are speaking. For those participants that do not have a mute feature on your phone, please press (*6) to mute your phone and (*7) to un-mute your phone. Putting the conference call on hold may cause music to be played over the discussion and if so, the NAESB office will contact the conference call administrator to have the line disconnected.

To join the web conference, go to www.readytalk.com and enter the same access code and security code. Please note that if the conference leader has not yet initiated the web conference, you will view a screen that states, "The Chairperson has not yet arrived. Please standby for your web conference to begin."

ReadyTalk recommends that you test your browser and network connections for compatibility prior to participating in a web conference. To do so, go to http://test.callinfo.com. If you have problems joining a conference call or need technical assistance, please contact ReadyTalk Customer Care, 1-800-843-9166.

Please contact the NAESB Office (713-356-0060 or naesb@naesb.org) should you need any additional information or have questions or comments.

North American Energy Standards Board
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SMART GRID STANDARDS SUBCOMMITTEE ON PRIORITY ACTION PLAN 10 SCHEDULE

Date	Event	Additional Information
June 22, 2010	Kick-off Task Force Meeting	1-4 pm C, see above for how to join the meeting
June 29, 2010	Task Force Meeting	1-4 pm C, see above for how to join the meeting
July 13, 2010	Task Force Meeting	1-4 pm C, see above for how to join the meeting
July 20, 2010	Task Force Meeting	1-4 pm C, see above for how to join the meeting
July 27, 2010	Task Force Meeting	1-4 pm C, see above for how to join the meeting
Aug 3, 2010	Task Force Meeting	1-4 pm C, see above for how to join the meeting
Aug 10, 2010	Task Force Meeting	1-4 pm C, see above for how to join the meeting Straw Vote on draft recommendation to send out for informal comment
Aug 10, 2010	Informal Comment Start	The draft recommendation will be posted and send to a broad distribution list for any interested party to prepare comments
Aug 16, 2010	Informal Comment End	All comments will be posted and publicly available
Aug 20, 2010	Task Force Meeting	1-4 pm C, see above for how to join the meeting Task Force to address informal comments and make changes to the draft recommendation
Aug 24, 2010	Task Force Meeting	1-4 pm C, see above for how to join the meeting Task Force to address informal comments and make changes to the draft recommendation
Aug 31, 2010	Task Force Meeting	1-4 pm C, see above for how to join the meeting Task Force to address informal comments and make changes to the draft recommendation, and task force to vote to send out revised recommendation for industry consideration
Sept 1, 2010	Formal Comment Period Start	The draft recommendation will be posted and send to a broad distribution list for any interested party to prepare comments
Sept 30, 2010	Formal Comment Period End	All comments will be posted and publicly available
Oct 4, 2010	Task Force Meeting	1-4 pm C, see above for how to join the meeting Task Force to address formal comments and prepare late comments as suggested changes to the recommendation
Oct 5, 2010	Task Force Meeting	1-4 pm C, see above for how to join the meeting Task Force to address formal comments and prepare late comments as suggested changes to the recommendation
Oct 8, 2010	Task Force Late Comments Issued	The task force will issue late comments in the form of a revised recommendation and will provide the matrix of comments received and actions taken as part of the late comments.

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SMART GRID STANDARDS SUBCOMMITTEE ON PRIORITY ACTION PLAN 10 SCHEDULE

Date	Event	Additional Information
Oct 15, 2010	Joint EC Single Topic Review Session	1-4 pm C, see above for how to join the meeting Drafters of the recommendation will discuss the recommendation and the late comments and answer EC member questions
Oct 22, 2010	Joint EC Meeting	1-4 pm C, see above for how to join the meeting WEQ and REQ EC members will vote on the recommendation
Oct 29, 2010	Ratification Period Begins	WEQ and REQ members will be issued a ratification ballot.
Nov 29, 2010	Ratification Period Ends	Ballot to be returned to NAESB no later than 11-29-10.
Dec 1, 2010	Standards Ratified	

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE

For Quadrant:	**Retail Electric and Wholesale Electric Quadrants**
Requesters:	**Smart Grid PAP 10 Subcommittee**
Request No.:	**WEQ AP Item 6(d), REQ AP Item 9(d)**
Request Title:	**Business Practices and Information Models to Support Priority Action Plan 10 – Standardized Energy Usage Information**

1. RECOMMENDED ACTION:

X	Accept as requested
	Accept as modified below
	Decline

EFFECT OF EC VOTE TO ACCEPT RECOMMENDED ACTION:

X	Change to Existing Practice
	Status Quo

2. TYPE OF DEVELOPMENT/MAINTENANCE

Per Request:		**Per Recommendation:**	
X	Initiation	X	Initiation
	Modification		Modification
	Interpretation		Interpretation
	Withdrawal		Withdrawal
X	Principle	X	Principle
X	Definition	X	Definition
X	Business Practice Standard	X	Business Practice Standard
X	Document	X	Document
X	Data Element	X	Data Element
X	Code Value	X	Code Value
	X12 Implementation Guide		X12 Implementation Guide
X	Business Process Documentation	X	Business Process Documentation

3. RECOMMENDATION

SUMMARY:

The Joint Retail Electric (REQ) and Wholesale Electric (WEQ) Quadrants' PAP 10 Smart Grid Subcommittee submit this Recommendation for 2010 Retail Annual Plan Item No. 9d and WEQ Annual Plan Item No. 6d – Business Practices and Information Models to support Priority Action Plan 10, "Standardized Energy Usage Information," based on the Tiger Team Report issued on June 22, 2010 by the NIST SGIP PAP10 Committee.

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In initiating this standards development, NAESB agreed to by year-end 2010 develop an energy use information model standard defining information to be communicated between utilities, third parties and energy use customers, via customer devices and/or 3rd Party energy services providers. The basic energy usage information model standard will let energy services providers exchange detailed energy use and cost information in a consistent format on behalf of customers. Doing so will let Customers track their power use and help them manage energy consumption and cost. Without a standardized format for representing energy use data, a variety of approaches could emerge, leading to incompatibilities among energy management products and services. It is planned that the American Society of Heating, Refrigerating and AC Engineers (ASHRAE) will extend the NAESB standard to create a facilities data model providing additional energy use data elements for facility energy management including buildings.

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RECOMMENDED STANDARDS:

WEQ-019 CUSTOMER ENERGY USAGE INFORMATION COMMUNICATION

EXECUTIVE SUMMARY

This section presents a summary of the Model Business Practices for Retail Customer Energy Usage Information communication. Specifically, these Model Business Practices establish a model for Energy Usage Information to be communicated in a consistent format among a variety of Entities, potentially including Distribution Companies, Energy Service Providers, meter-reading entities, and Retail Customers, via devices owned by Retail Customers and/or Energy Services Providers. Establishment of this model will let Retail Customers track their energy use and help them manage energy consumption and costs.

This document contains Model Business Practices establishing a model for communication of Retail Customer Energy Usage Information. The Model Business Practices do not require that wholesale electricity markets administered by System to adopt this model since System Operators generally are not the system of record for individual Retail Customer Energy Usage Information and load data or individual Retail Customer forecasted usage and load data. These Model Business Practices are not intended to replace applicable Governing Documents, and in the event of a conflict, the latter documents shall have precedence over these standards. . Without limiting the foregoing, these Model Business Practices are only applicable to the extent the information covered by this model is collected, managed or communicated pursuant to the applicable Governing Documents.

Retail Customer Energy Usage Information communication encompasses a variety of interactions between Distribution Companies, Retail Customers and Energy Services Providers. In a business environment where best practices are voluntary, Model Business Practices such as those in this document may be applied within the context of regulatory or other market requirements and agreements.

INTRODUCTION

The North American Energy Standards Board (NAESB) is a voluntary, non-profit organization comprised of members from all aspects of the natural gas and electric industries. Within NAESB, the Retail Electric Quadrant (REQ) and the Retail Gas Quadrant (RGQ) focus on issues impacting the retail sale of energy to end-use Retail Customers. REQ / RGQ Model Business Practices are intended to provide guidance to Distribution Companies, Suppliers, and other Market Participants involved in providing competitive energy service to end-use Retail Customers. The focus of these Model Business Practices is the representation of Retail Customer Energy Usage Information. System Operators do not generally communicate with Retail Customers and are not the system of record for individual Retail Customer Energy Usage Information or individual Retail Customer load forecast.

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These Model Business Practices are voluntary and do not address policy issues that are the subject of state legislation or regulatory decisions. These Model Business Practices have been adopted with the realization that as the industry evolves, additional and amended Model Business Practices may be necessary. Any industry participant seeking additional or amended Model Business Practices (including principles, definitions, data elements, process descriptions, and technical implementation instructions) should submit a request to the NAESB office, detailing the change, so that the appropriate process may take place to amend the Model Business Practice.

BUSINESS PROCESSES AND PRACTICES

Overview

The business processes and practices described below are not presently applicable to Wholesale Markets because Wholesale Markets do not generally communicate directly with Retail Customers and are not the system of record for individual Retail Customer Energy Usage Information or individual Retail Customer load forecast. The model and these business processes and practices are not required of System Operators. As the model and these business processes and practices evolve, System Operators may determine that use of the model or these business processes can be applied to other information. However, such use is not intended to replace or supplant applicable Governing Documents. Without limiting the foregoing, these Model Business Practices are only applicable to the extent the information covered by this model is collected, managed or communicated pursuant to the applicable tariff, market rules, operating procedures, protocols or manuals.

WEQ-019.1 Principles

WEQ-019.1.1 Overall Principles

WEQ-019-1.1.1 These Model Business Practices provide a Retail Customer Energy Usage Information model, defining a collection of structured Energy Usage Information elements needed by Retail Customers, to allow management of their energy efficiency and costs, including environmental impacts.

WEQ-019-1.1.2 The Energy Usage Information model is specified in UML, which is syntax neutral, so that it may be used within exchange protocols using a variety of specific representation syntax and exchange mechanisms, specified separately.

WEQ-019-1.1.3 The recommended use of the Energy Usage Information model is in implementation specifications exposing Retail Customer Energy Usage Information. Specifications that conform to the model shall contain semantically equivalent representations of all required and included model elements, resulting in straightforward, lossless transformations between conformant specifications.

WEQ-019.1.2 General Principles

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This section describes the requirements for the Energy Usage Information model defined in these Model Business Practices. It is specifically not intended to represent requirements for use of the Model Business Practices. Rather, it describes the potential overlapping needs of a robust model that can satisfy the many current and anticipated future needs for exchange of Energy Usage Information.

The following list of objectives represents a series of intended outcomes from the implementation of Model Business Practices defining Energy Usage Information. The goals and objectives herein do not require the regulated wholesale or retail Entity, in control of such information, to provide in the defined format or release such information, except where required under their Governing Documents and only to the Parties that are identified in the Governing Documents to receive such information. The Wholesale Market does not communicate with the individual Retail Customer, nor does the Wholesale Market forecast energy consumption for individual Retail Customers. The Wholesale Market does not use individual Retail Customer Energy Usage Information in their settlement unless specified in or supported by their Governing Documents. Statements idealizing intended outcomes do not hold the regulated Entity responsible for any actions taken or results of the actions of the receiving party.

For each requirement stated, there is an explanatory verification paragraph describing how the model in Appendix A satisfies the requirement.

WEQ-019.1.2.1 **General**

WEQ-019.1.2.1.1 *Facilities shall include residences, buildings, and industrial installations*

WEQ-019.1.2.1.2 *Usage and load information shall be readily available*

WEQ-019.1.2.1.3 *PAP 10 is an information model concept which is transport agnostic.*

WEQ-019.1.2.2 **Timeliness of Delivery**

WEQ-019.1.2.2.1 *Customers shall be able to use the information defined in these standards for real-time feedback on present and projected performance*

WEQ-019.1.2.2.2 *Premises based systems (e.g. EMS/ESI) shall be able to use the information defined in these standards for real-time feedback on present and projected performance*

WEQ-019.1.2.2.3 *Information exchanged shall be delivered in sufficient time to affect usage ["and this is the definition of real-time and near real-time "]*

WEQ-019.1.2.2.4 *Operations, Distribution, and Service Providers shall be able to use the information defined in these standards with the facility in near-real-time*

WEQ-019.1.2.2.5 *Customers and premises-based systems shall be able to use the information defined in these standards to provide real-time feedback on present and projected performance*

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129	**WEQ-019.1.2.3**	**Benefits to Facilities**
130	*WEQ-019.1.2.3.1*	*Standard load and usage information shall enable improved energy efficiency by defining a consistent way to communicate usage information.*
132	*WEQ-019.1.2.3.2*	*Standard load and usage information shall enable helping [all] Customers and operations manage their energy usage [and load]*
134	*WEQ-019.1.2.3.3*	*Standard load and usage information shall enable improved [facility] energy usage by availability of fine grained and timely information*
136	*WEQ-019.1.2.3.4*	*Availability of fine grained and timely information will enable better decisions about energy usage and conservation*
138	*WEQ-019.1.2.3.5*	*Facilities will benefit from consistent usage information exchange inside the facility, including meeting the energy efficiency goals of EISA 2007 and DOE initiatives*
140	*WEQ-019.1.2.3.6*	*Standard model shall support aggregated projections that can be passed on to operations make forecasting and management better and increase the value of a facility to the Smart Grid*
143	*WEQ-019.1.2.3.7*	*Sharing usage and load information inside a facility makes that facility more valuable to the Smart Grid*
145	*WEQ-019.1.2.3.8*	*The information exchanged shall allow integration of usage information throughout facility decision processes*
147	**WEQ-019.1.2.4**	**Benefits to Grid and Service Provider Operations**
148	*WEQ-019.1.2.4.1*	*Standard load and usage information will improve forecasting and grid management by delivering aggregated projections to operations.*
150	*WEQ-019.1.2.4.2*	*Standard load and usage information will improve forecasting and grid management by delivering aggregated projections to service providers.*
152	*WEQ-019.1.2.4.3*	*Standard load and usage information will enable more responsive facilities.*
153	*WEQ-019.1.2.4.4*	*Standard load and usage information will enable early deployment of devices that deliver and understand usage information.*
155	**WEQ-019.1.2.5**	**Internet-Like Future**
156	*WEQ-019.1.2.5.1*	*Standard usage and load information enables innovation in novel ways to help customers manage energy usage.*
158	*WEQ-019.1.2.5.2*	*Standard usage and load information enables innovation by third party service and software providers.*
160	**WEQ-019.1.2.6**	**Improved Collaboration**
161	*WEQ-019.1.2.6.1*	*The Information model shall not restrict two way flows of information.*

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162	*WEQ-019.1.2.6.2*	*By standardizing usage and load information exchange, devices that deliver and understand usage and load can be deployed more quickly, contributing to achieving the energy efficiency goals of EISA 2007 and DOE.*
165	**WEQ-019.1.2.7**	**Information Sources and Accessibility**
166	*WEQ-019.1.2.7.1*	*Usage and load information shall be provided by utilities and aggregating service providers and may be provided by others.*
168	*WEQ-019.1.2.7.2*	*Usage and load information shall be provided by devices and EMS/ESI implementations.*
169	*WEQ-019.1.2.7.3*	*Usage and load information can be accessed from the meter.*
170	*WEQ-019.1.2.7.4*	*Usage and load information can be accessed from the Smart Grid.*
171	**WEQ-019.1.2.8**	**Interactions and Information Exchanges Supported**
172	*WEQ-019.1.2.8.1*	*Interactions supported shall include those between Distribution [and Operations] and the industrial, commercial, and residential premises.*
174	*WEQ-019.1.2.8.2*	*Standard information models and understanding of usage and load are essential to cross domain interactions between Distribution [and Operations]: and Industrial, Commercial, Residential, and PEVs.*
177	*WEQ-019.1.2.8.3*	*Interactions supported shall include those between Distribution [and Operations] and the industrial, commercial, residential premises, and plug-in electric vehicles.*
179	*WEQ-019.1.2.8.4*	*Standard information models and understanding of usage and load are essential to cross domain interactions between Service Providers: and Industrial, Commercial, Residential, and PEVs.*
182	*WEQ-019.1.2.8.5*	*Interactions supported shall include those between Service Providers and the industrial, commercial, residential premises, and plug-in electric vehicles.*
184	*WEQ-019.1.2.8.6*	*This effort shall support information standards for load curtailment, load shaping, and energy market operations, hence load and usage must be supported (see PAP09, PAP03, and PAP04).*
187	*WEQ-019.1.2.8.7*	*Information exchanges shall include to, from, and within facilities.*
188	**WEQ-019.1.2.9**	**Information Characteristics**
189	*WEQ-019.1.2.9.1*	*Information model shall support exchange of both Fine Grained and summary information.*
191	*WEQ-019.1.2.9.2*	*Fine grained means that there is disaggregated information. Disaggregated information can include for example load, subsystem, premise, and variable time interval.*
193	*WEQ-019.1.2.9.3*	*Support for exchanging standard historical, present, and projected load information is required.*
195	*WEQ-019.1.2.9.4*	*Energy Usage Information shall include usage, usage profile, and some component of cost (consistent with PAP03, PAP04).*

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197 198	*WEQ-019.1.2.9.5*	*The PAP 10 Energy Usage Information model shall allow for exchange of greater or lesser detail.*
199	**WEQ-019.1.2.10**	**Timing and Goals**
200 201	*WEQ-019.1.2.10.1*	*Initial steps include making usage information more readily available by defining and standardizing usage information [delivered] through existing SG infrastructure.*
202	*WEQ-019.1.2.10.2*	*Information on device and facility usage is a primary goal in the initial focus.*
203 204	*WEQ-019.1.2.10.3*	*Standard load and usage information will enable early deployment of devices that deliver and understand usage information.*
205	**WEQ-019.1.2.11**	**Requirements on Quality of Consensus Standard**
206		*The information model shall support:*
207	*WEQ-019.1.2.11.1*	*Consistent data representation for REST & Web Services*
208 209	*WEQ-019.1.2.11.2*	*Specification of transactional exchange, syntax, and required population of the information model are beyond the scope of these requirements*
210	*WEQ-019.1.2.11.3*	*an extensible information model – e.g. ability to add custom extensions as needed*
211 212	*WEQ-019.1.2.11.4*	*have an evolvable information model – e.g. the standards process supports future revisions*
213	*WEQ-019.1.2.11.5*	*Forward compatible as we evolve*
214	*WEQ-019.1.2.11.6*	*Supportive of versioning*
215	*WEQ-019.1.2.11.7*	*Usable without "knowing all the details"*
216		*More flexibility for independent innovation shall be achieved through:*
217	*WEQ-019.1.2.11.8*	*Focus on information exchanged*
218	*WEQ-019.1.2.11.9*	*Agreed upon interfaces are maintained over time*
219	*WEQ-019.1.2.11.10*	*Minimal details = maximum interoperation*
220	*WEQ-019.1.2.11.11*	*Intellectual Property Rights shall be clear & clean*
221		*Results of PAP 10 shall produce:*
222	*WEQ-019.1.2.11.12*	*Information model and XML schema*
223	*WEQ-019.1.2.11.13*	*At information exchange level*
224		*The information model shall be:*
225	*WEQ-019.1.2.11.14*	*Readable without charge*
226	*WEQ-019.1.2.11.15*	*Reusable without restriction or charge*

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227	*WEQ-019.1.2.11.16*	*Adaptable without restriction or charge*
228	*WEQ-019.1.2.11.17*	*Usable for open source*
229	**WEQ-019.1.2.12**	**Additional Considerations**
230	*WEQ-019.1.2.12.1*	*In communicating energy usage information, the Energy Usage Information Model should be used and the information outlined within the model should be available.*
232	*WEQ-019.1.2.12.2*	*The Energy Usage Information Model data set has three unique identifiers, which serve the purpose of allowing various aggregations of data sets.*
234	*WEQ-019.1.2.12.3*	*The Tariff Profile component should be included in the Energy Information Usage Model.*
236	*WEQ-019.1.2.12.4*	*UsageSummary should include an optional cost attribute to interval and reading class.*
237	*WEQ-019.1.2.12.5*	*A known base currency should be included in the top level class associated with the MeterAsset for the Energy Usage Information Model, which would be applicable to all instances.*
240	*WEQ-019.1.2.12.6*	*The Energy Usage Information Model should be compliant with ISO8601.*
241	*WEQ-019.1.2.12.7*	*Optionally, both start and end of interval can be defined in order to support non-uniform interval information, which is accomplished in the Energy Information Usage Model through endTimestamp to IntervalReading.*
244	*WEQ-019.1.2.12.8*	*Demand based elements are maintained in the TariffProfile including common demand and demand ratchets.*
246	*WEQ-019.1.2.12.9*	*The Energy Information Usage Model status structure includes a named pair of QualityOfReading and values of raw, forecast, validated, estimated, mixed, and other for qualifying the associated data set, as an explicit representation of these name value pairs can be processed in implementations by sending and receiving actors. The UsageSummary class also includes such summary information.*
251	*WEQ-019.1.2.12.10*	*MeterEvent should be associated with meterAsset, not MeterReading.*
252	*WEQ-019.1.2.12.11*	*PQSummary as events of enumerated type are provided in the Energy Information Usage Model to represent a simple exposure of summary information.*
254	*WEQ-019.1.2.12.12*	*The Energy Usage Information Model should represent and take into account pollutant energy emissions such as O2, SO2, and NOX.*
256	*WEQ-019.1.2.12.13*	*Energy Usage Information Model should include a top level cost summary – billStart, billEnd, billToDate, lastPeriod, and costAdditional, so that the bill to date and bill as of the last billing period could be conveyed through a formula:*
259	*WEQ-019.1.2.12.14*	*The model shall use the work being produced by OASIS on common schedule information pursuant to the SGIP PAP04 Requirements. As this work is not complete as of this draft, the abstract definition of time intervals is the most appropriate way to ensure consistency.*

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WEQ-019.1.2.12.15 *The model shall use the work being produced by OASIS on common price and product definition information pursuant to the SGIP PAP03 Requirements. As this work is not complete as of this draft, should information related to price be included in the Seed Specification it must be at an appropriate level of abstraction.*

WEQ-019.2 Energy Usage Abbreviations, Acronyms and Definition of Terms

WEQ-019.2.1 Business Definitions

WEQ-019.2.1.1 Applicable Regulatory Authority

The state regulatory agency or other governing body that provides oversight, policy guidance, and direction to any parties involved in the process of providing energy to Retail Customers through regulations and orders.

WEQ-019.2.1.2 (Retail) Customer

Any Entity that takes gas and/or electric service for its own consumption.

WEQ-019.2.1.3 Distribution Company

A regulated Entity which provides distribution services and may provide energy and/or transmission/transportation services in a given area.

WEQ-019.2.1.4 Entity

A person or organization with sufficient legal standing to enter into a contract or arrangement with another such person or organization (as such legal standing may be determined by those parties) for the purpose of conducting and/or coordinating energy transactions.

WEQ-019.2.1.5 Governing Documents

Documents that govern the interactions among parties, including but not limited to: regulatory documents (e.g. tariffs, rules, regulations), contractual agreements, and Distribution Company Operational Manuals.

WEQ-019.2.1.6 Market Participant

A party engaged in the process of providing competitive retail energy to end-use Customers including but not limited to the Distribution Company, the Supplier, the Registration Agent, the settlement agent, and the meter reading Entity.

WEQ-019.2.1.7 Model Business Practices

TBD

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WEQ-019.2.1.8 Supplier

Persons engaged in the competitive sale of energy to end-users.

WEQ-019.2.2 Technical Definitions

This section contains technical terms and abbreviations used in this recommendation.

WEQ-019.2.2.1 Energy Management System (EMS)

An application used for controlling multiple energy-controllable devices (e.g., pool pump, Programmable Communicating Thermostat, light switches, PEV charging, etc.). This application may reside within a HAN Device (e.g. Programmable Communicating Thermostat, In-Home Display, computer, cable set-top box, other computing device, etc.). This application may also control other devices or systems in the home providing integrated automated services for the Consumer.

WEQ-019.2.2.2 Energy Services Interface (ESI)

A secure interface to a premises communications network (i.e. HAN) which facilitates relevant energy applications (e.g. remote load control, demand response, monitoring and control of DER, in-premises display of energy usage, reading of energy and non-energy meters, PEV charging and roaming coordination, and integration with energy management systems, etc.), provides auditing / logging functions that record transactions to and from HAN Devices, and, often, coordination functions that enable secure transactions between the HAN Devices Commissioned and Registered on its network and Enrolled in a Service Provider program.

WEQ-019.2.2.3 Energy Services Provider

An entity (e.g. Utility, retail electric provider, demand response aggregator, etc.) which provides energy services to Customers.

WEQ-019.2.2.4 Energy Usage Information

TBD

WEQ-019.2.2.5 Facility

TBD

WEQ-019.2.2.6 Fine Grained

Characterized by abundant use of detail or thoroughness of treatment.

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WEQ-019.2.2.1 Operations

One of the seven domains identified in the NIST Framework and Roadmap, defined there as "The managers of the movement of electricity". This could apply to operators of equipment within any of the other domains.

WEQ-019.2.2.2 Real-time

Refers to the ability of a component to process input at the rate it is received.

WEQ-019.2.2.3 Regional Transmission Organization

TBD

WEQ-019.2.2.4 Seed Specification

TBD

WEQ-019.2.2.5 Smart Grid

TBD

WEQ-019.2.2.6 System Operator

TBD

WEQ-019.2.2.7 Wholesale Market

TBD

WEQ-019.3 Energy Usage Information Model Business Practices

WEQ-019.3.1 Introduction

The focus of these Model Business Practices is the representation of Energy Usage Information. As defined in [PAP10 Requirements] the Energy Usage Information includes historic, present, and future projected usage and load together with the time period(s) for that information.

These Model Business Practices draw on actors and use cases defined by the following groups:

- Energy Information Standards Alliance (the EIS Alliance) [EIS]
- NAESB Survey and Consolidation of PAP10 Use Cases [NAESB PAP10]
- UCAIug OpenADE [ADE]
- ZigBee/Home Plug Smart Energy Profile 2.0 Market Requirements [SEP MRD]

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The relevant use cases are summarized as follows:

WEQ-019.4.1 The ESP and/or Distribution Company communicates historic and present Energy Usage Information and load information to the Retail Customer or Facility.[1]

WEQ-019.4.2 The Retail Customer or Facility communicates future projected usage and load information to the ESP, Distribution Company, or Grid Operations.[2]

WEQ-019.4.3 The ESP and/or Utility communicates their projection of usage and load to the Retail Customer or Facility.[3]

WEQ-019.4.4 Devices within a Facility communicate their present and future projected usage and load to Controllers or Facility EMS for aggregation and to be a component of Facility aggregated future projected usage and load.[4]

WEQ-019.4.5 Devices, business processes, EMS, ESI, and other functional units within the Facility communicate usage and load information among themselves.[5]

WEQ-019.4.6 These Model Business Practices are limited to the Seed Specification which shall be usable by others to build standards and/or specification for exchange of Energy Usage Information and load information appropriate to their needs without overly constraining those uses or including information that is not required in all implementations of specifications for exchanging load and usage.

WEQ-019.4 Energy Usage Information Model

The model proposed is based on the IEC TC57 Common Information Model, WG13 and WG14. New elements identified in this recommendation will be proposed to these working groups, after ratification within NAESB, as extensions to be considered for inclusion in a future release of the CIM.

[1] See e.g. EIS Alliance Use Cases v2 including UC-9, UC-11, UC-12, UC-14, UC-15, and OpenADE use case "Publication".
[2] See e.g. EIS Alliance Use Cases v2 including UC-3, UC-11, UC-14, UC-15
[3] Needs refs. This is an addition to EIS and OpenADE.
[4] See e.g. EIS Alliance Use Cases v2 including UC-1, UC-2, UC-3, UC-8, UC-9.
[5] See e.g. EIS Alliance Use Cases v2 including UC-1, UC-2, UC-3

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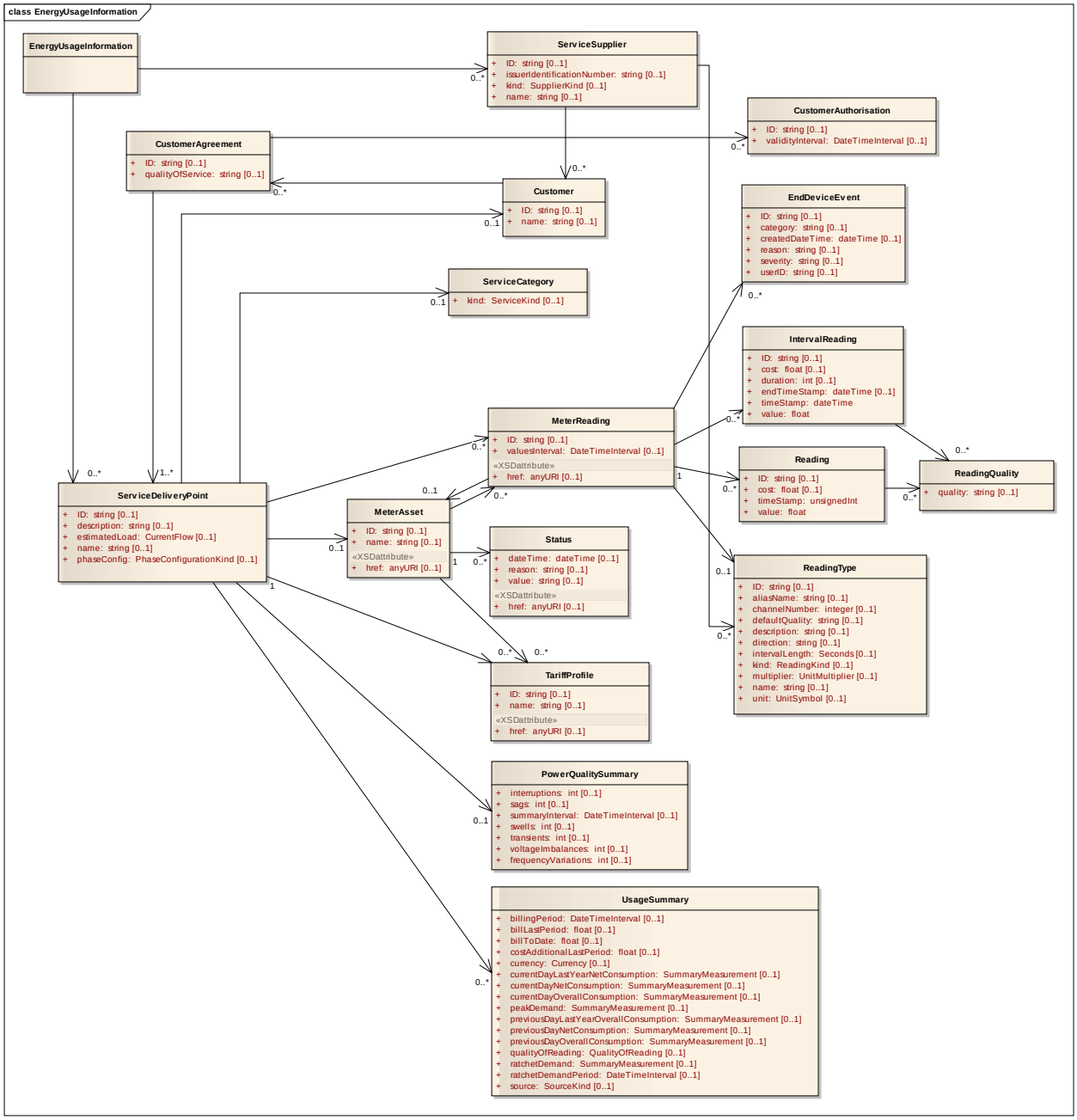

373

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374 **WEQ-019.4.1 Energy Usage Information Model Details**

375 The following sections contain the classes and attributes defined in the model, along with
376 their descriptions. Elements tagged with <<enumeration>> define the valid values for an
377 enumerated data type.

378 **WEQ-019.4.7.1.1 Currency** *«enumeration»*

379 Monetary currencies. Apologies for this list not being exhaustive.

Name	Type	Description
AUD		Australian dollar
CAD		Canadian dollar
CHF		Swiss francs
CNY		Chinese yuan renminbi
DKK		Danish crown
EUR		European euro
GBP		British pound
INR		India rupees
JPY		Japanese yen
NOK		Norwegian crown
other		Another type of currency.
RUR		Russian ruble
SEK		Swedish crown
USD		US dollar

380 **WEQ-019.4.7.1.2 CurrentFlow**

381 Electrical current (positive flow is out of the ConductingEquipment into the
382 ConnectivityNode)

Name	Type	Description
multiplier	*UnitMultiplier*	Multiplier for 'unit'.
unit	*UnitSymbol*	Unit in symbol
value	*float*	Value in type of float

383 **WEQ-019.4.7.1.3 Customer**

384 Organisation receiving services from ServiceSupplier.

Name	Type	Description

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ID	*string*	Object identifier
name	*string*	Name of an attribute.

385 **WEQ-019.4.7.1.4 CustomerAgreement**

386 Agreement between the Customer and the ServiceSupplier to pay for service at a specific
387 ServiceLocation. It records certain billing information about the type of service provided
388 at the ServiceLocation and is used during charge creation to determine the type of
389 service.

Name	Type	Description
ID	*string*	A Model Authority issues mRIDs. Given that each Model Authority has a unique id and this id is part of the mRID, then the mRID is globally unique.
qualityOfService	*string*	Quality of service provided to customer related to contracted level of power quality events

390 **WEQ-019.4.7.1.5 DateTimeInterval**

391 Interval of date and time.

Name	Type	Description
end	*unsignedInt*	Date and time that this interval ended.
start	*unsignedInt*	Date and time that this interval started.

392 **WEQ-019.4.7.1.6 EndDeviceEvent**

393 Event detected by a DeviceFunction associated with EndDeviceAsset.

Name	Type	Description
ID	*string*	A Model Authority issues mRIDs. Given that each Model Authority has a unique id and this id is part of the mRID, then the mRID is globally unique.
category	*string*	Category of event resulting in this activity record.
createdDateTime	*dateTime*	Date and time this activity record has been created (different from the 'status.dateTime', which is the time of a status change of the associated object, if applicable).
reason	*string*	Reason for event resulting in this activity record, typically supplied when user initiated.
severity	*string*	Severity level of event resulting in this

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		activity record.
userID	*string*	(if user initiated) ID of user who initiated this end device event.

394 **WEQ-019.4.7.1.7 EnergyUsageInformation**

395

396 **WEQ-019.4.7.1.8 IntervalReading**

397 Data captured at regular intervals of time. Interval data could be captured as incremental
398 data, absolute data, or relative data. The source for the data is usually a tariff quantity or
399 an engineering quantity. Data is typically captured in time-tagged, uniform, fixed-length
400 intervals of 5, 10, 15, 30, or 60 minutes.
401 Note: Interval Data is sometimes also called "Interval Data Readings" (IDR).

Name	Type	Description
ID	*string*	Object identifier
cost	*float*	
duration	*int*	The duration of the interval, in seconds.
endTimeStamp	*dateTime*	End interval timestamp
timeStamp	*dateTime*	The start date and time of an interval reading
value	*float*	Value in type of float

402 **WEQ-019.4.7.1.9 MeterAsset**

403 Physical asset that performs the metering role of the ServiceDeliveryPoint. Used for
404 measuring consumption and detection of events.

Name	Type	Description
ID	*string*	Object identifier
name	*string*	Meter name
href	*anyURI*	Hypertext reference pointing to a URI

405 **WEQ-019.4.7.1.10 MeterReading**

406 Set of values obtained from the meter.

Name	Type	Description
href	*anyURI*	Hypertext reference pointing to a URI
ID	*string*	Object identifier
valuesInterval	*DateTimeInterval*	Interval in date time (start & end)

407 **WEQ-019.4.7.1.11 PhaseConfigurationKind** *«enumeration»*

Kind of phase configuration.
Note that there is an enum Wires::WindingConnection with values {D, Y, Z, Yn, Zn}. However, there are many more phase configurations than delta (threePhaseThreeWire) and wye (threePhaseFourWire), which are defined here.

Name	Type	Description
onePhaseThreeWire		
onePhaseTwoWire		
other		
threePhaseFourWire		
threePhaseThreeWire		
threePhaseTwoWire		
twoPhaseThreeWire		
twoPhaseTwoWire		

WEQ-019.4.7.1.12 **PowerQualitySummary**

Name	Type	Description
interruptions	*int*	Number of interruptions
sags	*int*	Number of sags
summaryInterval	*DateTimeInterval*	Interval of summary period
swells	*int*	Number of swells
transients	*int*	Number of transients
voltageImbalances	*int*	Number of voltage imbalances
frequencyVariations	*int*	Number of frequency variations

WEQ-019.4.7.1.13 **QualityOfReading** *«enumeration»*

Name	Type	Description
estimated		

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forecast		
mixed		
raw		
validated		
normalizedForWeather		
other		

WEQ-019.4.7.1.14 Reading

Specific value measured by a meter or other asset. Each Reading is associated with a specific ReadingType.

Name	Type	Description
ID	*string*	Object identifier
cost	*float*	Cost in a currency
timeStamp	*unsignedInt*	The date and time of a reading
value	*float*	Value in type of float

WEQ-019.4.7.1.15 ReadingKind *«enumeration»*

Kind of reading.

Name	Type	Description
current		
currentAngle		
date		
demand		
energy		
other		
phaseAngle		
power		
powerFactor		
pressure		
time		
voltage		
voltageAngle		
volume		
carbonDioxide		

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NOx		
carbon		
SOx		
methane		
HCH		
perfluorocarbons		
sulfurHexafluoride		

WEQ-019.4.7.1.16 ReadingQuality

Quality of a specific reading value or interval reading value. Note that more than one Quality may be applicable to a given Reading. Typically not unsed unless problems or unusual conditions occur (i.e., quality for each Reading is assumed to be 'Good' unless stated otherwise in associated ReadingQuality).

Name	Type	Description
quality	*string*	Quality, to be specified if different than 'Good'.

WEQ-019.4.7.1.17 ReadingType

Type of data conveyed by a specific Reading.

Name	Type	Description
ID	*string*	A Model Authority issues mRIDs. Given that each Model Authority has a unique id and this id is part of the mRID, then the mRID is globally unique.
aliasName	*string*	The aliasName is free text human readable name of the object alternative to IdentifiedObject.name. It may be non unique and may not correlate to a naming hierarchy.
channelNumber	*integer*	Logical positioning of this measurement data.
defaultQuality	*string*	Characteristics of a data value conveyed by a specific Reading, which allow an application to understand how a specific Reading is to be interpreted.
description	*string*	The description is a free human readable text describing or naming the object. It may be non unique and may not correlate to a naming hierarchy.

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direction	*string*	Specifies the direction of flow of the measurement.
intervalLength	*Seconds*	(if incremental reading value) Length of increment interval. Interval duration specified at the IntervalReading overrides this default.
kind	*ReadingKind*	Kind of reading.
multiplier	*UnitMultiplier*	Multiplier for 'unit'.
name	*string*	Name of an attribute.
unit	*UnitSymbol*	Unit in symbol

428 **WEQ-019.4.7.1.18 Seconds**

429 Time, in seconds

Name	Type	Description
multiplier	*UnitMultiplier*	Multiplier for 'unit'.
unit	*UnitSymbol*	Unit in symbol
value	*float*	Value in type of float

430 **WEQ-019.4.7.1.19 ServiceDeliveryPoint**

431 Logical point on the network where the ownership of the service changes hands. It is one
432 of potentially many service points within a ServiceLocation, delivering service in
433 accordance with a CustomerAgreement. Used at the place where a meter may be
434 installed.

Name	Type	Description
ID	*string*	A Model Authority issues mRIDs. Given that each Model Authority has a unique id and this id is part of the mRID, then the mRID is globally unique.
description	*string*	The description is a free human readable text describing or naming the object. It may be non unique and may not correlate to a naming hierarchy.
estimatedLoad	*CurrentFlow*	Estimated load.
name	*string*	Name of an attribute.
phaseConfig	*PhaseConfiguratio nKind*	Phase configuration kind.

435 **WEQ-019.4.7.1.20 SourceKind** *«enumeration»*

436

Name	Type	Description

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consumer		
provider		
other		

WEQ-019.4.7.1.21 Status

Current status information relevant to an entity.

Name	Type	Description
dateTime	*dateTime*	Date and time for which status 'value' applies.
href	*anyURI*	Hypertext reference pointing to a URI
reason	*string*	Reason code or explanation for why an object went to the current status 'value'.
value	*string*	Value in string

WEQ-019.4.7.1.22 SummaryMeasurement

Name	Type	Description
multiplier	*UnitMultiplier*	
timeStamp	*dateTime*	
unit	*UnitSymbol*	
value	*float*	

WEQ-019.4.7.1.23 TariffProfile

A schedule of charges; structure associated with Tariff that allows the definition of complex tarif structures such as step and time of use when used in conjunction with TimeTariffInterval and Charge. Inherited 'status.value' is defined in the context of the utility's business rules, for example: active, inactive, etc.

Name	Type	Description
ID	*string*	Object identifier
name	*string*	Name of an attribute.
href	*anyURI*	Hypertext reference pointing to a URI

WEQ-019.4.7.1.24 UnitMultiplier *«enumeration»*

The unit multipliers defined for the CIM

Name	Type	Description
c		Centi 10**-2

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d		Deci 10**-1
G		Giga 10**9
k		Kilo 10**3
m		Milli 10**-3
M		Mega 10**6
micro		Micro 10**-6
n		Nano 10**-9
none		
p		Pico 10**-12
T		Tera 10**12

448 **WEQ-019.4.7.1.25** **UnitSymbol** *«enumeration»*

449 The units defiend for usage in the CIM

Name	Type	Description
A		Current in ampere
deg		Plane angle in degrees
F		Capacitance in farad
g		Mass in gram
h		Time in hours
H		Inductance in henry
Hz		Frequency in hertz
Hz-1		per Hertz
J		Energy in joule
J/s		Joule per second
kg/J		Mass per energy
m		Length in meter
m2		Area in square meters
m3		Volume in cubic meters
min		Time in minutes
N		Force in newton
none		Dimension less quantity, e.g. count, per unit, etc.
C		Relative temperature in degrees Celsius
ohm		Resistance in ohm

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Pa		Pressure in pascal (n/m2)
rad		Plane angle in radians
S		Conductance in siemens
s		Time in seconds
s-1		per second
V		Voltage in volt
V/VAr		Volt per volt ampere reactive
VA		Apparent power in volt ampere
VAh		Apparent energy in volt ampere hours
VAr		Reactive power in volt ampere reactive
VArh		Reactive energy in volt ampere reactive hours
W		Active power in watt
W/Hz		Watt per hertz
W/s		Watt per second
Wh		Real energy in what hours

450 **WEQ-019.4.7.1.26** **UsageSummary**

451

Name	Type	Description
billingPeriod	*DateTimeInterval*	
billLastPeriod	*float*	
billToDate	*float*	
costAdditionalLastPeriod	*float*	
currency	*Currency*	
currentDayLastYearNetConsumption	*SummaryMeasurement*	
currentDayNetConsumption	*SummaryMeasurement*	
currentDayOverallConsumption	*SummaryMeasurement*	
peakDemand	*SummaryMeasurement*	
previousDayLastYearOverallCon	*SummaryMeasurement*	

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sumption		
previousDayNetConsumption	*SummaryMeasurement*	
previousDayOverallConsumption	*SummaryMeasurement*	
qualityOfReading	*QualityOfReading*	
ratchetDemand	*SummaryMeasurement*	
ratchetDemandPeriod	*DateTimeInterval*	
source	*SourceKind*	

WEQ-019.4.7.1.27 **ServiceKind** *«enumeration»*

Kind of service.

Name	Type	Description
electricity		
gas		
water		
time		
heat		
refuse		
sewerage		
rates		
tvLicence		
internet		
other		

WEQ-019.4.7.1.28 **CustomerAuthorisation**

Holds an authorisation for access to specific user-private data granted to a 3rd Party service provider. [OpenADE Extension - Specialization of "Agreement"]

Name	Type	Description
ID	*string*	Unique identifier for this authorisation
validityInterval	*DateTimeInterval*	Date and time interval this agreement is valid (from going into effect to termination).

WEQ-019.4.7.1.29 **ServiceCategory**

458 Category of service provided to the customer.

Name	Type	Description
kind	*ServiceKind*	Kind of service.

459 **WEQ-019.4.7.1.30** **SupplierKind** *«enumeration»*

460 Kind of supplier.

Name	Type	Description
utility		
retailer		
other		

461 **WEQ-019.4.7.1.31** **ServiceSupplier**

462 Organisation that provides services to Customers.

Name	Type	Description
ID	*string*	Unique identifier of this service supplier.
issuerIdentificationNumber	*string*	Unique transaction reference prefix number issued to an entity by the International Standards Organisation for the purpose of tagging onto electronic financial transactions, as defined in ISO/IEC 7812-1 and ISO/IEC 7812-2.
kind	*SupplierKind*	Kind of supplier.
name	*string*	The human-readable name for the service supplier.

463

464 **WEQ-019.4.2** **Energy Usage Information and Format and Use**

465 **WEQ-019.4.7.2.1** The Energy Usage Information Model is developed using a UML modeling tool. The
466 Model classes, attributes, types and descriptions are included in WEQ-019.4.7. The
467 Model is made available as XMI, which is the standard XML import/export format for
468 UML. The Model is exported as HTML, and made available as a downloadable archive
469 viewable with a web browser.

470 **WEQ-019.4.3** **Energy Usage Information Model Technical Consideration**

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WEQ-019.4.3.1 *The Energy Usage Information Model will used as the basis for Smart Grid interfaces exchanging customer usage information between energy services providers.*

WEQ-019.4.3.2 *The Energy Usage Information Model will be configured to allow schemas to be generated from it, using XML Schema Definition Language (XSD). This format defines the valid structures and types for XML documents that may carry the model information.*

WEQ-019.4.3.3 *Implementations may decide to include only a subset of the elements defined in the model.*

WEQ-019.4.3.4 *The example XSD shall conform to Naming and Design Rules best practices as described by IEC 62361-100, Naming and Design Rules for CIM Profiles to XML Schema Mapping.*

WEQ-019.4.3.5 *The model and schema shall support multiple information exchange standards, including WS-I Basic Profile Web Services, RESTful Web Services, or other conventions. These specifics are left to implementers to define.*

WEQ-019.4.3.6 *Though there may be elements useful for transfer of security-related information elements in the model, the specific details related to how to protect sensitive information, and how to authorize specific roles or identities to have access are not defined in this recommendation.*

WEQ-019.4.3.7 *A conformant specification that refines or extends this standard shall produce information for exchange that can be transformed algorithmically (that is based on the standard alone) into a form that can be validated through the method described in WEQ-019.4.3.8.*

This requirements means that various formats for representation and exchange and various subsets and potentially supersets of information content are envisioned based on this standard. The use of the schema is not to impose its direct use in message validation. Rather its use is intended to facilitate verification of conformance to the information model with respect to message content and semantics without imposing constraints on specific message payload schemas and data element representations. Some representations are anticipated to be entirely binary in nature. Others will trade off strings for integer representations of information contents. Regardless of the means, the information should be convertible to be testable as described herein.

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WEQ-019.4.3.8 *A specification that claims conformance to this standard shall describe and define an automatable transformation from that specification's model to and from this UML Model, including indicating listing of attributes used and not used.*

WEQ-019.4.3.9 *Conformant specifications shall include the following required core model elements exchanged between data provider and data consumer in their defined messages:*

- *One or more measurement or summary containers: IntervalReading, Reading, PowerQualitySummary, UsageSummary*
- *Two of the following attributes, for each IntervalReading: timeStamp, endTimeStamp, duration*
- *value (the value of the measurement, from IntervalReading or Reading)*
- *ReadingType – ID, defaultQuality, direction, kind, multiplier, name, unit*
- *ReadingType ID for each measurement (IntervalReading or Reading) (exists in model through MeterReading)*
- *Measurement source / location – ServiceDeliveryPoint.ID or MeterAsset.ID and association to measurements or summary*

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APPENDIX A Principle Verifications Against The Energy Information Usage Model

WEQ-019.4.4 Requirements validation method

A complete requirements process involves a sequential breakdown of a problem starting with the collection of high level functional user requirements. The high level requirements are broken down into ever more specific derived requirements. Eventually you get to design requirements. At the bottom of the requirements tree are simple, testable, atomic requirements. When the atomic requirements are met, the tracing to the higher level requirements allows them to be met by definition.

The PAP10 charter – the text of the abstract, description, and objectives from the NIST Framework – are high level user requirements {insert reference to NIST Framework Rev 1.0}. The requirements presented in 0 can be considered the first level requirements breakdown of derived requirements.

This standard does not go to the final level of detailed design requirements. Instead, we performed a parallel assessment of the "derived requirements" against the evolving model, which itself was initially derived from detailed requirements identified in activities external to this standard.

Here is a sample requirement and how it is verified:

<<*requirement reference*>>	*Standard load and usage information shall enable improved energy efficiency by defining a consistent way to communicate usage information.*
	In the Model, There is at least one Schema, see {reference} produced as a part of this standard. With a schema at least one specific consistent way to communicate usage information is thereby specified. Thus, the presence of the agreed upon schema or equivalent satisfies this requirement.

WEQ-019.4.4.1 General

WEQ-019.4.4.1.1 *Facilities shall include residences, buildings, and industrial installations*

No specific limit as to the nature of the facility appears in the EUI model. Identifiers are for user, location, and device only.

WEQ-019.4.4.1.2 *Usage and load information shall be readily available*

While the availability of information is the realm of the utility and its customer, this model facilitates availability by providing a single simple information model for client applications

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550	*WEQ-019.4.4.1.3*	*PAP 10 is an information model concept which is transport agnostic.*
551 552 553		Because it is defined within a UML model as a series of classes and no services are specifically defined in the standard for those classes, it is by this definition transport agnostic.
554	**WEQ-019.4.4.2**	**Timeliness of Delivery**
555 556	*WEQ-019.4.4.2.1*	*Customers shall be able to use the information defined in these standards for real-time feedback on present and projected performance*
557 558		There are no constraints on time stamps, latency or performance imposed by the model, so it is possible to represent past, present, or future usage.
559 560	*WEQ-019.4.4.2.2*	*Premises based systems (e.g. EMS/ESI) shall be able to use the information defined in these standards for real-time feedback on present and projected performance*
561 562		There are no constraints on time stamps, latency or performance imposed by the model, so it is possible to represent past, present, or future usage.
563 564	*WEQ-019.4.4.2.3*	*Information exchanged shall be delivered in sufficient time to affect usage ["and this is the definition of real-time and near real-time "]*
565 566		There are no constraints on time stamps, latency or performance imposed by the model, so it is possible to represent past, present, or future usage.
567 568	*WEQ-019.4.4.2.4*	*Operations, Distribution, and Service Providers shall be able to use the information defined in these standards with the facility in near-real-time*
569 570		There are no constraints on time stamps, latency or performance imposed by the model, so it is possible to represent past, present, or future usage.
571 572	*WEQ-019.4.4.2.5*	*Customers and premises-based systems shall be able to use the information defined in these standards to provide real-time feedback on present and projected performance*
573 574		There are no constraints on time stamps, latency or performance imposed by the model, so it is possible to represent past, present, or future usage.
575	**WEQ-019.4.4.3**	**Benefits to Facilities**
576 577	*WEQ-019.4.4.3.1*	*Standard load and usage information shall enable improved energy efficiency by defining a consistent way to communicate usage information.*
578 579 580 581		By minimizing the number of different physical representations of usage information, and aligning the logical elements included in the definition of this information, it will allow for the development of applications that require this information to provide energy efficiency services and functionality.
582 583	*WEQ-019.4.4.3.2*	*Standard load and usage information shall enable helping [all] Customers and operations manage their energy usage [and load]*

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		The data model standardizes load and usage information so customer usage data provider services may be developed to interface with systems that help customers and operations with energy management.
	WEQ-019.4.4.3.3	*Standard load and usage information shall enable improved [facility] energy usage by availability of fine grained and timely information*
		The data model standard provides for measurement intervals enabling the availability of fine grained and timely load and usage information.
	WEQ-019.4.4.3.4	*Availability of fine grained and timely information will enable better decisions about energy usage and conservation*
		The data model enables a standard approach for fine grained and timely load and usage information so customer usage data provider services can interface to systems that help customers and/or operations with energy conservation.
	WEQ-019.4.4.3.5	*Facilities will benefit from consistent usage information exchange inside the facility, including meeting the energy efficiency goals of EISA 2007 and DOE initiatives*
		The data model provides consistent energy usage data representation so information exchanges are uniformly understood. This ensures facility energy efficiency systems using this data are acting on correct and consistent information.
	WEQ-019.4.4.3.6	*Standard model shall support aggregated projections that can be passed on to operations[the System Operator's] or [building management] [?] make forecasting and management better and increase the value of a facility to the Smart Grid*
		Aggregated projections are supported via future timestamps in interval and other data.
	WEQ-019.4.4.3.7	*Sharing usage and load information inside a facility makes that facility more valuable to the Smart Grid*
		The data model provides usage, load, and pricing information from which a facility manager or system may take optimization actions.
	WEQ-019.4.4.3.8	*The information exchanged shall allow integration of usage information throughout facility decision processes*
		The data model standardizes usage information so customer usage data provider services may be developed to integrate with systems handling facility decision processes.
	WEQ-019.4.4.4	**Benefits to Grid and Service Provider Operations**
	WEQ-019.4.4.4.1	*Standard load and usage information will improve forecasting and grid management by delivering aggregated projections to operations.*

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By specifying future intervals, which could be larger than measured intervals, it is possible to represent aggregated projections.

WEQ-019.4.4.4.2 *Standard load and usage information will improve forecasting and grid management by delivering aggregated projections to service providers.*

By specifying future intervals, which could be larger than measured intervals, it is possible to represent aggregated projections.

WEQ-019.4.4.4.3 *Standard load and usage information will enable more responsive facilities.*

Interoperable models of load and usage information allow coordination of response capability, allowing those capabilities to be utilized more efficiently.

WEQ-019.4.4.4.4 *Standard load and usage information will enable early deployment of devices that deliver and understand usage information.*

By standardizing the information to be made available, devices and applications will be able to get access to that information.

WEQ-019.4.4.5 **Internet-Like Future**

WEQ-019.4.4.5.1 *Standard usage and load information enables innovation in novel ways to help customers manage energy usage.*

By standardizing on simple data sets that many providers and consumers can utilize, this information can be combined with additional information to find the specific way that will help customers the most.

WEQ-019.4.4.5.2 *Standard usage and load information enables innovation by third party service and software providers.*

By standardizing on simple data sets that many providers and consumers can utilize, this information can be combined with additional information to find the specific way that will help customers the most.

WEQ-019.4.4.6 **Improved Collaboration**

WEQ-019.4.4.6.1 *The Information model shall not restrict two way flows of information.*

Customers, utilities and third parties will have access to the model in real time with the appropriate usage information and customer permissions/allowances.

WEQ-019.4.4.6.2 *By standardizing usage and load information exchange, devices that deliver and understand usage and load can be deployed more quickly, contributing to achieving the energy efficiency goals of EISA 2007 and DOE.*

Uniformity among signals as required by the model standards will lead to greater acceptance and adoption.

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WEQ-019.4.4.7 Information Sources and Accessibility

WEQ-019.4.4.7.1 *Usage and load information shall be provided by utilities and aggregating service providers and may be provided by others.*

With consent from the customer, utilities and aggregators will provide access to usage and load information in the provided format for model integration.

WEQ-019.4.4.7.2 *Usage and load information shall be provided by devices and EMS/ESI implementations.*

With consent from the customer, devices and EMS/ESI implementations will provide usage and load information in the provided format for model integration.

WEQ-019.4.4.7.3 *Usage and load information can be accessed from the meter.*

With consent from the customer and the utility, usage and load information will be provided by the meter to accredited sources for purposes of running the model.

WEQ-019.4.4.7.4 *Usage and load information can be accessed from the Smart Grid.*

With consent from the customer and the utility, usage and load information will be made available by any Smart Grid services provider via the public Internet.

WEQ-019.4.4.8 Interactions and Information Exchanges Supported

WEQ-019.4.4.8.1 *Interactions supported shall include those between Distribution [and Operations] and the industrial, commercial, and residential premises.*

The model does not exclude/include specific actors or potential exchange points, it merely describes data and format of information.

WEQ-019.4.4.8.2 *Standard information models and understanding of usage and load are essential to cross domain interactions between Distribution [and Operations]: and Industrial, Commercial, Residential, and PEVs.*

The standard information format does not exclude potential actors or exchange points including potential cross domain interaction including those between Distribution companies and other actors.

WEQ-019.4.4.8.3 *Interactions supported shall include those between Distribution [and Operations] and the industrial, commercial, residential premises, and plug-in electric vehicles.*

The model does not exclude/include specific actors or potential exchange points, it merely describes data and format of information.

WEQ-019.4.4.8.4 *Standard information models and understanding of usage and load are essential to cross domain interactions between Service Providers: and Industrial, Commercial, Residential, and PEVs.*

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The standard information format does not exclude potential actors or exchange points including potential cross domain interaction including those between Service Providers and other actors.

WEQ-019.4.4.8.5 *Interactions supported shall include those between Service Providers and the industrial, commercial, residential premises, and plug-in electric vehicles.*

The model does not exclude/include specific actors or potential exchange points, it merely describes data and format of information therefore by not excluding these actors.

WEQ-019.4.4.8.6 *This effort shall support information standards for load curtailment, load shaping, and energy market operations, hence load and usage must be supported (see PAP09, PAP03, and PAP04).*

Load and usage information are part of the model.

WEQ-019.4.4.8.7 *Information exchanges shall include to, from, and within facilities.*

The model does not preclude any potential exchange points therefore the requirement is met.

WEQ-019.4.4.9 **Information Characteristics**

WEQ-019.4.4.9.1 *Information model shall support exchange of both Fine Grained and summary information.*

Summary information is available at the top level through PowerQualitySummary and UsageSummary components. Fine-grained information is available through the list of MeterReading measurement structures which in turn have both summary, Reading, and interval level detail, IntervalReading components. Additionally, the EUI data structures can be associated by device, location, and owner facilitating variable aggregations.

WEQ-019.4.4.9.2 *Fine grained means that there is disaggregated information. Disaggregated information can include for example load, subsystem, premise, and variable time interval.*

Fine grained (disaggregated) information is described throughout the information model. From CustomerAccount, EventType, MeterAsset, ReadingKind, etc. there seems to be enough detailed data elements to support "Fine grained" information.

WEQ-019.4.4.9.3 *Support for exchanging standard historical, present, and projected load information is required.*

Historical information seems to be supported by the UsageSummary attributes for billing items only. Present (meter reading) information has fine grained as well as billing attributes defined. Projected usage is supported in the

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QualityOfReading <<enumeration>> attribute, which delineates the "estimated" and "forecast" attribute names.

WEQ-019.4.4.9.4 *Energy Usage Information shall include usage, usage profile, and some component of cost (consistent with PAP03, PAP04)*

Energy usage information, including costs is contained in the data model. Interval data is supportive of usage profiles and PAP04.

WEQ-019.4.4.9.5 *The PAP 10 Energy Usage Information model shall allow for exchange of greater or lesser detail.*

Summary information is available at the top level through PowerQualitySummary and UsageSummary components. Fine-grained information is available through the list of MeterReading measurement structures which in turn have both summary, Reading, and interval level detail, IntervalReading components. Additionally, the EUI data structures can be associated by device, location, and owner facilitating variable aggregations.

WEQ-019.4.4.10 **Timing and Goals**

WEQ-019.4.4.10.1 *Initial steps include making usage information more readily available by defining and standardizing usage information [delivered] through existing SG infrastructure.*

The EUI data structures enable a diverse range of technologies to deliver usage information in a timely and protocol agnostic manner. Examples of this might be a premise ESI or through services provided by a utility or facility.

WEQ-019.4.4.10.2 *Information on device and facility usage is a primary goal in the initial focus.*

As the EUI data structures cover summary and device level information, device and facility (aggregated) information can be delivered.

WEQ-019.4.4.10.3 *Standard load and usage information will enable early deployment of devices that deliver and understand usage information.*

As the EUI data models are standardized, producers may deliver usage based devices with confidence in interoperability.

WEQ-019.4.4.11 **Requirements on Quality of Consensus Standard**

The information model shall support:

WEQ-019.4.4.11.1 *Consistent data representation for REST & Web Services.*

The Schema in section WEQ-019.4.3 ensures that a consistent data representation can be achieved when a Schema is developed in a supporting standard carrying EUI in REST and Web Services.

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754 755	*WEQ-019.4.4.11.2*	*Specification of transactional exchange, syntax, and required population of the information model are beyond the scope of these requirements.*
756		No transactional syntaxes or message services are defined in this standard.
757	*WEQ-019.4.4.11.3*	*an extensible information model – e.g. ability to add custom extensions as needed*
758 759 760 761		This model may be extended by adding new elements (classes, attributes, and associations). Implementations must utilize conventions to ignore any elements not understood by components, to allow them to continue to operate when future extensions are added.
762 763	*WEQ-019.4.4.11.4*	*have an evolvable information model – e.g. the standards process supports future revisions*
764 765		**Error! Reference source not found.** identifies how the model is evolvable. Section WEQ-019.4.3.7 defines how the standard version can be revised.
766	*WEQ-019.4.4.11.5*	*Forward compatible as we evolve*
767 768 769 770		To maintain forward and backward compatibility, no model elements may be removed or restricted in future versions. Only additions and expansions are allowed, so that previous version representations maintain validity against future versions, and vice-versa.
771	*WEQ-019.4.4.11.6*	*Supportive of versioning*
772 773 774		Versioning in the UML Model is addressed by a tagged value. The tagged value "version" is used additionally in the XML Schema export (see WEQ-019.4.3) as the schema version value.
775	*WEQ-019.4.4.11.7*	*Usable without "knowing all the details"*
776 777 778 779 780		Information in the model is arranged hierarchically. Greater detail can be understood the deeper into this hierarchy the reader goes. Summary information is exposed near the top of the hierarchy. These arrangements make it straightforward to accessing applications to ignore the level of detail they do not plan to use or comprehend, while getting value out of higher level information.
781		*More flexibility for independent innovation shall be achieved through:*
782	*WEQ-019.4.4.11.8*	*Focus on information exchanged*
783 784		The specification of an information-only model allows the standard to focus on the information exchanged.
785	*WEQ-019.4.4.11.9*	*Agreed upon interfaces are maintained over time*
786		See section WEQ-019.4.3.7 which describes

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787	*WEQ-019.4.4.11.10*	*Minimal details = maximum interoperation*
788 789 790		The model provides a hierarchy of summary and detailed information. A balance is achieved by the definition of minimal set of details necessary to satisfy the cumulative set of use cases of the EUI and allocated to this model.
791	*WEQ-019.4.4.11.11*	*Intellectual Property Rights shall be clear & clean*
792		[Need section on IPR and access to model and schema]
793		*Results of PAP 10 shall produce:*
794	*WEQ-019.4.4.11.12*	*Information model and XML schema*
795 796		See sections WEQ-019.4.2 and WEQ-019.4.3 which describe the delivery of an information model and XML schema respectively.
797	*WEQ-019.4.4.11.13*	*At information exchange level*
798 799 800		The information model is designed to be exchanged between participants. The information model and XML Schema provide the specificity to define an information exchange, but stops short of mandating one (see WEQ-019.4.3.7).
801		*The information model shall be:*
802	*WEQ-019.4.4.11.14*	*Readable without charge*
803 804		NAESB has agreed to make the Energy Usage Information Model included in WEQ-019.4.7and WEQ-019.4.7.1available to the public without charge.
805	*WEQ-019.4.4.11.15*	*Reusable without restriction or charge*
806 807		The use of the Energy Usage Information Model included in WEQ-019.4.7 and WEQ-019.4.7.1 for the production of derivative work products is not prohibited.
808	*WEQ-019.4.4.11.16*	*Adaptable without restriction or charge*
809 810		All NAESB standards maybe modified through the NAESB process. (Please see: http://www.naesb.org//misc/naesb_process_for_standards_dev.doc)
811	*WEQ-019.4.4.11.17*	*Usable for open source*
812 813 814		The use of the Energy Usage Information Model included in WEQ-019.4.7and WEQ-019.4.7.1.maybe distributed in any manner, however, must be made available without charge.

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WEQ-019.4.4.12 Additional Considerations

WEQ-019.4.4.12.1 *In communicating energy usage information, the Energy Usage Information Model should be used and the information outlined within the model should be available.*

The model provides a common, consensus-based, vendor-neutral model to represent usage information, to be used in exchange scenarios where it is applicable and desired by usage information providers and Customers.

WEQ-019.4.4.12.2 *The Energy Usage Information Model data set has three unique identifiers, which serve the purpose of allowing various aggregations of data sets.*

Owner (customer): This is represented by the Customer class, provided the use of the term "owner" or similar verbiage is not indicative or dispositive of any ownership or other rights under applicable law in the Model or any data.

Location: This is represented by ServiceDeliveryPoint.

Device: This is represented by MeterAsset.

WEQ-019.4.4.12.3 *The Tariff Profile component should be included in the Energy Information Usage Model.*

Recommend marking as a "Future" – TariffProfile provides the representation of the rate elements, and would expand the scope beyond our initial target schedule.

WEQ-019.4.4.12.4 *UsageSummary should include an optional cost attribute to interval and reading class.*

Recommend marking as "Future".

WEQ-019.4.4.12.5 *A known base currency should be included in the top level class associated with the MeterAsset for the Energy Usage Information Model, which would be applicable to all instances*

Recommend marking as "Future" – If performance considerations require optimization, global defaults for this and other repetitious elements should be considered.

WEQ-019.4.4.12.6 *The Energy Usage Information Model should be compliant with ISO8601.*

The current model does not define the primitive to be used to represent the dateTime, however the default xs:dateTime is ISO8601 compliant.

WEQ-019.4.4.12.7 *Optionally, both start and end of interval can be defined in order to support non-uniform interval information, which is accomplished in the Energy Information Usage Model through endTimestamp to IntervalReading.*

The endTimeStamp element is included as an optional component of IntervalReading.

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849	*WEQ-019.4.4.12.8*	*Demand based elements are maintained in the TariffProfile including common demand*
850		*and demand ratchets.*
851		The model does not currently contain the full definition of TariffProfile, but this
852		is the CIM element where thresholds associated with the rate are specified.
853	*WEQ-019.4.4.12.9*	*The Energy Information Usage Model status structure includes a named pair of*
854		*QualityOfReading and values of raw, forecast, validated, estimated, mixed, and other for*
855		*qualifying the associated data set, as an explicit representation of these name value pairs*
856		*can be processed in implementations by sending and receiving actors. The*
857		*UsageSummary class also includes such summary information.*
858		Model is specified as described.
859	*WEQ-019.4.4.12.10*	*MeterEvent should be associated with meterAsset, not MeterReading.*
860		The events are currently associated to the MeterAsset through MeterReading,
861		but could be represented in other ways if the group decides this should be
862		changed.
863	*WEQ-019.4.4.12.11*	*PQSummary as events of enumerated type are provided in the Energy Information Usage*
864		*Model to represent a simple exposure of summary information.*
865		The model exposes these events in summary form as described.
866	*WEQ-019.4.4.12.12*	*The Energy Usage Information Model should represent and take into account pollutant*
867		*energy emissions such as O2, SO2, and NOX.*
868		Detailed information about these emissions is possible through definition of a
869		ReadingType specifying the appropriate kindReading values as enumerated in
870		ReadingKind.
871	*WEQ-019.4.4.12.13*	*Energy Usage Information Model should include a top level cost summary – billStart,*
872		*billEnd, billToDate, lastPeriod, and costAdditional, so that the bill to date and bill as of*
873		*the last billing period could be conveyed through a formula:*
874		billLastPeriod = costAdditionalLastPeriod + ∑MeterReading[i].Reading.cost
875		(constrained by datetime)
876		The model represents these elements in the UsageSummary class.
877	*WEQ-019.4.4.12.14*	*The model shall use the work being produced by OASIS on common schedule*
878		*information pursuant to the SGIP PAP04 Requirements. As this work is not complete as*
879		*of this draft, the abstract definition of time intervals is the most appropriate way to*
880		*ensure consistency.*
881		TBD – Group to discuss alignment with PAP04
882	*WEQ-019.4.4.12.15*	*The model shall use the work being produced by OASIS on common price and product*
883		*definition information pursuant to the SGIP PAP03 Requirements. As this work is not*

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884 *complete as of this draft, should information related to price be included in the Seed*
885 *Specification it must be at an appropriate level of abstraction.*

886 TBD – Group to discuss alignment with PAP03

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4. SUPPORTING DOCUMENTATION

a. Description of Request:

b. Description of Recommendation:

c. Business Purpose:

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

NAESB Process for Standards Development -
http://www.naesb.org//misc/naesb_process_for_standards_dev.doc

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1. RECOMMENDED ACTION:

X	Accept as requested
	Accept as modified below
	Decline

EFFECT OF EC VOTE TO ACCEPT RECOMMENDED ACTION:

X	Change to Existing Practice
	Status Quo

2. TYPE OF DEVELOPMENT/MAINTENANCE

Per Request:		**Per Recommendation:**	
X	Initiation	X	Initiation
	Modification		Modification
	Interpretation		Interpretation
	Withdrawal		Withdrawal
X	Principle	X	Principle
X	Definition	X	Definition
X	Business Practice Standard	X	Business Practice Standard
X	Document	X	Document
X	Data Element	X	Data Element
X	Code Value	X	Code Value
	X12 Implementation Guide		X12 Implementation Guide
X	Business Process Documentation	X	Business Process Documentation

3. RECOMMENDATION

SUMMARY:

The Joint Retail Electric (REQ) and Wholesale Electric (WEQ) Quadrants' PAP 10 Smart Grid Subcommittee submit this Recommendation for 2010 Retail Annual Plan Item No. 9d and WEQ Annual Plan Item No. 6d – Business Practices and Information Models to support Priority Action Plan 10, "Standardized Energy Usage Information," based on the Tiger Team Report issued on June 22, 2010 by the NIST SGIP PAP10 Committee.

In initiating this standards development, NAESB agreed to by year-end 2010 develop an energy use information model standard defining information to be communicated between utilities, third parties and energy use customers, via customer devices and/or 3rd Party energy services providers. The basic energy usage information model standard will let energy services providers exchange detailed energy use and cost information in a consistent format on behalf of customers. Doing so will let Customers track their power use and help them manage energy consumption and cost. Without a standardized format for representing energy use data, a variety of approaches could emerge, leading to incompatibilities among energy management products and services. It is planned that the American Society of Heating, Refrigerating and AC Engineers (ASHRAE) will extend the NAESB standard to create a facilities data model providing additional energy use data elements for facility energy management including buildings.

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE

For Quadrant:	**Retail Electric and Wholesale Electric Quadrants**
Requesters:	**Smart Grid PAP 10 Subcommittee**
Request No.:	**WEQ AP Item 6(d), REQ AP Item 9(d)**
Request Title:	**Business Practices and Information Models to Support Priority Action Plan 10 – Standardized Energy Usage Information**

RECOMMENDED STANDARDS:

REQ.18 CUSTOMER ENERGY USAGE INFORMATION COMMUNICATION

EXECUTIVE SUMMARY

This section presents a summary of the Model Business Practices for Retail Customer Energy Usage Information communication. Specifically, these Model Business Practices establish a model for Energy Usage Information to be communicated in a consistent format among a variety of Entities, potentially including Distribution Companies, Energy Service Providers, meter-reading entities, and Retail Customers, via devices owned by Retail Customers and/or Energy Services Providers. Establishment of this model will let Retail Customers track their energy use and help them manage energy consumption and costs.

This document contains Model Business Practices establishing a model for communication of Retail Customer Energy Usage Information. The Model Business Practices do not require that wholesale electricity markets administered by System to adopt this model since System Operators generally are not the system of record for individual Retail Customer Energy Usage Information and load data or individual Retail Customer forecasted usage and load data. These Model Business Practices are not intended to replace applicable Governing Documents, and in the event of a conflict, the latter documents shall have precedence over these standards. Without limiting the foregoing, these Model Business Practices are only applicable to the extent the information covered by this model is collected, managed or communicated pursuant to the applicable Governing Documents.

Retail Customer Energy Usage Information communication encompasses a variety of interactions between Distribution Companies, Retail Customers and Energy Services Providers. In a business environment where best practices are voluntary, Model Business Practices such as those in this document may be applied within the context of regulatory or other market requirements and agreements.

INTRODUCTION

The North American Energy Standards Board (NAESB) is a voluntary, non-profit organization comprised of members from all aspects of the natural gas and electric industries. Within NAESB, the Retail Electric Quadrant (REQ) and the Retail Gas Quadrant (RGQ) focus on issues impacting the retail sale of energy to end-use Retail Customers. REQ / RGQ Model Business Practices are intended to provide guidance to Distribution Companies, Suppliers, and other Market Participants involved in providing competitive energy service to end-use Retail Customers. The focus of these Model Business Practices is the representation of Retail Customer Energy Usage Information. System Operators do not generally communicate with Retail Customers and are not the system of record for individual Retail Customer Energy Usage Information or individual Retail Customer load forecast.

These Model Business Practices are voluntary and do not address policy issues that are the subject of state legislation or regulatory decisions. These Model Business Practices have been adopted

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with the realization that as the industry evolves, additional and amended Model Business Practices may be necessary. Any industry participant seeking additional or amended Model Business Practices (including principles, definitions, data elements, process descriptions, and technical implementation instructions) should submit a request to the NAESB office, detailing the change, so that the appropriate process may take place to amend the Model Business Practice.

BUSINESS PROCESSES AND PRACTICES

Overview

The business processes and practices described below are not presently applicable to Wholesale Markets because Wholesale Markets do not generally communicate directly with Retail Customers and are not the system of record for individual Retail Customer Energy Usage Information or individual Retail Customer load forecast. The model and these business processes and practices are not required of System Operators. As the model and these business processes and practices evolve, System Operators may determine that use of the model or these business processes can be applied to other information. However, such use is not intended to replace or supplant applicable Governing Documents. Without limiting the foregoing, these Model Business Practices are only applicable to the extent the information covered by this model is collected, managed or communicated pursuant to the applicable tariff, market rules, operating procedures, protocols or manuals.

REQ.18.1 Principles

REQ.18.1.1 Overall Principles

REQ.18.1.1.1 These Model Business Practices provide a Retail Customer Energy Usage Information model, defining a collection of structured Energy Usage Information elements needed by Retail Customers, to allow management of their energy efficiency and costs, including environmental impacts.

REQ.18.1.1.2 The Energy Usage Information model is specified in UML, which is syntax neutral, so that it may be used within exchange protocols using a variety of specific representation syntax and exchange mechanisms, specified separately.

REQ.18.1.1.3 The recommended use of the Energy Usage Information model is in implementation specifications exposing Customer Energy Usage Information. Specifications that conform to the model shall contain semantically equivalent representations of all required and included model elements, resulting in straightforward, lossless transformations between conformant specifications.

REQ.18.1.2 General Principles

This section describes the requirements for the Energy Usage Information model defined in these Model Business Practices. It is specifically not intended to represent

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requirements for use of the Model Business Practices. Rather, it describes the potential overlapping needs of a robust model that can satisfy the many current and anticipated future needs for exchange of Energy Usage Information.

The following list of objectives represents a series of intended outcomes from the implementation of Model Business Practices defining Energy Usage Information. The goals and objectives herein do not require the regulated wholesale or retail Entity, in control of such information, to provide in the defined format or release such information, except where required under their Governing Documents and only to the Parties that are identified in the Governing Documents to receive such information. The Wholesale Market does not communicate with the individual Retail Customer, nor does the Wholesale Market forecast energy consumption for individual Retail Customers. The Wholesale Market does not use individual Retail Customer Energy Usage Information in their settlement unless specified in or supported by their Governing Documents. Statements idealizing intended outcomes do not hold the regulated Entity responsible for any actions taken or results of the actions of the receiving party.

For each requirement stated, there is an explanatory verification paragraph describing how the model in Appendix A satisfies the requirement.

REQ.18.1.2.1 General

REQ.18.1.2.1.1 Facilities shall include residences, buildings, and industrial installations

REQ.18.1.2.1.2 Usage and load information shall be readily available

REQ.18.1.2.1.3 PAP 10 is an information model concept which is transport agnostic.

REQ.18.1.2.2 Timeliness of Delivery

REQ.18.1.2.2.1 Customers shall be able to use the information defined in these standards for real-time feedback on present and projected performance

REQ.18.1.2.2.2 Premises based systems (e.g. EMS/ESI) shall be able to use the information defined in these standards for real-time feedback on present and projected performance

REQ.18.1.2.2.3 Information exchanged shall be delivered in sufficient time to affect usage ["and this is the definition of real-time and near real-time "]

REQ.18.1.2.2.4 Operations, Distribution, and Service Providers shall be able to use the information defined in these standards with the facility in near-real-time

REQ.18.1.2.2.5 Customers and premises-based systems shall be able to use the information defined in these standards to provide real-time feedback on present and projected performance

REQ.18.1.2.3 Benefits to Facilities

REQ.18.1.2.3.1 Standard load and usage information shall enable improved energy efficiency by defining a consistent way to communicate usage information.

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131	*REQ.18.1.2.3.2*	*Standard load and usage information shall enable helping [all] Customers and*
132		*operations manage their energy usage [and load]*
133	*REQ.18.1.2.3.3*	*Standard load and usage information shall enable improved [facility] energy usage by*
134		*availability of fine grained and timely information*
135	*REQ.18.1.2.3.4*	*Availability of fine grained and timely information will enable better decisions about*
136		*energy usage and conservation*
137	*REQ.18.1.2.3.5*	*Facilities will benefit from consistent usage information exchange inside the facility,*
138		*including meeting the energy efficiency goals of EISA 2007 and DOE initiatives*
139	*REQ.18.1.2.3.6*	*Standard model shall support aggregated projections that can be passed on to*
140		*operations make forecasting and management better and increase the value of a facility*
141		*to the Smart Grid*
142	*REQ.18.1.2.3.7*	*Sharing usage and load information inside a facility makes that facility more valuable to*
143		*the Smart Grid*
144	*REQ.18.1.2.3.8*	*The information exchanged shall allow integration of usage information throughout*
145		*facility decision processes*
146	**REQ.18.1.2.4**	**Benefits to Grid and Service Provider Operations**
147	*REQ.18.1.2.4.1*	*Standard load and usage information will improve forecasting and grid management by*
148		*delivering aggregated projections to operations.*
149	*REQ.18.1.2.4.2*	*Standard load and usage information will improve forecasting and grid management by*
150		*delivering aggregated projections to service providers.*
151	*REQ.18.1.2.4.3*	*Standard load and usage information will enable more responsive facilities.*
152	*REQ.18.1.2.4.4*	*Standard load and usage information will enable early deployment of devices that*
153		*deliver and understand usage information.*
154	**REQ.18.1.2.5**	**Internet-Like Future**
155	*REQ.18.1.2.5.1*	*Standard usage and load information enables innovation in novel ways to help customers*
156		*manage energy usage.*
157	*REQ.18.1.2.5.2*	*Standard usage and load information enables innovation by third party service and*
158		*software providers.*
159	**REQ.18.1.2.6**	**Improved Collaboration**
160	*REQ.18.1.2.6.1*	*The Information model shall not restrict two way flows of information.*
161	*REQ.18.1.2.6.2*	*By standardizing usage and load information exchange, devices that deliver and*
162		*understand usage and load can be deployed more quickly, contributing to achieving the*
163		*energy efficiency goals of EISA 2007 and DOE.*

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164	**REQ.18.1.2.7**	**Information Sources and Accessibility**
165 166	*REQ.18.1.2.7.1*	*Usage and load information shall be provided by utilities and aggregating service providers and may be provided by others.*
167	*REQ.18.1.2.7.2*	*Usage and load information shall be provided by devices and EMS/ESI implementations.*
168	*REQ.18.1.2.7.3*	*Usage and load information can be accessed from the meter.*
169	*REQ.18.1.2.7.4*	*Usage and load information can be accessed from the Smart Grid.*
170	**REQ.18.1.2.8**	**Interactions and Information Exchanges Supported**
171 172	*REQ.18.1.2.8.1*	*Interactions supported shall include those between Distribution [and Operations] and the industrial, commercial, and residential premises.*
173 174 175	*REQ.18.1.2.8.2*	*Standard information models and understanding of usage and load are essential to cross domain interactions between Distribution [and Operations]: and Industrial, Commercial, Residential, and PEVs.*
176 177	*REQ.18.1.2.8.3*	*Interactions supported shall include those between Distribution [and Operations] and the industrial, commercial, residential premises, and plug-in electric vehicles.*
178 179 180	*REQ.18.1.2.8.4*	*Standard information models and understanding of usage and load are essential to cross domain interactions between Service Providers: and Industrial, Commercial, Residential, and PEVs.*
181 182	*REQ.18.1.2.8.5*	*Interactions supported shall include those between Service Providers and the industrial, commercial, residential premises, and plug-in electric vehicles.*
183 184 185	*REQ.18.1.2.8.6*	*This effort shall support information standards for load curtailment, load shaping, and energy market operations, hence load and usage must be supported (see PAP09, PAP03, and PAP04).*
186	*REQ.18.1.2.8.7*	*Information exchanges shall include to, from, and within facilities.*
187	**REQ.18.1.2.9**	**Information Characteristics**
188 189	*REQ.18.1.2.9.1*	*Information model shall support exchange of both Fine Grained and summary information.*
190 191	*REQ.18.1.2.9.2*	*Fine grained means that there is disaggregated information. Disaggregated information can include for example load, subsystem, premise, and variable time interval.*
192 193	*REQ.18.1.2.9.3*	*Support for exchanging standard historical, present, and projected load information is required.*
194 195	*REQ.18.1.2.9.4*	*Energy Usage Information shall include usage, usage profile, and some component of cost (consistent with PAP03, PAP04).*
196 197	*REQ.18.1.2.9.5*	*The PAP 10 Energy Usage Information model shall allow for exchange of greater or lesser detail.*

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198	**REQ.18.1.2.10**	**Timing and Goals**
199 200	*REQ.18.1.2.10.1*	*Initial steps include making usage information more readily available by defining and standardizing usage information [delivered] through existing SG infrastructure.*
201	*REQ.18.1.2.10.2*	*Information on device and facility usage is a primary goal in the initial focus.*
202 203	*REQ.18.1.2.10.3*	*Standard load and usage information will enable early deployment of devices that deliver and understand usage information.*
204	**REQ.18.1.2.11**	**Requirements on Quality of Consensus Standard**
205		*The information model shall support:*
206	*REQ.18.1.2.11.1*	*Consistent data representation for REST & Web Services*
207 208	*REQ.18.1.2.11.2*	*Specification of transactional exchange, syntax, and required population of the information model are beyond the scope of these requirements*
209	*REQ.18.1.2.11.3*	*an extensible information model – e.g. ability to add custom extensions as needed*
210 211	*REQ.18.1.2.11.4*	*have an evolvable information model – e.g. the standards process supports future revisions*
212	*REQ.18.1.2.11.5*	*Forward compatible as we evolve*
213	*REQ.18.1.2.11.6*	*Supportive of versioning*
214	*REQ.18.1.2.11.7*	*Usable without "knowing all the details"*
215		*More flexibility for independent innovation shall be achieved through:*
216	*REQ.18.1.2.11.8*	*Focus on information exchanged*
217	*REQ.18.1.2.11.9*	*Agreed upon interfaces are maintained over time*
218	*REQ.18.1.2.11.10*	*Minimal details = maximum interoperation*
219	*REQ.18.1.2.11.11*	*Intellectual Property Rights shall be clear & clean*
220		*Results of PAP 10 shall produce:*
221	*REQ.18.1.2.11.12*	*Information model and XML schema*
222	*REQ.18.1.2.11.13*	*At information exchange level*
223		*The information model shall be:*
224	*REQ.18.1.2.11.14*	*Readable without charge*
225	*REQ.18.1.2.11.15*	*Reusable without restriction or charge*
226	*REQ.18.1.2.11.16*	*Adaptable without restriction or charge*
227	*REQ.18.1.2.11.17*	*Usable for open source*

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228	**REQ.18.1.2.12**	**Additional Considerations**
229	*REQ.18.1.2.12.1*	*In communicating energy usage information, the Energy Usage Information Model*
230		*should be used and the information outlined within the model should be available.*
231	*REQ.18.1.2.12.2*	*The Energy Usage Information Model data set has three unique identifiers, which serve*
232		*the purpose of allowing various aggregations of data sets.*
233	*REQ.18.1.2.12.3*	*The Tariff Profile component should be included in the Energy Information Usage*
234		*Model.*
235	*REQ.18.1.2.12.4*	*UsageSummary should include an optional cost attribute to interval and reading class.*
236	*REQ.18.1.2.12.5*	*A known base currency should be included in the top level class associated with the*
237		*MeterAsset for the Energy Usage Information Model, which would be applicable to all*
238		*instances.*
239	*REQ.18.1.2.12.6*	*The Energy Usage Information Model should be compliant with ISO8601.*
240	*REQ.18.1.2.12.7*	*Optionally, both start and end of interval can be defined in order to support non-uniform*
241		*interval information, which is accomplished in the Energy Information Usage Model*
242		*through endTimestamp to IntervalReading.*
243	*REQ.18.1.2.12.8*	*Demand based elements are maintained in the TariffProfile including common demand*
244		*and demand ratchets.*
245	*REQ.18.1.2.12.9*	*The Energy Information Usage Model status structure includes a named pair of*
246		*QualityOfReading and values of raw, forecast, validated, estimated, mixed, and other for*
247		*qualifying the associated data set, as an explicit representation of these name value pairs*
248		*can be processed in implementations by sending and receiving actors. The*
249		*UsageSummary class also includes such summary information.*
250	*REQ.18.1.2.12.10*	*MeterEvent should be associated with meterAsset, not MeterReading.*
251	*REQ.18.1.2.12.11*	*PQSummary as events of enumerated type are provided in the Energy Information Usage*
252		*Model to represent a simple exposure of summary information.*
253	*REQ.18.1.2.12.12*	*The Energy Usage Information Model should represent and take into account pollutant*
254		*energy emissions such as O2, SO2, and NOX.*
255	*REQ.18.1.2.12.13*	*Energy Usage Information Model should include a top level cost summary – billStart,*
256		*billEnd, billToDate, lastPeriod, and costAdditional, so that the bill to date and bill as of*
257		*the last billing period could be conveyed through a formula:*
258	*REQ.18.1.2.12.14*	*The model shall use the work being produced by OASIS on common schedule*
259		*information pursuant to the SGIP PAP04 Requirements. As this work is not complete as*
260		*of this draft, the abstract definition of time intervals is the most appropriate way to*
261		*ensure consistency.*
262	*REQ.18.1.2.12.15*	*The model shall use the work being produced by OASIS on common price and product*
263		*definition information pursuant to the SGIP PAP03 Requirements. As this work is not*
264		*complete as of this draft, should information related to price be included in the Seed*
265		*Specification it must be at an appropriate level of abstraction.*

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REQ.18.2 Energy Usage Abbreviations, Acronyms and Definition of Terms

REQ.18.2.1 Business Definitions

REQ.18.2.1.1 Applicable Regulatory Authority

The state regulatory agency or other governing body that provides oversight, policy guidance, and direction to any parties involved in the process of providing energy to Retail Customers through regulations and orders.

REQ.18.2.1.2 (Retail) Customer

Any Entity that takes gas and/or electric service for its own consumption.

REQ.18.2.1.3 Distribution Company

A regulated Entity which provides distribution services and may provide energy and/or transmission/transportation services in a given area.

REQ.18.2.1.4 Entity

A person or organization with sufficient legal standing to enter into a contract or arrangement with another such person or organization (as such legal standing may be determined by those parties) for the purpose of conducting and/or coordinating energy transactions.

REQ.18.2.1.5 Governing Documents

Documents that govern the interactions among parties, including but not limited to: regulatory documents (e.g. tariffs, rules, regulations), contractual agreements, and Distribution Company Operational Manuals.

REQ.18.2.1.6 Market Participant

A party engaged in the process of providing competitive retail energy to end-use Customers including but not limited to the Distribution Company, the Supplier, the Registration Agent, the settlement agent, and the meter reading Entity.

REQ.18.2.1.7 Model Business Practices

TBD

REQ.18.2.1.8 Supplier

Persons engaged in the competitive sale of energy to end-users.

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REQ.18.2.2 Technical Definitions

This section contains technical terms and abbreviations used in this recommendation.

REQ.18.2.2.1 Energy Management System (EMS)

An application used for controlling multiple energy-controllable devices (e.g., pool pump, Programmable Communicating Thermostat, light switches, PEV charging, etc.). This application may reside within a HAN Device (e.g. Programmable Communicating Thermostat, In-Home Display, computer, cable set-top box, other computing device, etc.). This application may also control other devices or systems in the home providing integrated automated services for the Consumer.

REQ.18.2.2.2 Energy Services Interface (ESI)

A secure interface to a premises communications network (i.e. HAN) which facilitates relevant energy applications (e.g. remote load control, demand response, monitoring and control of DER, in-premises display of energy usage, reading of energy and non-energy meters, PEV charging and roaming coordination, and integration with energy management systems, etc.), provides auditing / logging functions that record transactions to and from HAN Devices, and, often, coordination functions that enable secure transactions between the HAN Devices Commissioned and Registered on its network and Enrolled in a Service Provider program.

REQ.18.2.2.3 Energy Services Provider

An entity (e.g. Utility, retail electric provider, demand response aggregator, etc.) which provides energy services to Customers.

REQ.18.2.2.4 Energy Usage Information

TBD

REQ.18.2.2.5 Facility

TBD

REQ.18.2.2.6 Fine Grained

Characterized by abundant use of detail or thoroughness of treatment.

REQ.18.2.2.7 Operations

One of the seven domains identified in the NIST Framework and Roadmap, defined there as “The managers of the movement of electricity”. This could apply to operators of equipment within any of the other domains.

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REQ.18.2.2.8 Real-time

Refers to the ability of a component to process input at the rate it is received.

REQ.18.2.2.9 Regional Transmission Organization

TBD

REQ.18.2.2.10 Seed Specification

TBD

REQ.18.2.2.11 Smart Grid

TBD

REQ.18.2.2.12 System Operator

TBD

REQ.18.2.2.13 Wholesale Market

TBD

REQ.18.2.3 Abbreviations and Acronyms

Abbreviation / Acronym	Meaning
EUI	Energy Usage Information
UML	Unified Modeling Language
EMS	Energy Management System
ESI	Energy Services Interface
PEV	Plug-in Electric Vehicle

REQ.18.3 Energy Usage Information Model Business Practices

REQ.18.3.1 Introduction

The focus of these Model Business Practices is the representation of Energy Usage Information. As defined in [PAP10 Requirements] the Energy Usage Information includes historic, present, and future projected usage and load together with the time period(s) for that information.

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These Model Business Practices draw on actors and use cases defined by the following groups:

- Energy Information Standards Alliance (the EIS Alliance) [EIS]
- NAESB Survey and Consolidation of PAP10 Use Cases [NAESB PAP10]
- UCAIug OpenADE [ADE]
- ZigBee/Home Plug Smart Energy Profile 2.0 Market Requirements [SEP MRD]

The relevant use cases are summarized as follows:

REQ.18.4.1 The ESP and/or Distribution Company communicates historic and present Energy Usage Information and load information to the Retail Customer or Facility.[1]

REQ.18.4.2 The Retail Customer or Facility communicates future projected usage and load information to the ESP, Distribution Company, or Grid Operations.[2]

REQ.18.4.3 The ESP and/or Utility communicates their projection of usage and load to the Retail Customer or Facility.[3]

REQ.18.4.4 Devices within a Facility communicate their present and future projected usage and load to Controllers or Facility EMS for aggregation and to be a component of Facility aggregated future projected usage and load.[4]

REQ.18.4.5 Devices, business processes, EMS, ESI, and other functional units within the Facility communicate usage and load information among themselves.[5]

REQ.18.4.6 These Model Business Practices are limited to the Seed Specification which shall be usable by others to build standards and/or specification for exchange of Energy Usage Information and load information appropriate to their needs without overly constraining those uses or including information that is not required in all implementations of specifications for exchanging load and usage.

REQ.18.4 Energy Usage Information Model

The model proposed is based on the IEC TC57 Common Information Model, WG13 and WG14. New elements identified in this recommendation will be proposed to these working groups, after ratification within NAESB, as extensions to be considered for inclusion in a future release of the CIM.

[1] See e.g. EIS Alliance Use Cases v2 including UC-9, UC-11, UC-12, UC-14, UC-15, and OpenADE use case "Publication".
[2] See e.g. EIS Alliance Use Cases v2 including UC-3, UC-11, UC-14, UC-15
[3] Needs refs. This is an addition to EIS and OpenADE.
[4] See e.g. EIS Alliance Use Cases v2 including UC-1, UC-2, UC-3, UC-8, UC-9.
[5] See e.g. EIS Alliance Use Cases v2 including UC-1, UC-2, UC-3

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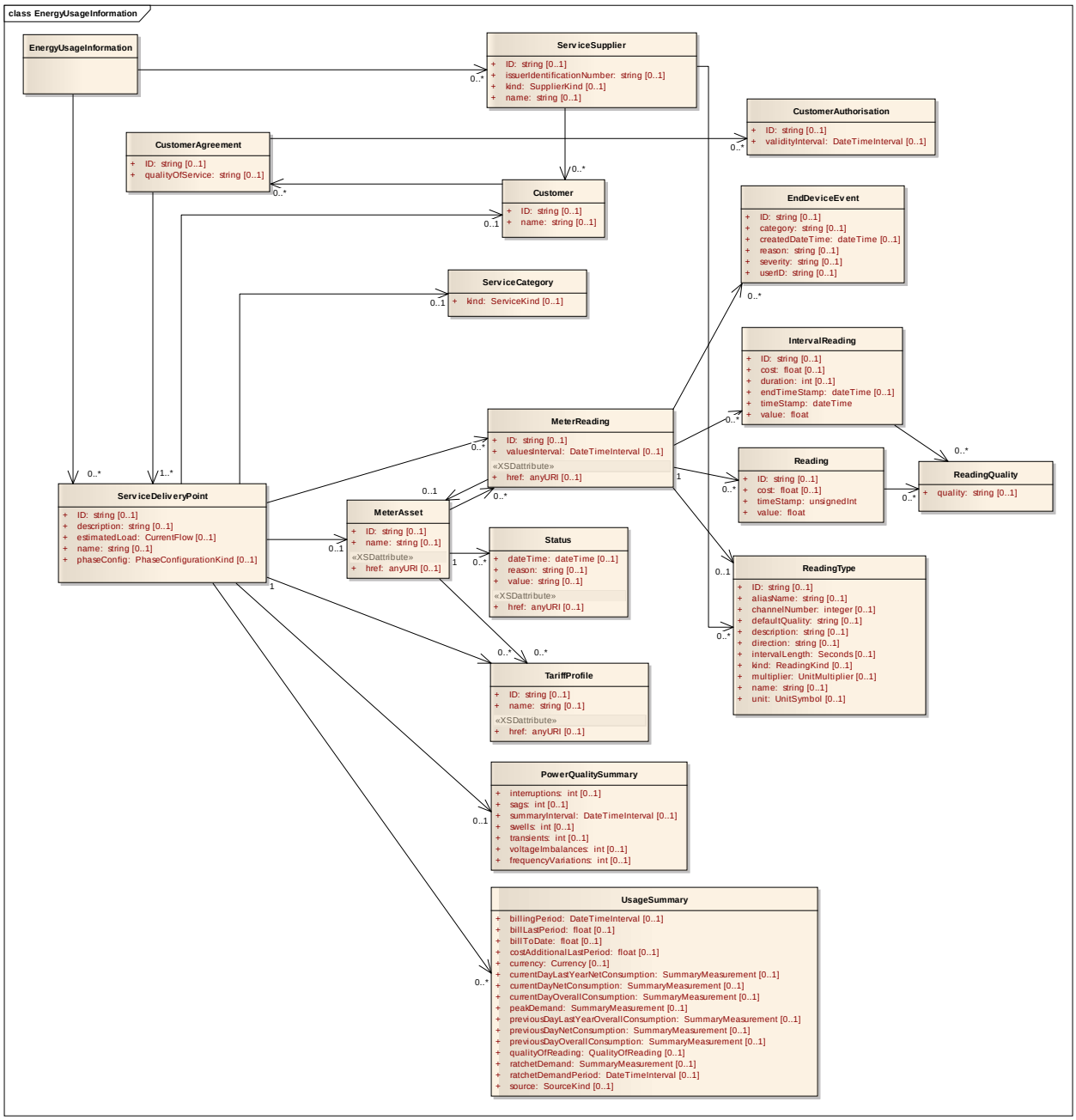

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Requesters:	**Smart Grid PAP 10 Subcommittee**
Request No.:	**WEQ AP Item 6(d), REQ AP Item 9(d)**
Request Title:	**Business Practices and Information Models to Support Priority Action Plan 10 – Standardized Energy Usage Information**

375 **REQ.18.4.1** **Energy Usage Information Model Details**

376 The following sections contain the classes and attributes defined in the model, along with
377 their descriptions. Elements tagged with <<enumeration>> define the valid values for an
378 enumerated data type.

379 **REQ.18.4.1.1** **Currency** *«enumeration»*

380 Monetary currencies. Apologies for this list not being exhaustive.

Name	Type	Description
AUD		Australian dollar
CAD		Canadian dollar
CHF		Swiss francs
CNY		Chinese yuan renminbi
DKK		Danish crown
EUR		European euro
GBP		British pound
INR		India rupees
JPY		Japanese yen
NOK		Norwegian crown
other		Another type of currency.
RUR		Russian ruble
SEK		Swedish crown
USD		US dollar

381 **REQ.18.4.1.2** **CurrentFlow**

382 Electrical current (positive flow is out of the ConductingEquipment into the
383 ConnectivityNode)

Name	Type	Description
multiplier	*UnitMultiplier*	Multiplier for 'unit'.
unit	*UnitSymbol*	Unit in symbol
value	*float*	Value in type of float

384 **REQ.18.4.1.3** **Customer**

385 Organisation receiving services from ServiceSupplier.

Name	Type	Description

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ID	*string*	Object identifier
name	*string*	Name of an attribute.

386 **REQ.18.4.1.4 CustomerAgreement**

387 Agreement between the Customer and the ServiceSupplier to pay for service at a specific
388 ServiceLocation. It records certain billing information about the type of service provided
389 at the ServiceLocation and is used during charge creation to determine the type of
390 service.

Name	Type	Description
ID	*string*	A Model Authority issues mRIDs. Given that each Model Authority has a unique id and this id is part of the mRID, then the mRID is globally unique.
qualityOfService	*string*	Quality of service provided to customer related to contracted level of power quality events

391 **REQ.18.4.1.5 DateTimeInterval**

392 Interval of date and time.

Name	Type	Description
end	*unsignedInt*	Date and time that this interval ended.
start	*unsignedInt*	Date and time that this interval started.

393 **REQ.18.4.1.6 EndDeviceEvent**

394 Event detected by a DeviceFunction associated with EndDeviceAsset.

Name	Type	Description
ID	*string*	A Model Authority issues mRIDs. Given that each Model Authority has a unique id and this id is part of the mRID, then the mRID is globally unique.
category	*string*	Category of event resulting in this activity record.
createdDateTime	*dateTime*	Date and time this activity record has been created (different from the 'status.dateTime', which is the time of a status change of the associated object, if applicable).
reason	*string*	Reason for event resulting in this activity record, typically supplied when user initiated.
severity	*string*	Severity level of event resulting in this

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		activity record.
userID	*string*	(if user initiated) ID of user who initiated this end device event.

REQ.18.4.1.7 EnergyUsageInformation

REQ.18.4.1.8 IntervalReading

Data captured at regular intervals of time. Interval data could be captured as incremental data, absolute data, or relative data. The source for the data is usually a tariff quantity or an engineering quantity. Data is typically captured in time-tagged, uniform, fixed-length intervals of 5, 10, 15, 30, or 60 minutes.
Note: Interval Data is sometimes also called "Interval Data Readings" (IDR).

Name	Type	Description
ID	*string*	Object identifier
cost	*float*	
duration	*int*	The duration of the interval, in seconds.
endTimeStamp	*dateTime*	End interval timestamp
timeStamp	*dateTime*	The start date and time of an interval reading
value	*float*	Value in type of float

REQ.18.4.1.9 MeterAsset

Physical asset that performs the metering role of the ServiceDeliveryPoint. Used for measuring consumption and detection of events.

Name	Type	Description
ID	*string*	Object identifier
name	*string*	Meter name
href	*anyURI*	Hypertext reference pointing to a URI

REQ.18.4.1.10 MeterReading

Set of values obtained from the meter.

Name	Type	Description
href	*anyURI*	Hypertext reference pointing to a URI
ID	*string*	Object identifier
valuesInterval	*DateTimeInterval*	Interval in date time (start & end)

REQ.18.4.1.11 PhaseConfigurationKind *«enumeration»*

Kind of phase configuration.
Note that there is an enum Wires::WindingConnection with values {D, Y, Z, Yn, Zn}. However, there are many more phase configurations than delta (threePhaseThreeWire) and wye (threePhaseFourWire), which are defined here.

Name	Type	Description
onePhaseThreeWire		
onePhaseTwoWire		
other		
threePhaseFourWire		
threePhaseThreeWire		
threePhaseTwoWire		
twoPhaseThreeWire		
twoPhaseTwoWire		

REQ.18.4.1.12 **PowerQualitySummary**

Name	Type	Description
interruptions	*int*	Number of interruptions
sags	*int*	Number of sags
summaryInterval	*DateTimeInterval*	Interval of summary period
swells	*int*	Number of swells
transients	*int*	Number of transients
voltageImbalances	*int*	Number of voltage imbalances
frequencyVariations	*int*	Number of frequency variations

REQ.18.4.1.13 **QualityOfReading** *«enumeration»*

Name	Type	Description
estimated		

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forecast		
mixed		
raw		
validated		
normalizedForWeather		
other		

417 **REQ.18.4.1.14 Reading**

418 Specific value measured by a meter or other asset. Each Reading is associated with a
419 specific ReadingType.

Name	Type	Description
ID	*string*	Object identifier
cost	*float*	Cost in a currency
timeStamp	*unsignedInt*	The date and time of a reading
value	*float*	Value in type of float

420 **REQ.18.4.1.15 ReadingKind** *«enumeration»*

421 Kind of reading.

Name	Type	Description
current		
currentAngle		
date		
demand		
energy		
other		
phaseAngle		
power		
powerFactor		
pressure		
time		
voltage		
voltageAngle		
volume		
carbonDioxide		

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NOx		
carbon		
SOx		
methane		
HCH		
perfluorocarbons		
sulfurHexafluoride		

REQ.18.4.1.16 ReadingQuality

Quality of a specific reading value or interval reading value. Note that more than one Quality may be applicable to a given Reading. Typically not unsed unless problems or unusual conditions occur (i.e., quality for each Reading is assumed to be 'Good' unless stated otherwise in associated ReadingQuality).

Name	Type	Description
quality	*string*	Quality, to be specified if different than 'Good'.

REQ.18.4.1.17 ReadingType

Type of data conveyed by a specific Reading.

Name	Type	Description
ID	*string*	A Model Authority issues mRIDs. Given that each Model Authority has a unique id and this id is part of the mRID, then the mRID is globally unique.
aliasName	*string*	The aliasName is free text human readable name of the object alternative to IdentifiedObject.name. It may be non unique and may not correlate to a naming hierarchy.
channelNumber	*integer*	Logical positioning of this measurement data.
defaultQuality	*string*	Characteristics of a data value conveyed by a specific Reading, which allow an application to understand how a specific Reading is to be interpreted.
description	*string*	The description is a free human readable text describing or naming the object. It may be non unique and may not correlate to a naming hierarchy.

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direction	*string*	Specifies the direction of flow of the measurement.
intervalLength	*Seconds*	(if incremental reading value) Length of increment interval. Interval duration specified at the IntervalReading overrides this default.
kind	*ReadingKind*	Kind of reading.
multiplier	*UnitMultiplier*	Multiplier for 'unit'.
name	*string*	Name of an attribute.
unit	*UnitSymbol*	Unit in symbol

REQ.18.4.1.18 **Seconds**

Time, in seconds

Name	Type	Description
multiplier	*UnitMultiplier*	Multiplier for 'unit'.
unit	*UnitSymbol*	Unit in symbol
value	*float*	Value in type of float

REQ.18.4.1.19 **ServiceDeliveryPoint**

Logical point on the network where the ownership of the service changes hands. It is one of potentially many service points within a ServiceLocation, delivering service in accordance with a CustomerAgreement. Used at the place where a meter may be installed.

Name	Type	Description
ID	*string*	A Model Authority issues mRIDs. Given that each Model Authority has a unique id and this id is part of the mRID, then the mRID is globally unique.
description	*string*	The description is a free human readable text describing or naming the object. It may be non unique and may not correlate to a naming hierarchy.
estimatedLoad	*CurrentFlow*	Estimated load.
name	*string*	Name of an attribute.
phaseConfig	*PhaseConfigurationKind*	Phase configuration kind.

REQ.18.4.1.20 **SourceKind** *«enumeration»*

Name	Type	Description

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consumer		
provider		
other		

438 **REQ.18.4.1.21** **Status**

439 Current status information relevant to an entity.

Name	Type	Description
dateTime	*dateTime*	Date and time for which status 'value' applies.
href	*anyURI*	Hypertext reference pointing to a URI
reason	*string*	Reason code or explanation for why an object went to the current status 'value'.
value	*string*	Value in string

440 **REQ.18.4.1.22** **SummaryMeasurement**

441

Name	Type	Description
multiplier	*UnitMultiplier*	
timeStamp	*dateTime*	
unit	*UnitSymbol*	
value	*float*	

442 **REQ.18.4.1.23** **TariffProfile**

443 A schedule of charges; structure associated with Tariff that allows the definition of
444 complex tarif structures such as step and time of use when used in conjunction with
445 TimeTariffInterval and Charge. Inherited 'status.value' is defined in the context of the
446 utility's business rules, for example: active, inactive, etc.

Name	Type	Description
ID	*string*	Object identifier
name	*string*	Name of an attribute.
href	*anyURI*	Hypertext reference pointing to a URI

447 **REQ.18.4.1.24** **UnitMultiplier** *«enumeration»*

448 The unit multipliers defined for the CIM

Name	Type	Description
c		Centi 10**-2

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d		Deci 10**-1
G		Giga 10**9
k		Kilo 10**3
m		Milli 10**-3
M		Mega 10**6
micro		Micro 10**-6
n		Nano 10**-9
none		
p		Pico 10**-12
T		Tera 10**12

449 **REQ.18.4.1.25** **UnitSymbol** *«enumeration»*

450 The units defiend for usage in the CIM

Name	Type	Description
A		Current in ampere
deg		Plane angle in degrees
F		Capacitance in farad
g		Mass in gram
h		Time in hours
H		Inductance in henry
Hz		Frequency in hertz
Hz-1		per Hertz
J		Energy in joule
J/s		Joule per second
kg/J		Mass per energy
m		Length in meter
m2		Area in square meters
m3		Volume in cubic meters
min		Time in minutes
N		Force in newton
none		Dimension less quantity, e.g. count, per unit, etc.
C		Relative temperature in degrees Celsius
ohm		Resistance in ohm

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Pa		Pressure in pascal (n/m2)
rad		Plane angle in radians
S		Conductance in siemens
s		Time in seconds
s-1		per second
V		Voltage in volt
V/VAr		Volt per volt ampere reactive
VA		Apparent power in volt ampere
VAh		Apparent energy in volt ampere hours
VAr		Reactive power in volt ampere reactive
VArh		Reactive energy in volt ampere reactive hours
W		Active power in watt
W/Hz		Watt per hertz
W/s		Watt per second
Wh		Real energy in what hours

451 **REQ.18.4.1.26 UsageSummary**

452

Name	Type	Description
billingPeriod	*DateTimeInterval*	
billLastPeriod	*float*	
billToDate	*float*	
costAdditionalLastPeriod	*float*	
currency	*Currency*	
currentDayLastYearNetConsumption	*SummaryMeasurement*	
currentDayNetConsumption	*SummaryMeasurement*	
currentDayOverallConsumption	*SummaryMeasurement*	
peakDemand	*SummaryMeasurement*	
previousDayLastYearOverallCon	*SummaryMeasurement*	

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sumption		
previousDayNetConsumption	*SummaryMeasurement*	
previousDayOverallConsumption	*SummaryMeasurement*	
qualityOfReading	*QualityOfReading*	
ratchetDemand	*SummaryMeasurement*	
ratchetDemandPeriod	*DateTimeInterval*	
source	*SourceKind*	

453 **REQ.18.4.1.27** **ServiceKind** *«enumeration»*

454 Kind of service.

Name	Type	Description
electricity		
gas		
water		
time		
heat		
refuse		
sewerage		
rates		
tvLicence		
internet		
other		

455 **REQ.18.4.1.28** **CustomerAuthorisation**

456 Holds an authorisation for access to specific user-private data granted to a 3rd Party
457 service provider. [OpenADE Extension - Specialization of "Agreement"]

Name	Type	Description
ID	*string*	Unique identifier for this authorisation
validityInterval	*DateTimeInterval*	Date and time interval this agreement is valid (from going into effect to termination).

458 **REQ.18.4.1.29** **ServiceCategory**

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459 Category of service provided to the customer.

Name	Type	Description
kind	*ServiceKind*	Kind of service.

460 **REQ.18.4.1.30** **SupplierKind** *«enumeration»*

461 Kind of supplier.

Name	Type	Description
utility		
retailer		
other		

462 **REQ.18.4.1.31** **ServiceSupplier**

463 Organisation that provides services to Customers.

Name	Type	Description
ID	*string*	Unique identifier of this service supplier.
issuerIdentificationNumber	*string*	Unique transaction reference prefix number issued to an entity by the International Standards Organisation for the purpose of tagging onto electronic financial transactions, as defined in ISO/IEC 7812-1 and ISO/IEC 7812-2.
kind	*SupplierKind*	Kind of supplier.
name	*string*	The human-readable name for the service supplier.

464

465 **REQ.18.4.2** **Energy Usage Information and Format and Use**

466 **REQ.18.4.2.1** The Energy Usage Information Model is developed using a UML modeling tool. The
467 Model classes, attributes, types and descriptions are included in REQ 18.4. The Model
468 is made available as XMI, which is the standard XML import/export format for UML.
469 The Model is exported as HTML, and made available as a downloadable archive
470 viewable with a web browser.

471 **REQ.18.4.3** **Energy Usage Information Model Technical Consideration**

472 *REQ.18.4.3.1* *The Energy Usage Information Model will used as the basis for Smart Grid interfaces*
473 *exchanging customer usage information between energy services providers.*

474 *REQ.18.4.3.2* *The Energy Usage Information Model will be configured to allow schemas to be*
475 *generated from it, using XML Schema Definition Language (XSD). This format defines*
476 *the valid structures and types for XML documents that may carry the model information.*

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REQ.18 4.3.3 *Implementations may decide to include only a subset of the elements defined in the model.*

REQ.18 4.3.4 *The example XSD shall conform to Naming and Design Rules best practices as described by IEC 62361-100, Naming and Design Rules for CIM Profiles to XML Schema Mapping.*

REQ.18.4.3.5 *The model and schema shall support multiple information exchange standards, including WS-I Basic Profile Web Services, RESTful Web Services, or other conventions. These specifics are left to implementers to define.*

REQ.18.4.3.6 *Though there may be elements useful for transfer of security-related information elements in the model, the specific details related to how to protect sensitive information, and how to authorize specific roles or identities to have access are not defined in this recommendation.*

REQ.18.4.3.7 *A conformant specification that refines or extends this standard shall produce information for exchange that can be transformed algorithmically (that is based on the standard alone) into a form that can be validated through the method described in REQ.18.4.3.7.*

This requirements means that various formats for representation and exchange and various subsets and potentially supersets of information content are envisioned based on this standard. The use of the schema is not to impose its direct use in message validation. Rather its use is intended to facilitate verification of conformance to the information model with respect to message content and semantics without imposing constraints on specific message payload schemas and data element representations. Some representations are anticipated to be entirely binary in nature. Others will trade off strings for integer representations of information contents. Regardless of the means, the information should be convertible to be testable as described herein.

REQ.18.4.3.8 *A specification that claims conformance to this standard shall describe and define an automatable transformation from that specification's model to and from this UML Model, including indicating listing of attributes used and not used.*

REQ.18.4.3.9 *Conformant specifications shall include the following required core model elements exchanged between data provider and data consumer in their defined messages:*

- *One or more measurement or summary containers: IntervalReading, Reading, PowerQualitySummary, UsageSummary*
- *Two of the following attributes, for each IntervalReading: timeStamp, endTimeStamp, duration*
- *value (the value of the measurement, from IntervalReading or Reading)*
- *ReadingType – ID, defaultQuality, direction, kind, multiplier, name, unit*
- *ReadingType ID for each measurement (IntervalReading or Reading) (exists in model through MeterReading)*
- *Measurement source / location – ServiceDeliveryPoint.ID or MeterAsset.ID and association to measurements or summary*

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APPENDIX A Principle Verifications Against The Energy Information Usage Model

REQ.18.4.4 Requirements validation method

A complete requirements process involves a sequential breakdown of a problem starting with the collection of high level functional user requirements. The high level requirements are broken down into ever more specific derived requirements. Eventually you get to design requirements. At the bottom of the requirements tree are simple, testable, atomic requirements. When the atomic requirements are met, the tracing to the higher level requirements allows them to be met by definition.

The PAP10 charter – the text of the abstract, description, and objectives from the NIST Framework – are high level user requirements {insert reference to NIST Framework Rev 1.0}. The requirements presented in REQ.18.6.1.1 can be considered the first level requirements breakdown of derived requirements.

This standard does not go to the final level of detailed design requirements. Instead, we performed a parallel assessment of the "derived requirements" against the evolving model, which itself was initially derived from detailed requirements identified in activities external to this standard.

Here is a sample requirement and how it is verified:

<<requirement reference>>	*Standard load and usage information shall enable improved energy efficiency by defining a consistent way to communicate usage information.*
	In the Model, There is at least one Schema, see {reference} produced as a part of this standard. With a schema at least one specific consistent way to communicate usage information is thereby specified. Thus, the presence of the agreed upon schema or equivalent satisfies this requirement.

REQ.18.4.4.1 General

REQ.18.4.4.1.1 *Facilities shall include residences, buildings, and industrial installations*

No specific limit as to the nature of the facility appears in the EUI model. Identifiers are for user, location, and device only.

REQ.18.4.4.1.2 *Usage and load information shall be readily available*

While the availability of information is the realm of the utility and its customer, this model facilitates availability by providing a single simple information model for client applications

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551	*REQ.18.4.4.1.3*	*PAP 10 is an information model concept which is transport agnostic.*
552		Because it is defined within a UML model as a series of classes and no services
553		are specifically defined in the standard for those classes, it is by this definition
554		transport agnostic.
555	**REQ.18.4.4.2**	**Timeliness of Delivery**
556	*REQ.18.4.4.2.1*	*Customers shall be able to use the information defined in these standards for real-time*
557		*feedback on present and projected performance*
558		There are no constraints on time stamps, latency or performance imposed by the
559		model, so it is possible to represent past, present, or future usage.
560	*REQ.18.4.4.2.2*	*Premises based systems (e.g. EMS/ESI) shall be able to use the information defined in*
561		*these standards for real-time feedback on present and projected performance*
562		There are no constraints on time stamps, latency or performance imposed by the
563		model, so it is possible to represent past, present, or future usage.
564	*REQ.18.4.4.2.3*	*Information exchanged shall be delivered in sufficient time to affect usage ["and this is*
565		*the definition of real-time and near real-time "]*
566		There are no constraints on time stamps, latency or performance imposed by the
567		model, so it is possible to represent past, present, or future usage.
568	*REQ.18.4.4.2.4*	*Operations, Distribution, and Service Providers shall be able to use the information*
569		*defined in these standards with the facility in near-real-time*
570		There are no constraints on time stamps, latency or performance imposed by the
571		model, so it is possible to represent past, present, or future usage.
572	*REQ.18.4.4.2.4.1*	*Customers and premises-based systems shall be able to use the information defined in*
573		*these standards to provide real-time feedback on present and projected performance*
574		There are no constraints on time stamps, latency or performance imposed by the
575		model, so it is possible to represent past, present, or future usage.
576	**REQ.18.4.4.3**	**Benefits to Facilities**
577	*REQ.18.4.4.3.1*	*Standard load and usage information shall enable improved energy efficiency by*
578		*defining a consistent way to communicate usage information.*
579		By minimizing the number of different physical representations of usage
580		information, and aligning the logical elements included in the definition of this
581		information, it will allow for the development of applications that require this
582		information to provide energy efficiency services and functionality.
583	*REQ.18.4.4.3.2*	*Standard load and usage information shall enable helping [all] Customers and*
584		*operations manage their energy usage [and load]*

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The data model standardizes load and usage information so customer usage data provider services may be developed to interface with systems that help customers and operations with energy management.

REQ.18.4.4.3.3 *Standard load and usage information shall enable improved [facility] energy usage by availability of fine grained and timely information*

The data model standard provides for measurement intervals enabling the availability of fine grained and timely load and usage information.

REQ.18.4.4.3.4 *Availability of fine grained and timely information will enable better decisions about energy usage and conservation*

The data model enables a standard approach for fine grained and timely load and usage information so customer usage data provider services can interface to systems that help customers and/or operations with energy conservation.

REQ.18.4.4.3.5 *Facilities will benefit from consistent usage information exchange inside the facility, including meeting the energy efficiency goals of EISA 2007 and DOE initiatives*

The data model provides consistent energy usage data representation so information exchanges are uniformly understood. This ensures facility energy efficiency systems using this data are acting on correct and consistent information.

REQ.18.4.4.3.6 *Standard model shall support aggregated projections that can be passed on to operations [the System Operator's] or [building management] [?] make forecasting and management better and increase the value of a facility to the Smart Grid*

Aggregated projections are supported via future timestamps in interval and other data.

REQ.18.4.4.3.7 *Sharing usage and load information inside a facility makes that facility more valuable to the Smart Grid*

The data model provides usage, load, and pricing information from which a facility manager or system may take optimization actions.

REQ.18.4.4.3.8 *The information exchanged shall allow integration of usage information throughout facility decision processes*

The data model standardizes usage information so customer usage data provider services may be developed to integrate with systems handling facility decision processes.

REQ.18.4.4.4 **RBenefits to Grid and Service Provider Operations**

REQ.18.4.4.4.1 *Standard load and usage information will improve forecasting and grid management by delivering aggregated projections to operations.*

RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE

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620 By specifying future intervals, which could be larger than measured intervals, it
621 is possible to represent aggregated projections.

622 *REQ.18.4.4.4.2* *Standard load and usage information will improve forecasting and grid management by*
623 *delivering aggregated projections to service providers.*

624 By specifying future intervals, which could be larger than measured intervals, it
625 is possible to represent aggregated projections.

626 *REQ.18.4.4.4.3* *Standard load and usage information will enable more responsive facilities.*

627 Interoperable models of load and usage information allow coordination of
628 response capability, allowing those capabilities to be utilized more efficiently.

629 *REQ.18.4.4.4.4* *Standard load and usage information will enable early deployment of devices that*
630 *deliver and understand usage information.*

631 By standardizing the information to be made available, devices and applications
632 will be able to get access to that information.

633 **REQ.18.4.4.5** **Internet-Like Future**

634 *REQ.18.4.4.5.1* *Standard usage and load information enables innovation in novel ways to help customers*
635 *manage energy usage.*

636 By standardizing on simple data sets that many providers and consumers can
637 utilize, this information can be combined with additional information to find the
638 specific way that will help customers the most.

639 *REQ.18.4.4.5.2* *Standard usage and load information enables innovation by third party service and*
640 *software providers.*

641 By standardizing on simple data sets that many providers and consumers can
642 utilize, this information can be combined with additional information to find the
643 specific way that will help customers the most.

644 **REQ.18.4.4.6** **Improved Collaboration**

645 *REQ.18.4.4.6.1* *The Information model shall not restrict two way flows of information.*

646 Customers, utilities and third parties will have access to the model in real time
647 with the appropriate usage information and customer permissions/allowances.

648 *REQ.18.4.4.6.2* *By standardizing usage and load information exchange, devices that deliver and*
649 *understand usage and load can be deployed more quickly, contributing to achieving the*
650 *energy efficiency goals of EISA 2007 and DOE.*

651 Uniformity among signals as required by the model standards will lead to
652 greater acceptance and adoption.

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653	**REQ.18.4.4.7**	**Information Sources and Accessibility**
654 655	*REQ.18.4.4.7.1*	*Usage and load information shall be provided by utilities and aggregating service providers and may be provided by others.*
656 657		With consent from the customer, utilities and aggregators will provide access to usage and load information in the provided format for model integration.
658	*REQ.18.4.4.7.2*	*Usage and load information shall be provided by devices and EMS/ESI implementations.*
659 660 661		With consent from the customer, devices and EMS/ESI implementations will provide usage and load information in the provided format for model integration.
662	*REQ.18.4.4.7.3*	*Usage and load information can be accessed from the meter.*
663 664 665		With consent from the customer and the utility, usage and load information will be provided by the meter to accredited sources for purposes of running the model.
666	*REQ.18.4.4.7.4*	*Usage and load information can be accessed from the Smart Grid.*
667 668		With consent from the customer and the utility, usage and load information will be made available by any Smart Grid services provider via the public Internet.
669	**REQ.18.4.4.8**	**Interactions and Information Exchanges Supported**
670 671	*REQ.18.4.4.8.1*	*Interactions supported shall include those between Distribution [and Operations] and the industrial, commercial, and residential premises.*
672 673		The model does not exclude/include specific actors or potential exchange points, it merely describes data and format of information.
674 675 676	*REQ.18.4.4.8.2*	*Standard information models and understanding of usage and load are essential to cross domain interactions between Distribution [and Operations]: and Industrial, Commercial, Residential, and PEVs.*
677 678 679		The standard information format does not exclude potential actors or exchange points including potential cross domain interaction including those between Distribution companies and other actors.
680 681	*REQ.18.4.4.8.3*	*Interactions supported shall include those between Distribution [and Operations] and the industrial, commercial, residential premises, and plug-in electric vehicles.*
682 683		The model does not exclude/include specific actors or potential exchange points, it merely describes data and format of information.
684 685 686	*REQ.18.4.4.8.4*	*Standard information models and understanding of usage and load are essential to cross domain interactions between Service Providers: and Industrial, Commercial, Residential, and PEVs.*

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The standard information format does not exclude potential actors or exchange points including potential cross domain interaction including those between Service Providers and other actors.

REQ.18.4.4.8.5 *Interactions supported shall include those between Service Providers and the industrial, commercial, residential premises, and plug-in electric vehicles.*

The model does not exclude/include specific actors or potential exchange points, it merely describes data and format of information therefore by not excluding these actors.

REQ.18.4.4.8.6 *This effort shall support information standards for load curtailment, load shaping, and energy market operations, hence load and usage must be supported (see PAP09, PAP03, and PAP04).*

Load and usage information are part of the model.

REQ.18.4.4.8.7 *Information exchanges shall include to, from, and within facilities.*

The model does not preclude any potential exchange points therefore the requirement is met.

REQ.18.4.4.9 **Information Characteristics**

REQ.18.4.4.9.1 *Information model shall support exchange of both Fine Grained and summary information.*

Summary information is available at the top level through PowerQualitySummary and UsageSummary components. Fine-grained information is available through the list of MeterReading measurement structures which in turn have both summary, Reading, and interval level detail, IntervalReading components. Additionally, the EUI data structures can be associated by device, location, and owner facilitating variable aggregations.

REQ.18.4.4.9.2 *Fine grained means that there is disaggregated information. Disaggregated information can include for example load, subsystem, premise, and variable time interval.*

Fine grained (disaggregated) information is described throughout the information model. From CustomerAccount, EventType, MeterAsset, ReadingKind, etc. there seems to be enough detailed data elements to support "Fine grained" information.

REQ.18.4.4.9.3 *Support for exchanging standard historical, present, and projected load information is required.*

Historical information seems to be supported by the UsageSummary attributes for billing items only. Present (meter reading) information has fine grained as well as billing attributes defined. Projected usage is supported in the

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		QualityOfReading <<enumeration>> attribute, which delineates the "estimated" and "forecast" attribute names.
	REQ.18.4.4.9.4	*Energy Usage Information shall include usage, usage profile, and some component of cost (consistent with PAP03, PAP04)*
		Energy usage information, including costs is contained in the data model. Interval data is supportive of usage profiles and PAP04.
	REQ.18.4.4.9.5	*The PAP 10 Energy Usage Information model shall allow for exchange of greater or lesser detail.*
		Summary information is available at the top level through PowerQualitySummary and UsageSummary components. Fine-grained information is available through the list of MeterReading measurement structures which in turn have both summary, Reading, and interval level detail, IntervalReading components. Additionally, the EUI data structures can be associated by device, location, and owner facilitating variable aggregations.
	REQ.18.4.4.10	**Timing and Goals**
	REQ.18.4.4.10.1	*Initial steps include making usage information more readily available by defining and standardizing usage information [delivered] through existing SG infrastructure.*
		The EUI data structures enable a diverse range of technologies to deliver usage information in a timely and protocol agnostic manner. Examples of this might be a premise ESI or through services provided by a utility or facility.
	REQ.18.4.4.10.2	*Information on device and facility usage is a primary goal in the initial focus.*
		As the EUI data structures cover summary and device level information, device and facility (aggregated) information can be delivered.
	REQ.18.4.4.10.3	*Standard load and usage information will enable early deployment of devices that deliver and understand usage information.*
		As the EUI data models are standardized, producers may deliver usage based devices with confidence in interoperability.
	REQ.18.4.4.11	**Requirements on Quality of Consensus Standard**
		The information model shall support:
	REQ.18.4.4.11.1	*Consistent data representation for REST & Web Services.*
		The Schema in section REQ.18.4.3 ensures that a consistent data representation can be achieved when a Schema is developed in a supporting standard carrying EUI in REST and Web Services.

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755 756	*REQ.18.4.4.11.2*	*Specification of transactional exchange, syntax, and required population of the information model are beyond the scope of these requirements.*
757		No transactional syntaxes or message services are defined in this standard.
758	*REQ.18.4.4.11.3*	*an extensible information model – e.g. ability to add custom extensions as needed*
759 760 761 762		This model may be extended by adding new elements (classes, attributes, and associations). Implementations must utilize conventions to ignore any elements not understood by components, to allow them to continue to operate when future extensions are added.
763 764	*REQ.18.4.4.11.4*	*have an evolvable information model – e.g. the standards process supports future revisions*
765 766		**Error! Reference source not found.** identifies how the model is evolvable. Section 0 defines how the standard version can be revised.
767	*REQ.18.4.4.11.5*	*Forward compatible as we evolve*
768 769 770 771		To maintain forward and backward compatibility, no model elements may be removed or restricted in future versions. Only additions and expansions are allowed, so that previous version representations maintain validity against future versions, and vice-versa.
772	*REQ.18.4.4.11.6*	*Supportive of versioning*
773 774 775		Versioning in the UML Model is addressed by a tagged value. The tagged value "version" is used additionally in the XML Schema export (see REQ.18.4.3) as the schema version value.
776	*REQ.18.4.4.11.7*	*Usable without "knowing all the details"*
777 778 779 780 781		Information in the model is arranged hierarchically. Greater detail can be understood the deeper into this hierarchy the reader goes. Summary information is exposed near the top of the hierarchy. These arrangements make it straightforward to accessing applications to ignore the level of detail they do not plan to use or comprehend, while getting value out of higher level information.
782		*More flexibility for independent innovation shall be achieved through:*
783	*REQ.18.4.4.11.8*	*Focus on information exchanged*
784 785		The specification of an information-only model allows the standard to focus on the information exchanged.
786	*REQ.18.4.4.11.9*	*Agreed upon interfaces are maintained over time*
787		See section 0 which describes

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788	*REQ.18.4.4.11.10*	*Minimal details = maximum interoperation*
789 790 791		The model provides a hierarchy of summary and detailed information. A balance is achieved by the definition of minimal set of details necessary to satisfy the cumulative set of use cases of the EUI and allocated to this model.
792	*REQ.18.4.4.11.11*	*Intellectual Property Rights shall be clear & clean*
793		[Need section on IPR and access to model and schema]
794		*Results of PAP 10 shall produce:*
795	*REQ.18.4.4.11.12*	*Information model and XML schema*
796 797		See sections REQ.18.4.2 and REQ.18.4.3 which describe the delivery of an information model and XML schema respectively.
798	*REQ.18.4.4.11.13*	*At information exchange level*
799 800 801		The information model is designed to be exchanged between participants. The information model and XML Schema provide the specificity to define an information exchange, but stops short of mandating one (see 0).
802		*The information model shall be:*
803	*REQ.18.4.4.11.14*	*Readable without charge*
804 805		NAESB has agreed to make the Energy Usage Information Model included in REQ.18.4 and REQ.18.4.1 available to the public without charge.
806	*REQ.18.4.4.11.15*	*Reusable without restriction or charge*
807 808		The use of the Energy Usage Information Model included in REQ.18.4 and REQ.18.4.1 for the production of derivative work products is not prohibited.
809	*REQ.18.4.4.11.16*	*Adaptable without restriction or charge*
810 811		All NAESB standards maybe modified through the NAESB process. . (Please see: http://www.naesb.org//misc/naesb_process_for_standards_dev.doc)
812	*REQ.18.4.4.11.17*	*REQ.18.1.2.13.17 Usable for open source*
813 814 815		The use of the Energy Usage Information Model included in REQ.18.4 and REQ.18.4.1.maybe distributed in any manner, however, must be made available without charge.

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REQ.18.4.4.12 Additional Considerations

REQ.18.4.4.12.1 *In communicating energy usage information, the Energy Usage Information Model should be used and the information outlined within the model should be available.*

The model provides a common, consensus-based, vendor-neutral model to represent usage information, to be used in exchange scenarios where it is applicable and desired by usage information providers and Customers.

REQ.18.4.4.12.2 *The Energy Usage Information Model data set has three unique identifiers, which serve the purpose of allowing various aggregations of data sets.*

Owner (customer): This is represented by the Customer class, provided the use of the term "owner" or similar verbiage is not indicative or dispositive of any ownership or other rights under applicable law in the Model or any data.

Location: This is represented by ServiceDeliveryPoint.

Device: This is represented by MeterAsset.

REQ.18.4.4.12.3 *The Tariff Profile component should be included in the Energy Information Usage Model.*

Recommend marking as a "Future" – TariffProfile provides the representation of the rate elements, and would expand the scope beyond our initial target schedule.

REQ.18.4.4.12.4 *UsageSummary should include an optional cost attribute to interval and reading class.*

Recommend marking as "Future".

REQ.18.4.4.12.5 *REQ.18.1.2.14.5 A known base currency should be included in the top level class associated with the MeterAsset for the Energy Usage Information Model, which would be applicable to all instances*

Recommend marking as "Future" – If performance considerations require optimization, global defaults for this and other repetitious elements should be considered.

REQ.18.4.4.12.6 *The Energy Usage Information Model should be compliant with ISO8601.*

The current model does not define the primitive to be used to represent the dateTime, however the default xs:dateTime is ISO8601 compliant.

REQ.18.4.4.12.7 *Optionally, both start and end of interval can be defined in order to support non-uniform interval information, which is accomplished in the Energy Information Usage Model through endTimestamp to IntervalReading.*

The endTimeStamp element is included as an optional component of IntervalReading.

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850	*REQ.18.4.4.12.8*	*Demand based elements are maintained in the TariffProfile including common demand*
851		*and demand ratchets.*
852		The model does not currently contain the full definition of TariffProfile, but this
853		is the CIM element where thresholds associated with the rate are specified.
854	*REQ.18.4.4.12.9*	*The Energy Information Usage Model status structure includes a named pair of*
855		*QualityOfReading and values of raw, forecast, validated, estimated, mixed, and other for*
856		*qualifying the associated data set, as an explicit representation of these name value pairs*
857		*can be processed in implementations by sending and receiving actors. The*
858		*UsageSummary class also includes such summary information.*
859		Model is specified as described.
860	*REQ.18.4.4.12.10*	*MeterEvent should be associated with meterAsset, not MeterReading.*
861		The events are currently associated to the MeterAsset through MeterReading,
862		but could be represented in other ways if the group decides this should be
863		changed.
864	*REQ.18.4.4.12.11*	*PQSummary as events of enumerated type are provided in the Energy Information Usage*
865		*Model to represent a simple exposure of summary information.*
866		The model exposes these events in summary form as described.
867	*REQ.18.4.4.12.12*	*The Energy Usage Information Model should represent and take into account pollutant*
868		*energy emissions such as O2, SO2, and NOX.*
869		Detailed information about these emissions is possible through definition of a
870		ReadingType specifying the appropriate kindReading values as enumerated in
871		ReadingKind.
872	*REQ.18.4.4.12.13*	*Energy Usage Information Model should include a top level cost summary – billStart,*
873		*billEnd, billToDate, lastPeriod, and costAdditional, so that the bill to date and bill as of*
874		*the last billing period could be conveyed through a formula:*
875		billLastPeriod = costAdditionalLastPeriod + ∑MeterReading[i].Reading.cost
876		(constrained by datetime)
877		The model represents these elements in the UsageSummary class.
878	*REQ.18.4.4.12.14*	*The model shall use the work being produced by OASIS on common schedule*
879		*information pursuant to the SGIP PAP04 Requirements. As this work is not complete as*
880		*of this draft, the abstract definition of time intervals is the most appropriate way to*
881		*ensure consistency.*
882		TBD – Group to discuss alignment with PAP04
883	*REQ.18.4.4.12.15*	*The model shall use the work being produced by OASIS on common price and product*
884		*definition information pursuant to the SGIP PAP03 Requirements. As this work is not*

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complete as of this draft, should information related to price be included in the Seed Specification it must be at an appropriate level of abstraction.

TBD – Group to discuss alignment with PAP03

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4. SUPPORTING DOCUMENTATION

a. Description of Request:

b. Description of Recommendation:

c. Business Purpose:

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

NAESB Process for Standards Development -
http://www.naesb.org//misc/naesb_process_for_standards_dev.doc

Core Model for Energy Usage Information

Note of 9 August 2010 (Minor revisions to model from 8 August)

William Cox

This note explains a simplified core model for energy usage information.

By simplifying the pattern and repetition scope, it gives a common way to describe all Historical, Present, and Future interval usage and load information, while using many of the common classes from the Straw Model.

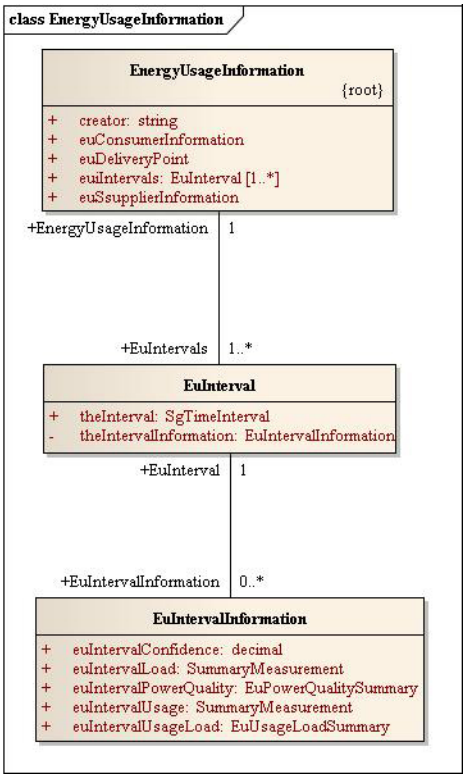
Overview

The model (excluding classes used as types, only including those in the core) addresses issues discussed in the PAP10 Subcommittee calls, including

- Adaptable to other standards and specifications
- Sufficiently abstract to support both NAESB Retail and Electric Quadrants
- More clearly applicable to NAESB Gas quadrants
- Uses PAP04 interval semantics
- Can be easily mapped to the Straw Model and others

First, we show the Core Model without definitions of all classes used, only the primary ones

:



The recurring pattern for usage information is to define the consumer and supplier information, the delivery point, and a set of intervals. The intervals match the PAP04 work (and the class uses Pap04Interval) and define an interval with additional information.

This reuses several classes from the Straw Model, and modifies several—in particular, UsageLoadSummary and PowerQualitySummary (the modified classes are EuUsageLoadSummary and EuPowerQualitySummary) because the repetition approach didn't fit with interval+data.

In terms of conformance to the Core Model, the text in the current draft says "A specification that claims conformance to this standard shall describe and define an automatable transformation from that specification's model to and from this UML Model, including indicating listing of attributes used and not used."

I believe that the Straw Model conforms to the Core Model using a straightforward mapping.

Improvements From the Core Model

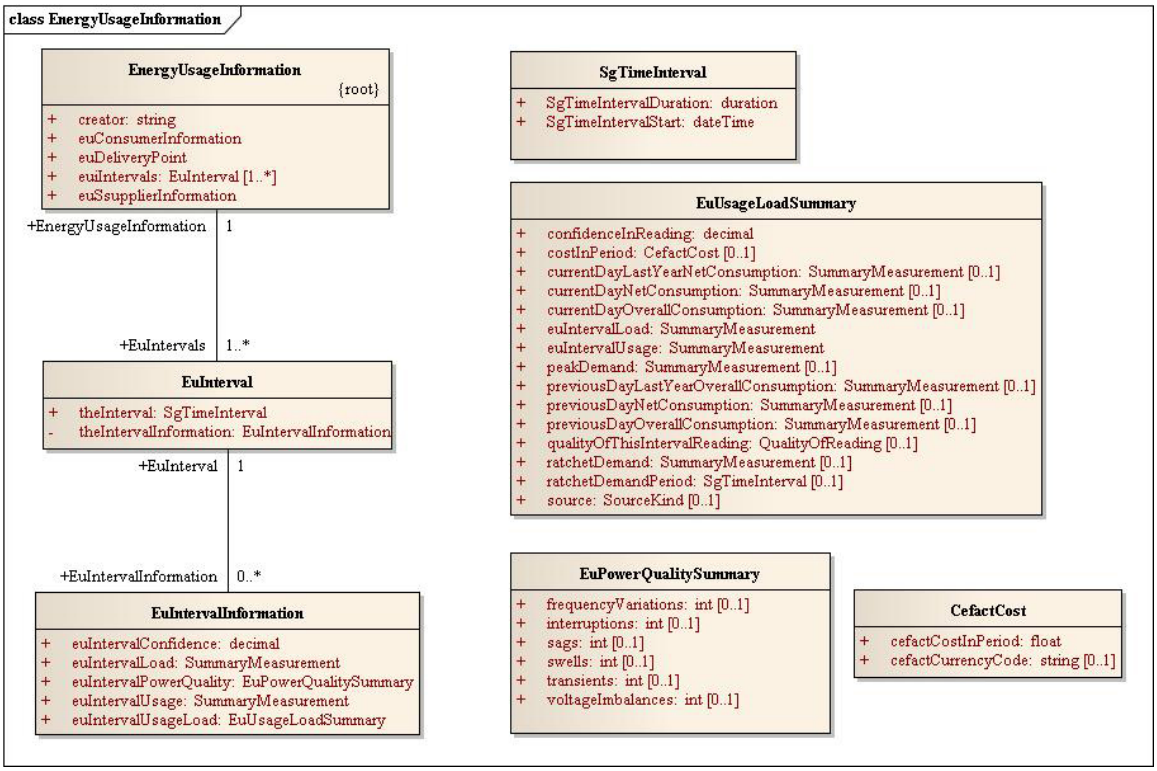
The issues raised with the WEQ are largely related to detail that is included; much of that detail is not in the Core Model. For example, the Core Model is suitable to a tariff based and to a market-based environment; as markets permeate the energy world, this will be very important.

I invite the WEQ participants to review the Core Model with their needs in mind. Some of the referenced classes are unchanged; those will be included directly in a future version of the class diagram.

The abstractions are consistent, and the center is the EnergyUsageInformation class (which can be repeated in say OpenADE), rather than both CustomerAgreement and MeterAsset. This reduces the complexity of the class structure significantly.

Model with Modified Classes

Here's the model with the modified classes added:



There are some issues to discuss on some of the attributes of the modified classes and the use of the Straw Model classes; I've fixed (e.g.) currency codes to be a full reference rather than a partial enumeration, and stripped any interval other than the current one from PowerQualitySummary. EuUsageLoadSummary is renamed from UsageSummary; the removed attributes related to previous bills can be included in a conformant specification.

The name prefix "Eu" should probably be "Eui" to avoid confusion with the European Union.

Next Steps

First, comments are welcome— wtcox@CoxSofttwareArchitects.com --on this note and the Enterprise Architect model I'm distributing with it.

Second, I suggest that we consider this as the model for the public review, either as a replacement or an alternate. We've not yet discussed the model in detail.

Finally, I request that all of the NAESB PAP10 participants examine this Core Model in the context of what we need to standardize to achieve the goals of the grid-side usage information model, and focus on gaps and inconsistencies.

R10008

North American Energy Standards Board

Request for Initiation of a NAESB Business Practice Standard, Model Business Practice or Electronic Transaction
or
Enhancement of an Existing NAESB Business Practice Standard, Model Business Practice or Electronic Transaction

Instructions:

1. **Please fill out as much of the requested information as possible. It is mandatory to provide a contact name, phone number and fax number to which questions can be directed. If you have an electronic mailing address, please make that available as well.**

2. **Attach any information you believe is related to the request. The more complete your request is, the less time is required to review it.**

3. **Once completed, send your request to:**

   Rae McQuade
   NAESB, President
   1301 Fannin, Suite 2350
   Houston, TX 77002

   Phone: 713-356-0060
   Fax: 713-356-0067

   by either mail, fax, or to NAESB's email address, naesb@naesb.org.

Once received, the request will be routed to the appropriate subcommittees for review.

Please note that submitters should provide the requests to the NAESB office in sufficient time so that the NAESB Triage Subcommittee may fully consider the request prior to taking action on it. It is preferable that the request be submitted a minimum of 3 business days prior to the Triage Subcommittee meetings. Those meeting schedules are posted on the NAESB web site at http://www.naesb.org/monthly_calendar.asp.

R10008

North American Energy Standards Board

Request for Initiation of a NAESB Business Practice Standard, Model Business Practice or Electronic Transaction
or
Enhancement of an Existing NAESB Business Practice Standard, Model Business Practice or Electronic Transaction

Date of Request: July 29, 2010

1. Submitting Entity & Address:

OpenADE Task Force
c/o UCA International Users Group
10604 Candler Falls Court
Raleigh, NC 27614

2. Contact Person, Phone #, Fax #, Electronic Mailing Address:

Name : David Mollerstuen
Title : Chair, OpenADE Task Force
Phone : 720-560-8223
Fax : 303-926-1398
E-mail : dmollerstuen@tendrilinc.com

3. Title and Description of Proposed Standard or Enhancement:

Title:

Syntax and Transport of Energy Usage Information

Description:

Standardization of the exchange of Energy Usage Information, as per the requirements outlined in the requirements collected in OpenADE 1.0 Requirements documents. This standard will facilitate the transfer of Energy Usage Information between designated parties, and will build on the "seed standard" of Energy Usage Information data model being developed by NAESB.

4. Use of Proposed Standard or Enhancement (include how the standard will be used, documentation on the description of the proposed standard, any existing documentation of the proposed standard, and required communication protocols):

The Standard may have many uses, but we anticipate that it will be initially used primarily between a Consumer's utility provider and a third party that the consumer nominates to display that energy usage information.

The OpenADE Task Force within the UCAIug's OpenSG has done extensive requirements analysis and initial service definition work in this domain, and intends to contribute their collected work to this standardization effort within NAESB.

5. Description of Any Tangible or Intangible Benefits to the Use of the Proposed Standard or Enhancement:

There are numerous existing proprietary implementations in use today between individual providers and consumers of Energy Usage Information; standardizing this interface will reduce costs, improve functionality and security, and enhance accessibility of this Energy Usage Information for the average Consumer.

6. Estimate of Incremental Specific Costs to Implement Proposed Standard or Enhancement:

Minimal cost to complete standard definition; initial implementation cost will be comparable to implementation of existing proprietary interfaces, but need only be completed once by each Provider and Consumer of Energy Usage Information.

7. Description of Any Specific Legal or Other Considerations:

N/A.

8. If This Proposed Standard or Enhancement Is Not Tested Yet, List Trading Partners Willing to Test Standard or Enhancement (Corporations and contacts):

Tendril Networks / David Mollerstuen
Southern California Edison / Steven Van Ausdall

9. If This Proposed Standard or Enhancement Is In Use, Who are the Trading Partners :

N/A.

10. Attachments (such as : further detailed proposals, transaction data descriptions, information flows, implementation guides, business process descriptions, examples of ASC ANSI X12 mapped transactions):

OpenADE Business and User Requirements v100
OpenSG OpenADE 1.0 SRS 20100209
OpenSG OpenADE SD - Common v0.96
OpenSG OpenADE SD - REST v0.92
OpenSG OpenADE SD - WS v0.8

North American Energy Standards Board
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NAESB UPDATE: VERSION 2.0 – WHOLESALE GAS QUADRANT (WGQ)
JULY 29, 2010

ACTIONS TO BE APPLIED TO WGQ VERSION 1.9 TO CREATE WGQ VERSION 2.0:

Version 1.9 was published on September 30, 2009.

2009-10:

Final Actions:

2009 Annual Plan Item 3/2009 Annual Plan Item 2(a)/R07009 – Update Model ISDA North American Gas Annex, November 2004 to correspond to the updated Base Contract for Sale and Purchase of Natural Gas, dated September 5, 2005, in accordance with NAESB WGQ Request No. R07009 as adopted by the WGQ Executive Committee on October 29, 2009 - http://naesb.org/member_login_check.asp?doc=model_isda_addendum102909.pdf *(This is a model and does not require member ratification)*

R08020 – Provide for enhanced granularity for public utilities in identifying critical operational flow orders, - Approved by the WGQ EC on February 4, 2010.
Recommendation: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_r08020.doc *(Ratified June 23, 2010)*

R09001 – Add two data elements to the Transactional Reporting – Interruptible Transportation Document (5.4.22) – Approved by the WGQ EC on February 4, 2010.
Recommendation: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_r09001.doc *(Ratified June 23, 2010)*

R09011 - Change the term Power Plant Operator to Power Plant Gas Coordinator in WEQ-011
Formal comment period ends April 29, 2010.
Recommendation: http://naesb.org/pdf4/r09011_rec.doc *(Ratified July 15, 2010)*

Recommendations:

R10004 - Change the usage of the element Ending Time from Mandatory to Business Conditional in the Nominations dataset; Change the usage of the elements Beginning Time and Ending Time from Mandatory to Business Conditional in the Pre-determined Allocation dataset and Change the usage of Beginning Time (or equivalent element for the specific document below) and Ending Time (or equivalent element for the specific document below) from Mandatory to Senders Option in the Request for Confirmation, Confirmation Response, Scheduled Quantity and Scheduled Quantity for Operator, Allocation, Shipper Imbalance, Measurement Information, Measured Volume Audit Statement, and Transportation / Sales Invoice documents. –
Recommendation: http://www.naesb.org/pdf4/wgq_r10004_rec_080210.doc - for discussion a the August 19, 2010 WGQ EC meeting.

R08028/2010 WGQ Annual Plan Item 3/2009 WGQ Annual Plan Item 4/2008 WGQ Annual Plan Item 3 – Eliminate Standards 5.4.4. (Replacement Capacity);
Formal comment period ends August 13, 2010 - http://www.naesb.org/pdf4/wgq_071410reqcom.doc)
Recommendation: http://www.naesb.org/pdf4/r08028_wgq_2010_api_3_rec_071410.doc,
Attachment 1 Offer: http://www.naesb.org/pdf4/r08028_wgq_2010_api_3_rec_071410_attach1.doc,
Attachment 2 Bid: http://www.naesb.org/pdf4/r08028_wgq_2010_api_3_rec_071410_attach2.doc,
Attachment 3 Award Download: http://www.naesb.org/pdf4/r08028_wgq_2010_api_3_rec_071410_attach3.doc,

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Attachment 4 Withdrawal Download:
http://www.naesb.org/pdf4/r08028_wgq_2010_api_3_rec_071410_attach4.doc,
Attachment 5 Business Documentation:
http://www.naesb.org/pdf4/r08028_wgq_2010_api_3_rec_071410_attach5.doc, and
Attachment 6 Principles/Standards/Interpretations as modified in redline:
http://www.naesb.org/pdf4/r08028_wgq_2010_api_3_rec_071410_attach6.doc – for WGQ EC consideration August 19, 2010

R10001 - Update the NAESB Wholesale Gas Quadrant (WGQ) Quadrant Electronic Delivery Mechanism (QEDM) Manual to add the ability to provide Informational Postings reports downloads in a CSV file format;
Formal comment period ends August 5, 2010 - http://www.naesb.org/pdf4/wgq_070610reqcom.doc).
Recommendation: http://www.naesb.org/pdf4/wgq_r10001_rec.doc – for WGQ EC consideration August 19, 2010.

R08008 - Develop customer security administration standards;
Formal comment period ends August 16, 2010 - http://www.naesb.org/pdf4/wgq_071610reqcom.doc
Recommendation: http://www.naesb.org/pdf4/r08008_rec.doc
– for WGQ EC consideration August 19, 2010

R99033/R96018/R04028 – Redesign of Operationally Available and Unsubscribed data set
Formal comment period ended June 17, 2010 - http://www.naesb.org/pdf4/wgq_051810reqcom.doc)
Recommendation: http://www.naesb.org/pdf4/r99033_r96018_r04038_rec_051710.doc,
Attachment 1: http://www.naesb.org/pdf4/r99033_r96018_r04038_rec_051710_attach1.doc, and
Attachment 2: http://www.naesb.org/pdf4/r99033_r96018_r04038_rec_051710_attach2.doc – for WGQ EC consideration August 19, 2010

R09025 – Create a new WGQ EDM standard
Formal comment period ended June 24, 2010 http://www.naesb.org/pdf4/wgq_052510reqcom.doc.
Recommendation: http://naesb.org/pdf4/r09025_rec_052510.doc – for WGQ EC consideration August 19, 2010.

2010 WGQ Annual Plan Item 5 – the NAESB WGQ EDM subcommittee reviews and updates to the NAESB WGQ technical standards per NAESB WGQ Standard No. 4.3.59.
Formal comment period ended June 24, 2010 - : http://www.naesb.org/pdf4/wgq_052510reqcom.doc
Recommendation: http://naesb.org/pdf4/wgq_2010_api_5_rec_052510.doc – for WGQ EC consideration August 19, 2010.

R09014 / 2010 WGQ Annual Plan Item 6 – add NAESB WGQ Standard to the NAESB WGQ QEDM as requested by Tennessee Valley Authority and modify NAESB WGQ Standard No. 4.3.23 per R09014 and WGQ Annual Plan Item #6
Formal comment period ended June 24, 2010 - http://www.naesb.org/pdf4/wgq_052510reqcom.doc.
Recommendation: http://naesb.org/pdf4/r09014_wgq_2010_api_6_rec_052510.doc – for WGQ EC consideration August 19, 2010.

R09021/R09022 – Change Charge Type conditionality in NAESSB WGQ Standard No. 3.1.14.1 Transportation/Sales Invoice
Formal comment period ended June 17, 2010 - http://www.naesb.org/pdf4/wgq_051810reqcom.doc).
Recommendation: http://naesb.org/pdf4/r09021_r09022_rec_051710.doc – for WGQ EC consideration August 19, 2010.

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R09006 - Add a new data element "Contract" in the following Transaction Datasets for the NAESB WGQ Version 1.8 release: NAESB WGQ Standard No. 3.4.2, Payment Remittance and NAESB WGQ Standard No. 3.4.4, Service Requester / Charge Allowance Invoice
Formal Comment period ended February 26, 2010.
Recommendation: http://naesb.org/pdf4/r09006_rec.doc

Minor Corrections:

MC10018 – Submitted by D. Davis and C. Burden, Williams Gas Pipeline for NAESB WGQ Version 2.0, NAESB WGQ Standard 2.4.3 – Allocation, NAESB WGQ Standard 2.4.4 – Shipper Imbalance and NAESB WGQ Standard 3.4.1 – Transportation/Sales Invoice: http://naesb.org/pdf4/wgq_mc10018.doc - proposed recommendation to be reviewed by WGQ IR/Technical in August 2010.

MC10022 – Version 2.0 Add code value description "Deferred Asset Surcharge" with code value "DAS" to the list of standardized code values for the following datasets and data elements: 3.4.1, 5.4.1, 5.4.2, 5.4.3, 5.4.7, 5.4.8, 5.4.18, 5.4.19, 5.4.20, 5.4.21, 5.4.22, Submitted by T. Gwilliam, Iroquois Gas Transmission System, L.P. - http://www.naesb.org/pdf4/wgq_mc10022.doc - proposed recommendation to be reviewed by WGQ IR/Technical in August 2010.

MC10024 – Version 2.0 Add additional Reduction Reason code value(s) to NAESB WGQ Standard No. 1.4.6, Submitted by R. Hogge, Dominion Transmission - http://www.naesb.org/pdf4/wgq_mc10024.doc - proposed recommendation to be reviewed by WGQ IR/Technical in August 2010.

MC10026 – Version 2.0 Addition of a Code Value for the data element "Transaction Type" to the following data element "Transaction Type" to the following Transaction Data Sets: Nomination (1.4.1), Scheduled Quantity (1.4.5), Per-determined Allocation (2.4.1), Allocation (2.4.3), Shipper Imbalance (2.4.4), and Transportation/Sales Invoice (3.4.1), Submitted by K. Brooks, Williston Basin Interstate Pipeline Company - http://www.naesb.org/pdf4/wgq_mc10026.doc - proposed recommendation to be reviewed by WGQ IR/Technical in August 2010.

MC10028 – This request proposes adding back the Code Value for the data element "Surcharge Indicator" to the following Transaction Data Sets: Offer Download (5.4.1), Bid Download (5.4.2) and Award Download (5.4.3), Submitted by M. Mahle, Transcanada - http://www.naesb.org/pdf4/wgq_mc10028.doc - to be added to the IR/Technical list of minor corrections for new code values.

MC10029 – NAESB WGQ Standards 4.3.54, Submitted by K. Brooks, Williston Basin Interstate Pipeline Company - http://www.naesb.org/pdf4/wgq_mc10029.doc - to be assigned to WGQ EDM or WGQ BPS.

MC10009 – Version 1.9 (Errata) for: NAESB WGQ Standard No.5.4.1 (Offer Download), NAESB WGQ Standard No.5.4.2 (Bid Download) and NAESB WGQ Standard No.5.4.3 (Award Download), Submitted by D. Davis, Williams Gas Pipeline - Recommendation: http://naesb.org/pdf4/wgq_mc10009_rec_040910.doc - for WGQ EC consideration *(vote due August 6, 2010).*

MC10010 – Version 1.9 (Errata) for NAESB WGQ Standard No.5.4.20 (Transactional Reporting – Capacity Release), Submitted by D. Davis, Williams Gas Pipeline - Recommendation: http://naesb.org/pdf4/wgq_mc10010_rec_040910.doc - for WGQ EC consideration *(vote due August 6, 2010).*

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MC10011 – Version 1.9 (Errata) for NAESB WGQ Standard Nos.3.4.1 (Transportation/Sales Invoice), Submitted by D. Davis, Williams Gas Pipeline - Recommendation: http://naesb.org/pdf4/wgq_mc10011_rec_040910.doc - for WGQ EC consideration *(vote due August 6, 2010).* .

MC10014 – Version 1.9 (Errata) for NAESB WGQ Standard No.5.4.18 (Bid Upload), Submitted by D. Davis/M. Stender, Co-Chairs Information Requirements/Technical Subcommittee – Recommendation: http://www.naesb.org/pdf4/wgq_mc10014_rec_032910.doc - for WGQ EC consideration *(vote due August 6, 2010).*

MC10015 – Version 1.9 (Errata) to NAESB WGQ Standard No.5.4.15 (Response to Upload of Request for Download of Posted Datasets), Submitted by D. Davis/M. Stender, Co-Chairs Information Requirements/Technical Subcommittee – Recommendation http://www.naesb.org/pdf4/wgq_mc10015_rec_042210.doc - for WGQ EC consideration *(vote due August 6, 2010).*

MC10016 – Version 1.9 (Errata) for NAESB WGQ Version 1.9 Standard No.3.4.1 (Transportation/Sales Invoice), Submitted by D. Davis/M. Stender, Co-Chairs Information Requirements/Technical Subcommittee – Recommendation http://www.naesb.org/pdf4/wgq_mc10016_rec_042210.doc - for WGQ EC consideration *(vote due August 6, 2010).*

MC10017 - Version 1.9 (Errata) to NAESB WGQ Standard No. 2.4.6 – Measurement Volume Audit Statement, Submitted by D. Davis/M. Stender, Co-Chairs Information Requirements/Technical Subcommittee – Recommendation http://www.naesb.org/pdf4/wgq_mc10017_rec_042210.doc - for WGQ EC consideration *(vote due August 6, 2010).*

MC10019 - Minor Correction Submitted by D. Davis, Williams Gas Pipeline for NAESB WGQ Version 1.9: Joint NAESB WEQ Version 002.1 Standard WEQ-014-A and WGQ Version 1.0 Standard No. 11.4.1 (Implementation Guide for Electronic Tariff Filing): http://naesb.org/pdf4/wgq_weq_mc10019.doc for WGQ EC consideration *(vote due August 6, 2010).*

MC10020 – Version 1.9 (Errata) for NAESB WGQ Capacity Release, Submitted by D. Davis/M. Stender, Co-Chairs Information Requirements/Technical Subcommittee – Recommendation: http://naesb.org/pdf4/wgq_mc10020_rec_051710.doc - for WGQ EC consideration *(vote due August 6, 2010).*

MC10021 – Version 1.9 (Errata) to NAESB WGQ Standard 5.4.22, Submitted by K. Brooks, Williston Basin Interstate Pipeline, Company – Recommendation: http://www.naesb.org/pdf4/wgq_mc10021_rec_070110.doc - for WGQ EC consideration *(vote due August 6, 2010).*

MC10023 – Version 1.9 (Errata) to the offer Download – NAESB WGQ Standard No. 5.4.1 – PID Segment and Correct the Technical Implementation of Business Process for Confirmation Response – NAESB WGQ Standard No. 1.4.4, Submitted by D. Davis/M. Stender, Co-Chairs Information Requirements/Technical Subcommittee - http://www.naesb.org/pdf4/wgq_mc10023.doc - for WGQ EC consideration *(vote due August 6, 2010).*

MC10025 – Version 1.9 (Errata) for NAESB WGQ Internet Electronic Transport (Internet ET) Manual and NAESB RXQ Internet ET Manual, Version 1.2, Submitted by C. Burden, Joint WGQ Information Requirements/Technical Subcommittee - http://www.naesb.org/pdf4/wgq_req_rgq_mc10025.doc - for WGQ EC consideration *(vote due August 6, 2010).*

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MC10027 - Errata to NAESB WGQ Version 1.9: Correct the condition for the data element Amendment Reporting in the following data sets: Transactional Reporting - Capacity Release (NAESB WGQ Standard No. 5.4.20), Transactional Reporting – Firm Transportation (NAESB WGQ Standard No. 5.4.21) and Transactional Reporting – Interruptible Transportation (NAESB WGQ Standard No. 5.4.22), Submitted by D. Davis/M. Stender, Co-Chairs Information Requirements/Technical Subcommittee - http://www.naesb.org/pdf4/wgq_mc10027.doc *(vote due August 6, 2010).*

MC10012 –Errata for NAESB WGQ Internet Electronic Transport (Internet ET) Manual, Version 1.9 and NAESB RXQ Internet ET Manual Version 1.2: http://www.naesb.org/pdf4/wgq_req_rgq_mc10012.doc - approved by the WGQ and Retail ECs on March 5, 2010 *(Effective Date June 24, 2010)*

MC10001 - Revised - Minor Correction Submitted by M. Stender, El Paso Natural Gas to NAESB standard 5.4.1, 5.4.2 and 5.4.17 version 1.9: http://www.naesb.org/pdf4/wgq_mc10001_revised011210.doc - approved by the WGQ EC on February 4, 2010. *(Effective date March 31, 2010)*

MC10002/R09019 - Minor Correction (errata to Version 1.9) to modify three and add one new Allocation Transaction Type Code Values and modify the Allocation Transaction Type Matrix accordingly in the following data set: Allocation, NAESB WGQ Standard No. 2.4.3 (Note: This recommendation corrects the actions taken for R05028 which were published in Version 1.9.): http://www.naesb.org/pdf4/wgq_mc10002.doc - approved by the WGQ EC on February 4, 2010. *(Effective date March 31, 2010)*

MC10003 - Minor Correction to Version 1.9 NAESB WGQ Standard No. 2.2.4 – Shipper Imbalance (EDI Implementation: ASC X12 Mapping Guidelines and Data Element Cross Reference): http://www.naesb.org/pdf4/wgq_mc10003.doc - approved by the WGQ EC on February 4, 2010. *(Effective date March 31, 2010)*

MC10005 - Recommendation – Submitted by C. Burden, Williams Gas Pipeline – This request proposes the correction of language for the NAESB WGQ Version 1.9 release: NAESB WGQ Standard 4.3.16: http://www.naesb.org/pdf4/wgq_mc10005.doc - approved by the WGQ EC on February 4, 2010. *(Effective date March 31, 2010)*

MC10006 Recommendation – Submitted by C. Burden, Williams Gas Pipeline – This request proposes corrections to NAESB WGQ Standards Booklet 1 of 2, NAESB WGQ QEDM Standards Manual and NAESB WGQ Capacity Release Standards Manual to correct an error in wording: http://www.naesb.org/pdf4/wgq_mc10006.doc - approved by the WGQ EC on February 4, 2010. *(Effective date March 31, 2010)*

MC10007 Recommendation – Submitted by C. Burden, Williams Gas Pipeline – This request proposes corrections to NAESB WGQ QEDM Standards Manual, Version 1.9 to correct browser and plug-in information and a spelling correction: http://www.naesb.org/pdf4/wgq_mc10007.doc - approved by the WGQ EC on February 4, 2010. *(Effective date March 31, 2010)*

MC10008 Recommendation – Submitted by D. Davis / M. Stender, Chair / Co-Chair WGQ Information Requirements / WGQ Technical Subcommittees – This request proposes corrections to NAESB WGQ Standard Nos. 3.4.1 (Transportation/Sales Invoice) and 3.4.4 (Service Requester Level Charge/Allowance Invoice, Version 1.9 to correct the code values in the Code Values Dictionaries: http://naesb.org/pdf4/wgq_mc10008.doc - approved by the WGQ EC on February 4, 2010. *(Effective date March 31, 2010)*

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MC09024 Recommendation - Submitted by M. Schmitz, Northern Natural Gas - This request proposes the addition of 1 code values for the data element "Validation Code (Detail)" in the following datasets for the NAESB WGQ Version 1.9 release: NAESB WGQ Standard 1.4.2 - Nomination Quick Response http://www.naesb.org/pdf4/wgq_mc09024_rec_011810.doc - approved by the WGQ EC on February 4, 2010. *(Effective date March 31, 2010)*

MC09033 Recommendation - Submitted by M. Schmitz, Northern Natural Gas - This request proposes the addition of 4 code values for the data element "Charge Type" in the following datasets for the NAESB WGQ Version 1.9 release: NAESB WGQ Standard 3.4.1 – Transportation / Sales Invoice: http://www.naesb.org/pdf4/wgq_mc09033_rec_011910.doc - approved by the WGQ EC on February 4, 2010. *(Effective date March 31, 2010)*

MC09032 Minor Correction to the Canadian Addendum, dated August 2, 2007 (NAESB Standard 6.3.1.CA) as submitted by K. Sappenfield, Chair, WGQ Contracts Subcommittee - http://naesb.org/pdf4/wgq_mc111209reqcom.doc - approved by the WGQ EC on October 29, 2009 *(Effective date December 14, 2009)*

TIMELINE:

- Version 2.0 is scheduled for publication no earlier than November 1, 2010 and no later than November 30, 2010.
- To back into this date – all standards should be ratified by date of publication, and EC actions should be taken one month prior, to publication, all subcommittee actions should be taken three months prior to publication.

Month - 4	Subcommittee Recommendations Completed and sent out for comment
Month - 3	EC Actions taken
Month - 2	Ratifications sent out and completes, minor corrections applied
Month - 1	Review of draft publication
Month - 0	Date of Publication.

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Items not to be included:

R09017 – Develop a new ISDA Gas Confirmation Form for use with the ISD Gas Annex based on the current Confirmation Form under the NAESB Base Contract for Sale and Purchase of Natural Gas – http://naesb.org/member_login_form.asp?doc=wgq_rat011310_r09017_rec.doc - Ratification on February 12, 2010.

Attachment (Exhibit A):
http://naesb.org/member_login_form.asp?doc=wgq_rat011310_r09017_rec_attachment.doc

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NAESB UPDATE: VERSION 002.2 – WHOLESALE ELECTRIC QUADRANT (WEQ)
JULY 29, 2010

ACTIONS TO BE APPLIED TO WEQ VERSION 002.1 TO CREATE WEQ VERSION 002.2:

Version 002.1 was published on March 11, 2009.

2009-10:

Final Actions:

2008 WEQ Annual Plan Item 5(a) – Review and develop business practice standards to support DR and DSM-EE programs – Ratified March 16, 2009 - http://naesb.org/member_login_check.asp?doc=fa_weq_2008_api5a.doc *(New WEQ-015)*

2009 WEQ Annual Plan Item 3(d) – Order 717, Standards of Conduct – Ratified June 15, 2009 - http://naesb.org/member_login_check.asp?doc=fa_weq_2009_api_3d.doc *(WEQ-001. WEQ-002, WEQ-003)*

2009 WEQ Annual Plan Item 2(a)(ii)(3) – Rollover Rights on Redirect on a Firm Basis – Ratified July 27, 2009 - http://naesb.org/member_login_check.asp?doc=fa_weq_2009_ap_2aii3.doc (*WEQ-001, WEQ-002, WEQ-003, WEQ-013)*

2009 WEQ Annual Plan Item 1(a), 3(a)(vii)/R05020 – Modifications to WEQ-004 Coordinate Interchange as approved by the WEQ EC on October 27, 2009 – Ratified December 14, 2009 - http://naesb.org/member_login_form.asp?doc=fa_weq_2009_api_1a_3avii_r05020.doc *(WEQ-001, WEQ-002, WEQ-003, WEQ-004, WEQ-013)*

Attachment: http://naesb.org/member_login_form.asp?doc=fa_weq_2009_api_1a_3avii_r05020_attach.doc

2009 WEQ Annual Plan Item 5(b) – Modify NAESB definition to address internal inconsistencies and inconsistencies with the NERC glossary – approved by the WEQ EC on February 2, 2010 – Ratified March 24, 2010 - http://naesb.org/member_login_check.asp?doc=fa_weq_2009_api5b.doc

2009 WEQ Annual Plan Items 5(a)(2), 5(i)/R08004/R09011 – Multiple Annual Plan Items affecting WEQ-011 Gas/Electric Coordination – Approved by the WEQ EC on June 11, 2010 via Notational Ballot. – Ratified July 15, 2010
Recommendation:
http://www.naesb.org/member_login_form.asp?doc=fa_weq_2009_api_5a2_5i_r08004_r09011.doc
Attachments:
http://www.naesb.org/member_login_form.asp?doc=fa_weq_2009_api_5a2_5i_r08004_r09011_attach1.doc

2009 WEQ Annual Plan Items 3(a)(ii)(1)/R07013 - Develop a Confidentiality Agreement - http://www.naesb.org/pdf4/weq_2009_api_3aii1_r07013_rec.doc - Approved by the WEQ EC on May 4, 2010 ***(No further actions needed)***

Recommendations:

2010 WEQ Annual Plan Item No. 6.a - Requirements Specifications for Common Electricity Product and Pricing Definition – for NIST PAP03 as revised by the WEQ EC on July 7, 2010.

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NAESB UPDATE: VERSION 002.2 – WHOLESALE ELECTRIC QUADRANT (WEQ)
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Recommendation:
http://www.naesb.org/member_login_form.asp?doc=weq_rat072110_weq_2010_api_6a_rec_clean.doc - Member ratification ends August 21, 2010.

2010 WEQ Annual Plan Item No. 6.b - Requirements Specifications for Common Scheduling Mechanism for Energy Transactions – for NIST PAP04 as revised by the WEQ EC on July 7, 2010.
Recommendation:
http://www.naesb.org/member_login_form.asp?doc=weq_rat072110_weq_2010_api_6b_rec_clean.doc - Member ratification ends August 21, 2010.

2010 WEQ Annual Plan Item No. 6.c - Requirements Specifications for Wholesale Standard DR Signals - for NIST PAP09 as revised by the WEQ EC on July 7, 2010.
Recommendation:
http://www.naesb.org/member_login_form.asp?doc=weq_rat072110_weq_2010_api_6c_rec_clean.doc - Member ratification ends August 21, 2010.

2009 WEQ Annual Plan Item 2(a)(i)(1-8) – Develop 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. Development is using joint standards development process with NERC. Request R050004 was expanded to include the Order No. 890 (Docket Nos. RM05-25-000 and RM05-17-000) and Order No. 890-A (Docket Nos. RM05-17-001, 002 and RM05-25-001, 002), "Preventing Undue Discrimination and Preference in Transmission Services," issued April 11, 2007). Group 3: Network Service on OASIS – Recommendation currently under development by the WEQ OASIS Subcommittee http://naesb.org/weq/weq_oasis.asp

2009 Annual Plan Item 2.a.i.1 through 2.a.i.8 and 3.a.i - Network Service on OASIS – Recommendation currently under development by the WEQ OASIS Subcommittee. Informal comment period ended July 12, 2010.

Request for Informal Comments - http://www.naesb.org/pdf4/weq_oasis062110reqcom.doc

Minor Corrections:

Minor Correction MC10019, Submitted by D. Davis, Williams Gas Pipeline for NAESB WGQ Version 1.9: Joint NAESB WEQ Version 002.1 Standard WEQ-014-A and WGQ Version 1.0 Standard No. 11.4.1 (Implementation Guide for Electronic Tariff Filing): http://naesb.org/pdf4/wgq_weq_mc10019.doc - for WEQ EC consideration August 17, 2010.

WEQ-001 Minor Correction to be applied to Version 002.2, Submitted by M. Goldberg, ISO New England Inc.: http://www.naesb.org/pdf4/weq_ec081710w1.doc - for WEQ EC consideration August 17, 2010.

Minor Correction for WEQ-001 to be applied to versions 002.1 and 002.2 submitted by JT Wood, Southern Company and approved by the WEQ Executive Committee on October 27, 2009. - http://naesb.org/pdf4/weq_mc111209_reqcom.doc Comment period ends November 30, 2009 *(Effective date December 14, 2009)*

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NAESB UPDATE: VERSION 002.2 – WHOLESALE ELECTRIC QUADRANT (WEQ)
JULY 29, 2010

TIMELINE:

- Version 002.2 is scheduled for publication end of third quarter 2010.
- To back into this date – all standards should be ratified by date of publication, and EC actions should be taken one month prior, to publication, all subcommittee actions should be taken three months prior to publication.

Month - 4	Subcommittee Recommendations Completed and sent out for comment
Month - 3	EC Actions taken
Month - 2	Ratifications sent out and completes, minor corrections applied
Month - 1	Review of draft publication
Month - 0	Date of Publication.

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NAESB UPDATE: VERSION 1.3 – RETAIL ELECTRIC AND RETAIL GAS QUADRANT (REQ/RGQ)
JULY 29, 2010

ACTIONS TO BE APPLIED TO RETAIL VERSION 1.2 TO CREATE RETAIL VERSION 1.3:

Version 1.2 was published on December 31, 2009.

2009-10:

Final Actions:

None to date

Recommendations:

2009 Retail Annual Plan Item 1/R05016 – Develop Technical Electronic Implementation Standards and Data Dictionaries (*Book 9: Customer Billing and Payment Notification via Uniform Electronic Transaction*) – approved by the Retail ECs on February 3, 2010.

Recommendation – Part A with Revised Attachments - http://www.naesb.org/pdf4/retail_2009_api1_r05016_rev_rec.doc

Revised Attachment 1 – Data Dictionaries - http://www.naesb.org/pdf4/retail_2009_api1_r05016_rev_rec_attach1.doc

Revised Attachment 2 – X12 Technical Implementation Guidelines - http://www.naesb.org/pdf4/retail_2009_api1_r05016_rev_rec_attach2.doc

2010 REQ Annual Plan Item No. 9.a - Requirements Specifications for Common Electricity Product and Pricing Definition – for NIST PAP03 as approved by the REQ EC on June 16, 2010.
Recommendation: http://www.naesb.org/member_login_form.asp?doc=req_rat063010_req_2010_api_9a_rec.doc - member ratification ends July 30, 2010.

2010 REQ Annual Plan Item No. 9.b - Requirements Specifications for Common Scheduling Mechanism for Energy Transactions – for NIST PAP04 as approved by the REQ EC on June 16, 2010.
Recommendation: http://www.naesb.org/member_login_form.asp?doc=req_rat063010_req_2010_api_9b_rec.doc - member ratification ends July 30, 2010.

2010 REQ Annual Plan Item No. 9.c - Requirements Specifications for Retail Standard DR Signals - for NIST PAP09 as approved by the REQ EC on June 16, 2010.
Recommendation: http://www.naesb.org/member_login_form.asp?doc=req_rat063010_req_2010_api_9c_rec.doc - member ratification ends July 30, 2010.

Retail 2009 Annual Plan Item 10a and 10c - Service Request, Disconnection and Reconnection in the Registration Agent Model – revised by the Retail Executive Committees on 05/05/2010 – formal comment period ended May 7, 2010.

Recommendation - http://naesb.org/pdf4/retail_2009_ap_10a_10c_rec.doc - for EC consideration August 18, 2010.

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NAESB UPDATE: VERSION 1.3 – RETAIL ELECTRIC AND RETAIL GAS QUADRANT (REQ/RGQ)
JULY 29, 2010

Recommendation 2010 Retail Annual Plan Item No. 4 - Billing and Payments - formal comment period ended July 15, 2010.

Recommendation: http://naesb.org/pdf4/retail_2010_ap4_rec.doc and

Attachment: http://naesb.org/pdf4/retail_2010_ap4_rec_attachment.ppt (Models) - for Retail EC consideration August 18, 2010.

Minor Corrections:

MC10025 - Version 1.9 (Errata) for NAESB WGQ Internet Electronic Transport (Internet ET) Manual and NAESB RXQ Internet ET Manual, Version 1.2, Submitted by C. Burden, Joint WGQ Information Requirements/Technical Subcommittee http://www.naesb.org/pdf4/wgq_req_rgq_mc10025.doc - for Retail EC consideration August 18, 2010.

MC10012 –Errata for NAESB WGQ Internet Electronic Transport (Internet ET) Manual, Version 1.9 and NAESB RXQ Internet ET Manual Version 1.2: http://www.naesb.org/pdf4/wgq_req_rgq_mc10012.doc - approved by the WGQ and Retail ECs on March 5, 2010 *(Effective Date June 24, 2010)*

TIMELINE:

- Version 1.3 is scheduled for publication in 2011.
- To back into this date – all standards should be ratified by date of publication, and EC actions should be taken one month prior, to publication, all subcommittee actions should be taken three months prior to publication.

Month - 4	Subcommittee Recommendations Completed and sent out for comment
Month - 3	EC Actions taken
Month - 2	Ratifications sent out and completes, minor corrections applied
Month - 1	Review of draft publication
Month - 0	Date of Publication.

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July 31, 2010
Via email and posting

TO:	**NAESB Executive Committee (EC) Members, posting for interested parties**
FROM:	NAESB Office
cc:	EC Alternates, Submitters, Subcommittee Chairs of Subcommittees noted in text below
RE:	NAESB Triage Actions Taken for R10003 and R10004

Dear Triage Subcommittee and EC members,

Tow requests were sent out for review and determination of disposition on April 30, 2010, all provided below as hyperlinks. There were no requests for conference cal for discussion, and there were no comments received. The requests were triaged as follows:

For R10003, submitted by Dale Davis and Christopher Burden on behalf of Williams Gas Pipeline:

> This request is (1) found within scope; (2) to be assigned to the Wholesale Gas Quadrant (WGQ); and (3) because it is a request for the addition of two new data elements "Discount Begin Date" and "Discount End Date" in the Transactional Reporting – Capacity Release Data Set (NAESB WGQ Standard No. 5.4.20) and Transactional Reporting – Firm Transportation Data Set (NAESB WGQ Standard No. 5.4.21) with a proposed usage of SO – Sender's Option, the request should be assigned to the WGQ Business Practices Subcommittee (BPS). 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 WGQ BPS.

For R10004, submitted by Mike Schisler on behalf of Natural Gas Pipeline of America:

> This request is (1) found within scope; (2) to be assigned to the Wholesale Gas Quadrant (WGQ); and (3) because it is a request for the modification of usage of Beginning Time (or equivalent element for the specific document provided in the request) and Ending Time (or equivalent element for the specific document provided in the request) from Mandatory to Senders Option in the Request for Confirmation, Confirmation Response, Scheduled Quantity and Scheduled Quantity for Operator, Allocation, Shipper Imbalance, Measurement Information, Measured Volume Audit Statement, and Transportation / Sales Invoice documents., the request should be assigned to the WGQ Business Practices Subcommittee (BPS). While there was nothing in the request indicating that it should be assigned a high priority, leadership has asked that it be processed as high priority to ensure that it is included in the upcoming WGQ Version 2.0 publication. As such, the request should be processed with a high priority.

If you have any questions on a specific request, please contact the requestor directly -- their email addresses are provided above. The noted dispositions for the requests and the requests themselves were forwarded to the Triage Subcommittee and the EC members on April 28. There were no dissenting comments received. As such, the requests are considered in scope and assigned to the indicated subcommittees for development. Please note that this communication serves as notice to the subcommittee chairs of the subcommittees to which the requests are assigned.

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August 2, 2010
Via email and posting

TO:	**NAESB Executive Committee (EC) Members, posting for interested parties**
FROM:	NAESB Office
cc:	EC Alternates, Submitters, Subcommittee Chairs of Subcommittees noted in text below
RE:	NAESB Triage Actions Pending for R10005 R10007, R10008

Dear Triage Subcommittee and EC members,

We have three requests[1] to triage – R10005, R10007, R10008 -- provided below as hyperlinks. The NAESB office recommends the following actions:

For R10005, submitted by Paul Love on behalf of Natural Gas Pipeline Company of America:

> This request is (1) found within scope; (2) to be assigned to the Wholesale Gas Quadrant (WGQ); and (3) because it is a request for the modification of Standard No. 5.3.26 to eliminate possible disputes over consequences associated with Bid Basis not selected by the Releasing Shipper, the request should be assigned to the WGQ Business Practices Subcommittee (BPS). 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 WGQ BPS.

For R10007, submitted by Mike Stender on behalf of Tennessee Gas Pipeline:

> This request is (1) found within scope; (2) to be assigned to the Wholesale Gas Quadrant (WGQ); and (3) because it is a request to describe the existing ability to specify multiple indexed rates for an offer, bid and award in the Technical Implementation of Business Process and in P01 loop specifications, the request should be jointly assigned to the WGQ Information Requirements and Technical Subcommittees (IR/Tech). 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 WGQ IR/Tech.

For R10008, submitted by David Mollersteun of Tendril Networks on behalf of the OpenADE Task Force:

> This request is (1) found within scope; (2) to be assigned to the Wholesale Electric and Retail Electric Quadrants (WEQ, REQ); and (3) because it is a request to reflect the OpenADE specifications as NAESB standards extending the work efforts underway for business practices for PAP 10, the request should be processed by the NAESB WEQ/REQ Smart Grid Subcommittee for PAP 10. . 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/REQ Smart Grid Subcommittee for PAP 10.

If you have any questions on a specific request, please contact the requestor directly -- their email addresses are provided as links with the requests. 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. Comments may certainly be provided and will be posted on the Triage Subcommittee page of the NAESB web site. If no concerns are raised, then on August 16, the dispositions as noted above will be considered approved.

[1] Request No. R10006 was determined to be processed as a minor correction as it addresses the addition of a Reduction Reason code value to NAESB WGQ Standard No. 1.4.6. It has been assigned number MC10024 and to be addressed jointly by the WGQ Information Requirements/Technical Subcommittees.

North American Energy Standards Board
Retail Gas Quadrant
Retail Electric Quadrant
Model Business Practices ~~Standards~~

~~Model Business Practices and Models Relating To~~Overview of Model Business Practices, Retail Procedures, and Master List of Defined Terms

~~Master List of Defined Terms~~
~~Market Participant Interactions~~
~~Creditworthiness~~
~~Billing and Payments~~
~~Distribution Company – Supplier Disputes~~
~~Quadrant-Specific Electronic Delivery Mechanism~~
~~Contracts~~
~~Internet Electronic Transport~~
~~Customer Information~~
~~Customer Billing and Payment Notification via Uniform Electronic Transactions~~
~~Customer Enrollment, Drop, and Account Information Change~~
~~Customer Enrollment, Drop, and Account Information Change Using a Registration Agent~~
~~Customer Inquiries~~
~~Measurement & Verification (M&V) of Demand Response Programs~~
~~Service Request, Disconnection and Reconnection in the Registration Agent Model~~
~~Smart Grid PAP 03~~
~~Smart Grid PAP 04~~
~~Smart Grid PAP 09~~
~~Smart Grid PAP 10~~
~~Measurement & Verification (M&V) of Energy Efficiency Programs~~

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The NAESB Retail Gas Quadrant ("RGQ") and Retail Electric Quadrant ("REQ") Model Business Practices related to defined terms, Market Participant Interactions, Creditworthiness, Billing and Payments, Quadrant-Specific Electronic Delivery Mechanisms, Distribution Company – Supplier Disputes, Contracts, and Internet Electronic Transport, Customer Information, Customer Billing and Payment Notification via Uniform Electronic Transactions, Customer Enrollment, Drop and Account Information Change, Customer Enrollment, Drop, Account Information Change Using a Registration Agent, Customer Inquiries and Measurement and Verification (M&V) of Demand Response Programs and any amendments or errata thereto, are protected by NAESB's federal copyright 2005-2009. NAESB hereby grants the authorized users who are NAESB members in good standing permission to reproduce material therein for internal reference and use and not for use by any unauthorized third parties. Reproduction in any other form, or for any other purpose, is forbidden without express permission of NAESB. Copies are available for purchase from NAESB. This non-exclusive limited license is non-transferable and may be revoked without notice upon violation of the terms contained herein or any applicable law or regulation. Each user grants NAESB the right to audit its use to assure compliance with these terms.

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RXQ.0.I. EXECUTIVE SUMMARY

This section presents three main topics. First, an overview of the Model Business Practices is presented. Specifically, an identification of the topics covered in the following Books that make up the group of Model Business Practices for the Retail Electric and Retail Gas Quadrants, an explanation of what is covered in each Book, and how the Model Business Practices are numbered.

Second, a description of the Retail Electric and Retail Gas Quadrant procedures for creating or modifying Model Business Practices is described.

Third, this Book conatins the Master List of Defined Terms which are those Terms that have specific definitions and have been ratified by the NAESB membership in the various Books that make up the group of Model Business Practices for the Retail Electric and Retail Gas Quadrants.

The programs and practices described in the Model Business Practices emcompass a variety of interactions between Distribution Companies, Customers and other Market Participants. In a business environment where best practices are voluntary, Model Business Practices such as those in ~~this document~~the following Books may be applied within the context of regulatory or other market requirements and agreements.

RXQ.0.II. Introduction

The North American Energy Standards Board (NAESB) is a voluntary, non-profit organization comprised of members from all aspects of the natural gas and electric industries. Within NAESB, the Retail Electric Quadrant (REQ) and the Retail Gas Quadrant (RGQ) focus on issues impacting the retail sale of energy to end-use Customers. REQ / RGQ Model Business Practices are intended to provide guidance to Distribution Companies, Suppliers, and other Market Participants involved in providing competitive energy service to end-use Customers.

These Model Business Practices are voluntary and do not address policy issues that are the subject of state legislation or regulatory decisions. These Model Business Practices describe a process to be followed after a policy decision has been made. The business rules described in the following Books are identified as Model Business Practices rather than Standards to differentiate them from mandatory requirements. The Retail Electric and Retail Gas Quadrants' procedures are different from the Wholesale Electric and Gas Quadrants. After Wholesale Electric and Gas Standards are ratified, they are filed with the Federal Energy Regulatory Commission (FERC) which will isue a Notice of Proposed Rulemaking and subsequently decide to make the Standards mandatory for jurisdictional parties. The Model Business Practices ratified by the Retail Electric and Gas Quadrants are submitted to the National Association of Reguatory Commissions (NARUC) for information only.

These Model Business Practrices have been adopted with the realization that as the industry evolves, additional and amended Model Business Practices may be necessary. Any industry participant seeking additional or amended Model Business Practices (including principles, definitions, data elements, process descriptions, and technical implementation instructions) should submit a request to the NAESB office, detailing the change, so that the appropriate process may take place to amend the Model Business Practice. (A more detailed explanation is in Section IV of this Book).

RXQ.0.III. Overview of Model Business Practices

RXQ.0.III.A. Book Numbering and Content

RXQ.0.III.A.1 The Model Business Practices for a specific topic are grouped into "Books" with a separate Book for each topic

RXQ.0.III.A.2 All Books begin with the Prefix "RXQ" where there is a single Book for both Retail Electric (REQ) and Retail Gas (RGQ) Quadrant Model Business Practices. Where the Book contains only Model Business Practices for a single Quadrant, the Prefix for the Book is either "REQ" or "RGQ".

RXQ.0.III.A.3 Book numbers begin with "0" (i.e. this Book). The Books developed are:

0 Overview of Model Business Practices, Retail Procedures, and Master List of Defined Terms
1 Market Participant Interactions
2 Creditworthiness
3 Billing and Payments
4 Distribution Company – Supplier Disputes
5 Quadrant-Specific Electronic Delivery Mechanism
6 Contracts
7 Internet Electronic Transport
8 Customer Information
9 Customer Billing and Payment Notification via Uniform Electronic Transactions
10 Customer Enrollment, Drop, and Account Information Change
11 Customer Enrollment, Drop, and Account Information Change Using a Registration Agent
12 Customer Inquiries
13 Meaurement & Verification (M&V) of Demand Response Programs
14 Service Request, Disconnection and Reconnection in the Registration Agent Model
15 Smart Grid PAP 03
16 Smart Grid PAP 04
17 Smart Grid PAP 09
18 Smart Grid PAP 10
19 Measurement & Verification (M&V) of Energy Efficiency Programs

RXQ.0.III.A.4 Each Book (with the exception of Book 0) contains four major sections. These sections are:

Executive Summary
Version Notes
Introduction (Note that much of the Introduction is standard language)
Business Processes and Practices *(see Model Business Practices Numbering below)*

RXQ.0.III.B Model Business Practices Numbering

RXQ.0.III.B.1 The model business practices follow a numbering convention which is q.x.y.z.a, where:

q RXQ Applicable to both Retail Electric Quadrant and Retail Gas Quadrant
REQ Applicable only to Retail Electric Quadrant
RGQ Applicable only to Retail Gas Quadrant

x Book Number (see above)

y 1 for Principles
2 for Definitions
A – Business Definitions
B – Technical Definitions
3 for Model Business Practices
4 for Models
5 for Related Model Business Practices
6 for Technical Implementation

z Functional Grouping

a Sequentially assigned number. Sub-topics use additional numbers separated by "."

Example:
RXQ.1.3.2 Dual Billing
RXQ.1.3.2.2 The Customer should make two separate payments; one to the Distribution Company and one to the Supplier.

RXQ.0.III.B.2 Where an identifiable difference exists between Retail Electric Quadrant and Retail Gas Quadrant processes, a Model Business Practice for each will be listed with the prefix REQ and RGQ, but with the same x.y.z.a designation.

RXQ.0.III.B.3 If a new Model Business Practice is added, the Model Business Practice numbers are not re-established. The new Model Business Practice is added at the end of the numbering. If necessary for clarity, the new Model Business Practice may be added in the logical position, but indented with a letter suffix (e.g. "a", "b", etc.).

RXQ.0.III.B.4 If an Model Business Practice, Principle, or Definition is removed/deleted, the old number will not be re-used. It will remain in the Model Business Practices with "Reserved" following it.

RXQ.0.III.B.5 In general, business users should focus on RXQ.x.3 and RXQ.x.4 with references back to RXQ.x.2. Likewise, technical users should focus on RXQ.x.6 and any additional sections following.

RXQ.0.III.C Overview

RXQ.0.III C.1 This section may contain background information, introduction to the architectural principles behind the use of the processes, statements on the scope of what is included in the Model Business Practies and what is not. The inclusion of this description is optional.

RXQ.0.III.D Principles

RXQ.0.III.D.1 Principles are high-level guiding principles and are numbered for reference purposes only. Principles provide context and intent.

RXQ.0.III.E Definitions

RXQ.0.III.E.1 Business Definitions

RXQ.0.III.E.1.1 This section contains those terms that are related to business rules and used in common with Model Business Practices for other topics

RXQ.0.III.E.2 Techincal Definitions

RXQ.0.III.E.2.1 This section contains those terms specifically related to technical implementation and are used only within this topic. Technical definitions are not included in the Master List of Defined Terms in Book RXQ.0. The number of the definition has the suffix "t".

Example: RXQ.3.2.1t Added Flat/Bypass Missing or Abundance of Consumption

~~Terms used:~~
~~**MBP** Model Business Practice~~
~~**NAESB** North American Energy Standards Board~~
~~**RGQ** Retail Gas Quadrant~~
~~**REQ** Retail Electric Quadrant~~

RXQ.0.III.E.3 Book RXQ.0 contains the Master List of Defined Terms, or Master Glossary

RXQ.0.III.E.4 Definitions for those terms that are used in the Model Business Practices are repeated in each Book. If a Defined Term is only used in the definition of another term, it is not repeated in the Book. Only those definitions for terms used in the Model Business Practices in the Book are repeated.

RXQ.0.III.E.5 Definitions are numbered, but listed in Book RXQ.0 and in subsequent Books in alphabetical order. Definition numbers are assigned sequentially (i.e. not revised each time a new term is added), but only for reference purposes.

RXQ.0.III.E.6 Only Defined Terms and the word at the beginning of a sentence are capitalized in the Model Business Practices. Titles of Sections are also capitalized

RXQ.0.III.E.7 In hyphenated Defined Terms, only the first word is capitalized. The second word is lower case.

RXQ.0.III.F General Rules for Writing Model Business Practices

RXQ.0.III.F.1 The Model Business Practice should use the word "should" rather than "shall", "may", or "will". This indicates that the Model Business Practice is optional rather than mandatory.

RXQ.0.III.F.2 Information should be "sent" rather than "forwarded", "submitted", or "provided".

RXQ.0.III.F.3 When information is sent to a party, the words "via Uniform Electronic Transaction" should follow the name of the transaction or information and before the name of the party receiving the information.

RXQ.0.III.F.4 Development of Model Business Practices should begin with developing Process Flows, which subsequently become Models to insure that the total process is accounted for, and no gaps exist. Following this, then Model Business Practice language should be developed matching the Process Flow. It may be necessary to cycled back and forth between the Process Flow and the Model Business Practices to insure that the process is complete.

RXQ.0.III.F.5 The final Process Flow (Model) should include the Model Business Practice number in each step of the process.

RXQ.0.IV. Retail Electric and Retail Gas Procedures

RXQ.0.IV.1 NAESB is focused on proposing, considering, and adopting voluntary standards and model business practices that will have a significant and lasting impact on all aspects of the natural gas and electricity marketplaces. As a result of the Model Business Practices NAESB adopts, it is expected that the industry will operate more efficiently and effectively, benefiting both the industry and its customers. At the same time, it must be acknowledged that NAESB Model Business Practices may constitute a change in the way parties do business, with an accompanying effect on the use and allocation of resources.

RXQ.0.IV.2 NAESB's policy is to move at a deliberate pace, consistent with its annual plan(s), thus permitting those affected by its Model Business Practices, especially those

Model Business Practices adopted as regulations by regulatory bodies, to assimilate them as part of their business practices. To this end, NAESB will carefully consider whether proposed Model Business Practices are both timely and necessary. In particular, it will try to avoid adopting and implementing new Model Business Practices, however beneficial, before the industry is able to reasonably make use of them.

RXQ.0.IV.3 The Model Business Practice development process is governed by the Annual Plan, and items can be included in the Plan or modified only with Board of Directors approval. The Plan typically reflects requests from NAESB members, government agencies, and other interested parties . In approving the Annual Plan, the Board considers the availability of resources, including the NAESB budget and staff and the availability of industry volunteers. New requests received throughout the year are either considered part of the existing Annual Plan or as new items that require Board approval. The Retail Annual Plan can be accessed from the NAESB web site at:

http://www.naesb.org/annual_plan.asp

RXQ.0.IV.4 The Model Business Practice development process begins with an Annual Plan item or a triaged and approved request. Triage is a process used by each quadrant of the Executive Committee to determine whether a request is within scope, which quadrant(s) it applies to, which subcommittee(s) it should be referred to, and what priority it should be assigned. Triage is carried out by Executive Committee members appointed by the Executive Committee Chair. Triage recommendations are submitted to the en banc Executive Committee and require Executive Committee approval, and may also require Board approval if there are scope questions or if a modification of the Annual Plan is required.

RXQ.0.IV.5 Once the triage process is completed, the subcommittees—more than one are normally involved in Model Business Practice recommendations—review the request, compare it to existing Model Business Practices, and prepare recommendations that may take the form of new or modified Model Business Practices. Participation in subcommittees is open to any interested party regardless of membership status. All subcommittee participants may vote; voting is balanced by segment and quadrant. All votes are public. Coments may be provided along with the votes and those comments will become part of the record.

RXQ.0.IV.5.1 If Model Business Practices (business rules) are required, then the request or Annual Plan item is assigned to the Business Practices Subcommittee, or a specially designated subcommittee.

RXQ.0.IV.5.2 If a term is identified which requires a definition, it is sent to the Glossary Subcommittee along with a suggested definition. The Glosaary Subcommittee will finalize the definition including insuring consistency and avoidance with other existing definitions. Once voted out of Subcommittee, the term and final definition is returned to the Business Practces Subcommittee, or other Subcommittee to be included in the appropriate Book.

RXQ.0.IV.5.3 Upon completion of development of the Model Business Practices (business rules) andupon being voted out of Subcommittee, the Model Business Practies are sent to the Information Requiremenst

Subcommittee to identify the daya elements which are required in the Uniform Electrinic Transactions.

RXQ.0.IV.5.4 When the Information Requirements Subcommittee votes out of Subcommittee the required data elements, they are sent to the Technical Electronic Implementation Subcommittee for completion of technical imlementation development.

RXQ.0.IV.5.5 At any time the Information Requirements Subcommittee or the Technical Electronic Implementation Subcommittee discovers a gap in the Model Business Practices, a notice should be sent to the Business Practices Subcommittee, or other Subcommittee, for resolution.

RXQ.0.IV.5.6 Upon completion of technical implementation, the Technical Electronic Implementation Subcommittee should present their work product to the Business Practices Subcommitteeto insure that the intent of the Model Business Practices has been achieved.

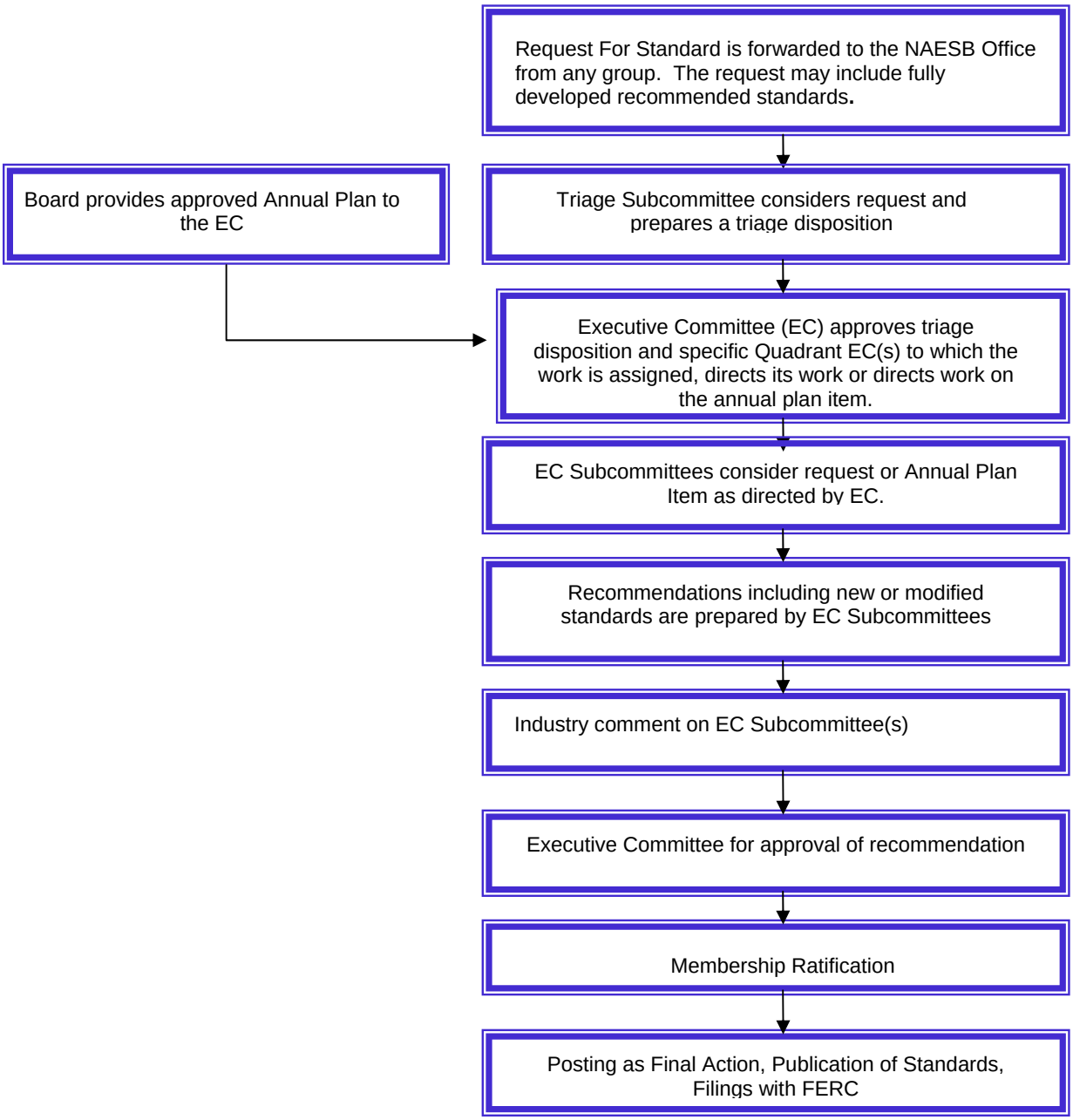
RXQ.0.IV.6 Once the subcommittee(s) completes its work, the recommendation is voted out of the subcommittee through a balanced subcommittee vote. When the recommendation is voted out of the subcommittee(s), it is made available for a thirty-day industry comment period. The recommendation and comments are then forwarded to the assigned quadrant(s) Executive Committee, which considers the recommendation, makes any changes it deems necessary, and takes a vote. A recommendation must receive an affirmative vote of at least 67 percent from each applicable quadrant and 40 percent from each of the fully populated segments of the applicable quadrant(s).

RXQ.0.IV.7 After passage by the Executive Committee, the recommendation must be ratified by the NAESB members. An affirmative vote of 67 percent of the members of the applicable quadrant(s) is required for ratification. After ratification, Model Business Practices and modifications are considered final actions and will be published in the next version of NAESB Model Business Practices. Depending on the Model Business Practices developed, the final actions may be forwarded to the regulatory community or they may stay as final actions without forwarding to the regulatory community until a full version is published.

RXQ.0.IV.8 The certificate, bylaws and NAESB Operating Procedures can be accessed from the NAESB web site (http://www.naesb.org/pdf/naesb_certificate_112108.pdf– certificate, http://www.naesb.org/pdf/naesbbylaws.pdf – bylaws, http://www.naesb.org/pdf/operating_procedures.pdf - operating procedures)

These documents provide much more detail on the standard and Model Business Practice development procedures followed by NAESB. A Process Flow of the development procedure follows:

North American Energy Standards Board
~~Standards~~ Model Business Practice
Development Process Flow Chart



RXQ.0.IV.9 Flexibility: NAESB recognizes that flexibility is necessary as Model Business Practices are developed to address regional concerns or to incorporate variances to accommodate operational or structural differences. There is a high threshold for incorporating such variances in a Model Business Practice; the subcommittee(s) in drafting the Model Business Practice, the Executive Committee in approving the subcommittee recommendation, and the membership in approving the Model Business Practices must all agree that such variance is necessary. Nonetheless, NAESB procedures are well suited to take into account operational, structural and regional differences.

RXQ.0.IV.10 Transparency: All NAESB meetings are open for attendance and participation by any interested party, with the exception of executive sessions of the Board or Managing Committee for purposes of discussing personnel, compensation or legal issues. Meeting announcements and agendas are posted in advance to permit the widest possible participation. Conference-calling capability is available for all meetings and web casting is available for most. Those intending to attend a meeting in person or by telephone are asked to notify NAESB by a specific date to permit adequate meeting planning.

Transcripts are made of all Board of Directors and Executive Committee meetings, and may also be made of other meetings that are expected to be controversial. Transcripts are maintained in the NAESB office and are provided to regulatory agencies for their internal use. All other interested parties can purchase transcripts from the relevant transcription service.

RXQ.0.IV.11 All of NAESB's final actions are copyrighted. It would be an infringement of the copyright to publically disclose the final Model Business Practices.

RXQ.0.V. MASTER LIST OF DEFINED BUSINESS TERMS

The terms and definitions listed below are those terms and definitions that have been ratified and published in the following Books. A Working Glossary also exists which includes all definitions approved and voted out of the Glossary Subcommittee. The Working Glossary can be found at the top of the Glossary Subcommittee web page.

RXQ.0.2.94 **Account Information Change**: The process by which Market Participants notify each other of modifications to Customer account data.

RXQ.0.2.117 **Account Information Change Confirmation**: The Uniform Electronic Transaction used to notify the Market Participant that their Account Information Change Request has been accepted.

RXQ.0.2.118 **Account Information Change Effective Date**: The date on which a change in Customer account data becomes effective.

RXQ.0.2.119 **Account Information Change Rejection**: The Uniform Electronic Transaction used to notify the Market Participant that their Account Information Change Request has been denied.

RXQ.0.2.120 **Account Information Change Request**: The Uniform Electronic Transaction used to initiate an Account Information Change.

REQ.0.2.145 **Adjustment Window**: The period of time prior to a Demand Response Event used for calculating a Baseline Adjustment.

REQ.0.2.146 **Advance Notification(s)**: One or more communications to Demand Resources of an impending Demand Response Event in advance of the actual event.

NOTE: THE REMAINDER OF THE DEFINED TERMS ARE NOT INCLUDED

RXQ.0.VI. MASTER TABLE OF CONTENTS FOR RXQ.1 THROUGH RXQ.13

Market Participant Interactions MBPs (RXQ.1)

Table of Contents

Executive Summary _____ Pages 4-5
Introduction _____ Page 5
Business Processes and Practices
RXQ.1 – Overview _____ Page 6
RXQ.1.1 – Principles_____ Page 6
RXQ.1.2 – Definitions _____ Pages 6-8
RXQ.1.2.A – Business Definitions
RXQ.1.3 – Model Business Practices _____ Pages 9-13
RXQ.1.3.1 – Governing Documents
RXQ.1.3.2 – Regulatory Documents
RXQ.1.3.3 – Contractual Agreements
RXQ.1.3.4 – Distribution Company Operational Manuals
RXQ.1.3.5 – Performance Standards
RXQ.1.3.6 – Supplier Certification
RXQ.1.4 – Models_____ Page 13
RXQ.1 Version Notes _____ Pages 14-15

Creditworthiness MBPs (RXQ.2)

Table of Contents

Executive Summary _____ Page 5
Introduction _____ Page 6

Business Process and Practices
RXQ.2 – Overview _____ Page 7
RXQ.2.1 – Principles_____ Page 7
RXQ.2.2 – Definitions _____ Pages 7-9
RXQ.2.2.A – Business Definitions
RXQ.2.3 – Model Business Practices _____ Pages 10-16
RXQ.2.3.1 – Overall
RXQ.2.3.2 – Determination of Risk Exposure
RXQ.2.3.3 – Determination of Initial Credit Limit
RXQ.2.3.4 – Reconsideration of Determination
of Credit Limit
RXQ.2.3.5 – Disqualification/Remedies
RXQ.2.3.6 – Security Instruments
RXQ.2.3.7 – Calling on Security
RXQ.2.3.8 – Confidentiality

NOTE: THE REMAINDER OF THE TABLE OF CONTENTS ARE NOT INCLUDED

RXQ.0.VII. VERSION NOTES

Version 1.0 NAESB REQ and RGQ Model Business Practices were published on September 27, 2005. The model business practices reflect REQ and RGQ Executive Committee Action on October 8, 2003, December 10, 2003, May 5, 2004, May 28, 2004, August 25, 2004, November 17, 2004, March 4, 2005, and August 24, 2004, and REQ and RGQ member ratification on November 24, 2003, March 1, 2004, June 28, 2004, October 7, 2004, December 30, 2004, May 13, 2005, August 30, 2005 and September 26, 2005.

Revised to include the minor corrections adopted by the Retail Executive Committees on May 10, 2006; Errata effective date: 07/14/2006.

Revised to include the minor correction adopted by the Retail Executive Committees on January 4, 2008; Errata effective date: 01/29/2008.

Version 1.1 June 30, 2009

The following table shows a summary of requests and minor corrections resulting in additions or modifications to the NAESB REQ and RGQ Principles, Definitions, Model Business Practices, and Appendices through June 15, 2009.

Version 1.2 December 31, 2009

The following table shows a summary of requests and minor corrections resulting in additions or modifications to the NAESB REQ and RGQ Principles, Definitions, Model Business Practices, Models, Related Model Business Practices, Technical Implementation and Appendices through November 16, 2009.

RXQ.0.VII.A. VERSION CROSS REFERENCE

NAESB PROCESS AND PROCEDURES

To create, modify or delete NAESB Standards (including models and schemas):

The foregoing process has been followed by the wholesale gas quadrant since 1994 and has been used to develop more than six hundred standards that have been incorporated by reference into federal regulations. The standards that apply to electronic delivery mechanisms have been endorsed by several state regulatory bodies and have also been adopted by the automotive, insurance, and health care industries. Similarly, the wholesale electric quadrant has used this procedure since 2001 and has more than a thousand standards that have been ncorporated into federal regulations. Ther etail gas and retail electric quadants have also followed this process since 2001 and have several hundred standards that have been approved and forwarded to NARUC. State commissions have reviewewd the work products for applicability in their states.

Coordination with NERC

For business practice standards development for the WEQ, if it is determined by NERC and NAESB Executive Management that joint development is needed by NERC and NAESB, the NERC-NAESB Coordination Joint Development Process is implemented. This process requires that the appropriate NAESB Subcommittee and NERC Standards Drafting Team work together to develop reliability standards and business practices.

To apply minor corrections to NAESB Standards (including models and schemas):
Procedures for Minor Corrections as excerpted from the NAESB Operating Procedures

D. Minor Clarifications and Corrections to Standards

Minor clarifications and corrections to existing standards include: (a) clarifications or corrections made by a regulatory agency to standards that are of a jurisdictional nature, or by the American National Standards Institute or its successor; (b) clarifications or corrections to the format, appearance, or descriptions of standards in standards documentation; (c) clarifications or corrections to add code values to tables; and (d) clarifications and corrections that do not materially change a standard.

Any request for a minor clarification or correction to an existing standard should be submitted in writing to the executive director. This request shall include a description of the minor clarification or correction and the reason the clarification or correction should be implemented.

1. Processing of Requests

The president shall promptly notify the EC and any appropriate subcommittee(s) of the receipt of the request. The members of the applicable quadrant's EC shall promptly determine whether the request meets the definition of a minor clarification or correction. Through the decision of the vice chair of the applicable quadrant, this determination may be delegated to one of the quadrant's subcommittees, with the concurrence of the subcommittee chair, in which case the subcommittee shall make a prompt decision.

If the request is determined to meet the definition of minor clarification or correction, the applicable quadrant's EC, with input from any subcommittee(s) to which the request has been forwarded, shall act on the request within one month of its receipt. A meeting to discuss the request is not required; the decision may be made by notational vote. A simple majority of the votes received shall determine the outcome. The members of the applicable quadrant's EC shall be given at least three working days to consider and vote on the request.

2. Public Notice

The results of the vote on the request for a minor clarification or correction shall be posted on the NAESB website and the members of the applicable quadrant shall be notified of the request by e-mail. If the request has been approved by the applicable quadrant's EC, the notification shall include a brief description of the request, the contact name and number of the requester so that further information can be obtained, and the proposed effective date of the clarification or correction. The proposed effective date of the minor clarification or correction shall normally be one month from the date of the public notice.

Any interested party shall have an opportunity to comment on the request, and the comments shall be posted on the NAESB website. The comment period is two weeks.

3. Final Disposition of Approved Requests

If no comments are received on an approved request, the standard shall be clarified or corrected as specified in the approved request on the effective date proposed. If comments are received, they shall be forwarded to the members of the applicable quadrant's EC for consideration. Each comment requires a public written response from the applicable quadrant's EC. The applicable quadrant's EC shall determine whether changes are necessary as a result of the comments.

Members of the applicable quadrant's EC shall be given three working days to consider the comments and determine the outcome, which shall be decided by a simple majority of the votes received. A meeting to discuss the request is not required; the decision may be made by notational vote. The standard shall be clarified or corrected in accordance with the outcome of the vote, effective with the completion of voting, and notice thereof shall be posted on the NAESB website.

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NORTH AMERICAN ENERGY STANDARDS BOARD
2010 ANNUAL PLAN for the RETAIL GAS and ELECTRIC QUADRANTS
As Approved by the NAESB Board of Directors on June 24, 2010 With Changes Proposed by Leadership

	Item Number & Description[1]	Completion[2]	Assignment[34]
1.	Develop Technical Electronic Implementation Standards and Data Dictionaries – Book 10: Customer Enrollment, Drop and Account Information Change		
	a.. For the Distribution Company Registration Model Registration Agent Model Status: Not Started	4th Q, 2010	TEIS
2.	Develop NAESB Certification checklist criteria for Retail Quadrants to be used in the NAESB Certification Program. The certification checklist may address test scripts, a checklist of items to be tested, data connectivity for test scripts and EDM testing. Status: Not Started. Dependent upon publication of Version 2.0 at a minimum, but more dependent upon completion of Customer Choice efforts, expected 1st Q 2011 at the earliest.	2011	Ad Hoc EC Certification Group
3.	**Review and develop business practices standards to Demand Response, Demand Side Management and Energy Efficiency Programs** 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. The wholesale and retail demand response work groups and the Smart Grid Standards Subcommittees should actively and timely communicate and coordinate work products to ensure consistency between the three work groups. Each work group should take into account the work products developed by the other.		
	a. Develop glossary for business practice standards Status: Ongoing	Ongoing	Joint WEQ/REQ DSM Subcommittee
	b. Develop business practice standards used to measure and verify reductions in energy and demand from energy efficiency in wholesale and retail markets.[5] This includes developing business practice standards to measure and verify energy reductions that are made to comply with a Renewable Portfolio Standard that included energy efficiency or a stand-alone Energy Efficiency Portfolio Standard. Status: Underway	4th Q, 2010	Joint WEQ/REQ DSM-EE Subcommittee
	c. Support the second phase of retail development of model business practice standards for demand response programs Status: Underway	3rd Q, 2010	REQ Section of the Joint WEQ/REQ DSM Subcommittee
	d. Create common interfaces and data structures necessary for enrolling DR sites into a DR program (Request No. R10002) Status: ~~Not Started~~Underway	4th Q, 2010	Joint WEQ/REQ DSM Subcommittee with coordination with Smart Grid Standards Task Force and REQ BPS
4.	Billing and Payments		
	a. Develop Process Flows to be included as models in Book 3 – Billing and Payments Status: Completed	2nd Q, 2010	BPS
	b. If the development of Process Flows indicate a gap in the model business practices, then develop new model business practices to address the gap.	2nd Q, 2010	BPS

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	Item Number & Description[1]	Completion[2]	Assignment[34]
	Status: Completed		
5.	Model Business Practices User Guide Add a new section to Book 0 to describe what Books have been developed, how the Books are laid out, and revised the title of the Book to reflect the additions Status: Underway	3rd Q, 2010	BPS
6.	Additional Registration Agent Processes		
	a. Review all existing Model Business Practices to determine if the Customer Information process is already covered, and if necessary develop any new Model Business Practices required Status: Completed	1st Q, 2010	BPS
	b. Review all existing Model Business Practices to determine if the disconnection and reconnection process is already covered, and if necessary develop any new Model Business Practices required. Status: Completed		
	i. Create MBPs for disconnection/reconnection initiated by the supplier Status: Completed	4th Q, 2009	BPS
	ii. Create MBPs for disconnection/reconnection initiated by the distribution company Status: Completed	4th Q, 2009	BPS
	c. Review all existing Model Business Practices to determine if there are other Registration Agent Model processes not covered, and develop a prioritized list of those processes, if any. Status: Underway	3rd Q, 2010	BPS
	d. Develop Model Business Practices and Process Flows for those Registration Agent Model processes on the prioritized list developed in (c) above, if any. Status: Underway	4th Q, 2010	BPS
	e. Develop Technical Electronic Implementation Standards and Data Dictionaries to support Model Business Practices of Book 14 – Service Requests, Disconnections and Reconnections in the registration Agent Model Status: Underway	4th Q, 2010	IR/TEIS
	f. Develop Technical Electronic Implementation Standards and Data Dictionaries to support any Model Business Practices developed in (d) above Status: Underway	4th Q, 2010	IR/TEIS
7.	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. Status: Not Started	4th Q, 2010	BPS

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	Item Number & Description[1]	Completion[2]	Assignment[34]
8.	Supplier Marketing Practices Develop Model Business Practices providing for a "Consumer Disclosure Statement" to be presented to residential and small commercial customers describing the Supplier's service offering and related contract provisions. This statement would also identify how certain Supplier-Customer interactions are conducted. Amongst the topics to be considered for inclusion on the statement would be the following: • the most important terms of the Supplier agreement, such as the contract's term and termination fee provisions; • training and identification of Supplier marketing representatives; • protocols for Supplier in-person and telephone contacts with customers; • added measures for protecting non-English speaking customers; and • Processes for handling customer complaints and resolving disputes arising from Supplier marketing activities. Status: Underway	4th Q, 2010	BPS
9.	Develop Smart Grid Wholesale and Retail Electric Standards		
	a. Develop Requirements and Use Cases for PAP 03 – Pricing Model		
	i. Phase 1 Status: Completed	1st Q, 2010	Joint WEQ/REQ SGS Subcommittee
	ii. Phase 2 Status: Underway	3rd Q, 2010	Joint WEQ/REQ SGS Subcommittee
	b. Develop Requirements and Use Cases for PAP 04 – Scheduling Model		
	i. Phase 1 Status: Completed	1st Q, 2010	Joint WEQ/REQ SGS Subcommittee
	ii. Phase 2 Status: Underway	3rd Q, 2010	Joint WEQ/REQ SGS Subcommittee
	c. Develop Requirements and Use Cases for PAP 09 – Demand Response/Distributed Energy Resources		
	i. Phase 1 Status: Completed	1st Q, 2010	REQ Section of the Joint WEQ/REQ SGS Subcommittee
	ii. Phase 2 Status: Underway	3rd Q, 2010	REQ Section of the Joint WEQ/REQ SGS Subcommittee

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Item Number & Description[1]	Completion[2]	Assignment[34]
d. Develop standards to support PAP 10 – Standards Energy Usage Information		
i. Act as a convener (develop and implement a plan to expedite harmonized standards development and adoption within the associated standards bodies) and develop business practice standards as needed and assigned to NAESB for PAP 10 – Standard Energy Usage Information Status: Completed	2nd Q, 2010	Joint WEQ/REQ PAP 10 SGS Subcommittee
ii. Develop Information Model and related business practices Status: Underway	4th Q, 2010	Joint WEQ/REQ PAP 10 SGS Subcommittee
10. Reserved (Items added under action item 6)		
11. Master List of Defined Terms: Review the definitions of all Defined Terms in Book 0 – Master List of Defined Terms, including other Ratified Terms not yet published, and revise the definitions of all Defined Terms not specifically related solely to the competitive marketplace to broaden their applicability to conform to NAESB's expanded scope. Status: Underway	3rd Q, 2010	Glossary

Program of Standards Maintenance & Fully Staffed Standards Work[6]

Business Practice Requests	Ongoing	Assigned by the EC
Information Requirements and Technical Mapping of Business Practices	Ongoing	Assigned by the EC
Ongoing Interpretations for Clarifying Language Ambiguities	Ongoing	Assigned by the EC
Ongoing Maintenance of Code Values and Other Technical Matters	Ongoing	Assigned by the EC
Ongoing Development and Maintenance of Definitions	Ongoing	Glossary

Provisional Activities

Joint Effort:

Modify TPA as necessary.

Review security standards as may be deemed necessary, such as Public Key Infrastructure (PKI).

Review existing body of model business practices for consistency and develop or modify model business practices as needed.

Review and update the technical implementation of Book 3 – Billing and Payment

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.

Develop business practice standards for cap and trade programs for green house gas (See action item 6h).

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Item Number & Description[1]	Completion[2]	Assignment[34]

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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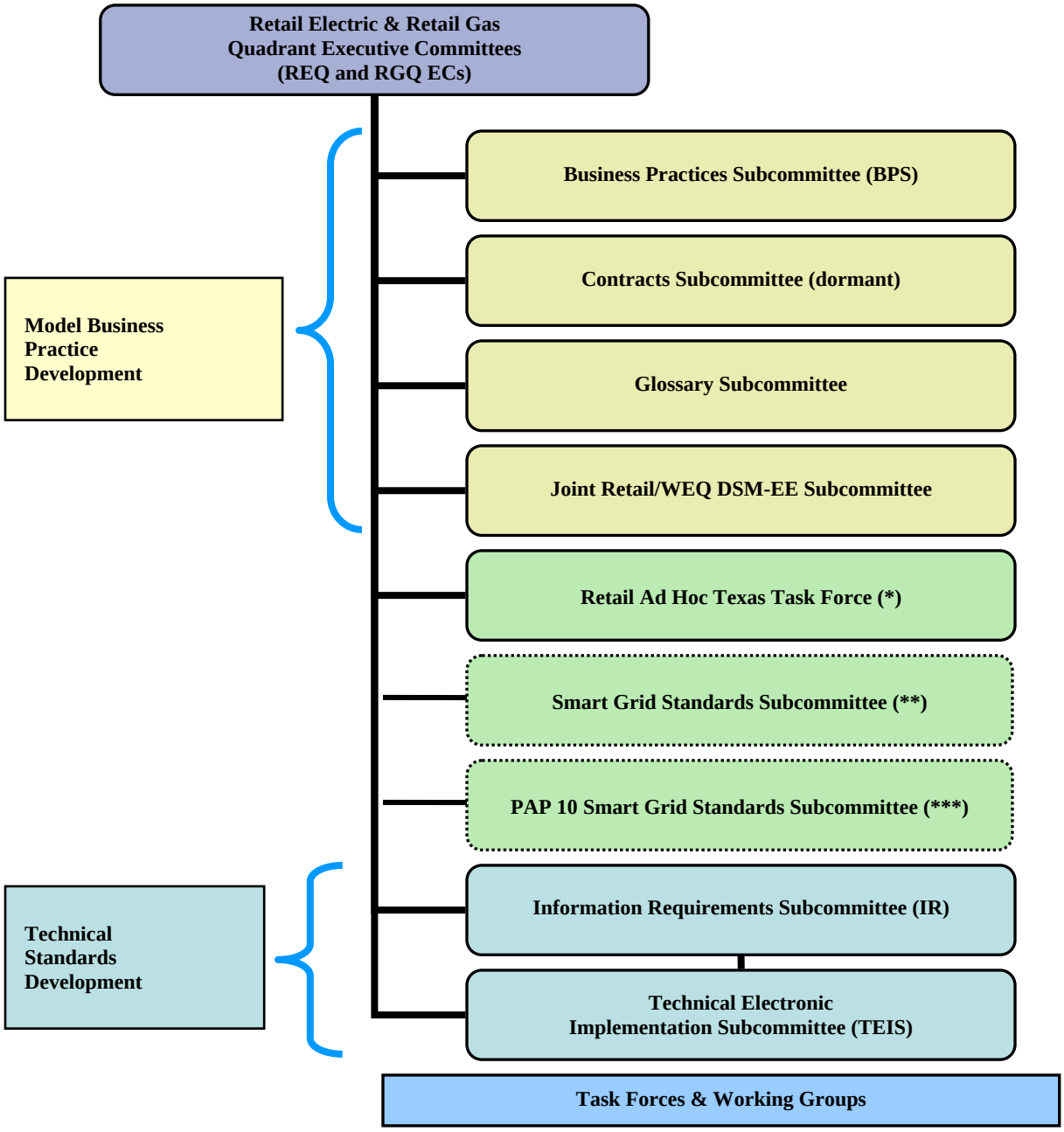

NAESB Retail Subcommittee Leadership: [7]

Executive Committee: Mike Novak, Chair (RGQ), Phil Precht, Chair (REQ)
Business Practices Subcommittee: Phil Precht (RGQ), Dan Jones (REQ)
Information Requirements Subcommittee: Jennifer Teel (REQ)
Technical Electronic Implementation Subcommittee: TBD

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Glossary Subcommittee: Patrick Eynon (REQ)
DSM-EE Subcommittee: Ruth Kiselewich, David Koogler (REQ), Roy True (WEQ), and Paul Wattles (WEQ)
Retail Ad Hoc Texas Task Force: Debbie McKeever (REQ) and Susan Munson (REQ)

(*) The Retail Ad Hoc Texas Task Force may draft MBPs, process flows, implementation guides and technical standards supportive of the Registration Agent. The group is chaired by Debbie McKeever and Susan Munson.

(**) The Smart Grid Standards Subcommittee is a joint group of the retail electric and wholesale electric quadrants with other standards development groups such as OASIS, CalConnect, FIX and UCAIug, and includes other groups. Direction may be given from NIST, DoE or FERC and the group reports jointly to the NAESB Board Smart Grid Strategic Steering Committee and the REQ EC. The group is chaired by Brent Hodges, Wayne Longcore, Joe Zhou and Robert Burke.

(***) The PAP 10 Smart Grid Standards Subcommittee is a joint group of the retail electric and wholesale electric quadrants with other standards development groups such as OASIS, UCAIug, OpenADE, ZigBee, ASHRAE, EIS Alliance, NARUC and includes other groups. Direction may be given from NIST, DoE or FERC and the group reports jointly to the NAESB Board Smart Grid Strategic Steering Committee and the REQ EC. The group is chaired by Brent Hodges, Phil Precht, Cathy Wesley/Heather Sanders, Sharon Dinges, David Kaufman, Brad Ramsay, Tobin Richardson and Ed Koch.

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Retail 2010 Annual Plan 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 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] The assignments are abbreviated. The abbreviations and committee structure can be found at the end of the annual plan document.

[4] The DSM-EE subcommittee is expected to be split into several separate subcommittees to support concurrent development of separate standards sets. The split is to take place at the end of May after which the assignments will be modified.

[5] Energy efficiency may be a wholesale product, such as capacity. Energy efficiency in retail markets may be from individual energy efficiency measures at the project level or a portfolio of projects that make up an energy efficiency program.

[6] This work is considered routine maintenance and thus the items are not separately numbered. The REQ and RGQ ECs will assign maintenance efforts on a request-by-request basis.

[7] 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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August 1, 2010

TO: NAESB Board of Directors, Executive Committee (EC) Members, EC Alternates, and Invited Guests

FROM: Cory Galik Cummings, NAESB Staff Attorney

RE: Draft Minutes of the NAESB Board Meeting –June 24, 2010

NAESB BOARD OF DIRECTORS MEETING
Marriott IAH Airport Hotel, Houston, Texas
Thursday, June 24, 2010 – 9:00 a.m. to 1:00 pm Central
DRAFT MINUTES

1. Administration and Welcome

Mr. Cleveland welcomed the Board members and guests in the room and on the phone. Mr. Boswell provided the antitrust guidance. Ms. Cummings called the roll of the NAESB Board members. Quorum was established.

2. Adoption of the Agenda and Minutes

The Board members reviewed the draft agenda. Ms. Crockett moved to adopt the agenda as drafted and Mr. Ellsworth seconded the motion. The motion passed without objection.

Next, the Board members reviewed the draft minutes from the March 25, 2010 Board meeting. Mr. Cleveland asked if there were any proposed modifications. No modifications were offered. Mr. Ackerman moved to adopt the minutes as drafted and Ms. Crockett seconded the motion. The motion passed without objection

3. Membership and Financial Report

Membership Report: Ms. McQuade reviewed the membership report. This quarter NAESB has experienced a net gain in membership, largely in response to the creation of the new WEQ segment and smart grid activities. The hard work of the Board has paid off this quarter and there are currently several new prospects in touch with the NAESB staff.

Financial Report: Ms. Wishart provided the financial report. NAESB's revenues are strong and expenses are staying even with last year. Ms. McQuade thanked the Revenue Committee for their hard work, the results of which are reflected in the financials.

4. Reports from Board Committees

Resources: Ms. McQuade provided the report of the Resources Committee. She noted the increase in membership due to NAESB's smart grid and demand response efforts. She encouraged the Board members to inform the NAESB office of colleagues that could benefit from NAESB membership and they will be provided with membership information. Mr. Booe also noted that there were seats available on the WEQ Board and Executive Committee.

Critical Infrastructure Committee: Mr. Burks provided an update of the activities of the Critical Infrastructure Committee. The main focus of the committee has been a substantial review of documents from NERC, NIST and various other sources. Mr. Hurley reviewed the current draft of Lieberman Bill, which attempts to revise the way to respond to cybersecuirty risks. Ms. McQuade reiterated that the Committee will only function as an advisory group to the Board on cyber security and critical infrastructure issues concerning commercial aspects and will not address the electric reliability aspects which are more appropriately addressed in the NERC venue.

Retail Restructuring Update: Mr. Minneman provided an update of the restructuring of the Retail Quadrants. The Retail Quadrants modified their structure in the third quarter of 2009 creating three segments; 1) the Suppliers/Services Providers segment, 2) the Utilities segment, and 3) the End Users/Public Agencies segment.

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This segment structure was developed in an effort to better reflect the status of the current retail market and appeal to participants interested in the Demand Side Management and Energy Efficiency (DSM-EE) and Smart Grid efforts. The Retail Quadrants have seen an increase in membership and a growing interest of potential members. Mr. Minneman noted that the restructuring actions taken last year appear to be moving the Quadrants in the right direction, even though the Quadrants membership statistics are still below the minimum requirements.

Board Resolution: Mr. Cleveland stated that the Managing Committee met prior to the board meeting to provide guidance to Executive Committee members on how to best manage formal comments. Ms. McQuade provided the context for the resolution. NAESB's smart grid efforts include a large number of groups that are new to the NAESB process. The work products being created by the task force will represent WEQ and REQ market requirements that can also support the work other groups are currently drafting. The standards developed by NAESB are considered seed standards that these other groups can use to develop their work product. The Board Resolution stated:

Whereas

The NAESB Smart Grid Standards Subcommittees include participation and leadership from many standards groups who will depend on NAESB work products as they proceed in their own efforts, and

NAESB standards developed to support Smart Grid activity should strive, where feasible, to be consistent for both the wholesale and retail electric market applications, now therefore

Be it Resolved that

the Board of Directors determines that the Smart Grid standards developed by the wholesale and retail electric executive committees should strive to be consistent in all areas excepting where there are substantive jurisdictional differences,

the Board of Directors urges the wholesale and retail electric executive committees to show great deference to the work products provided by the Smart Grid Standards Subcommittees, and provide explanations when substantively deviating from the subcommittee recommendations for standards, and

for the phase 1 Priority Action Plans 3, 4 and 9 smart grid standards recently adopted, the Board of Directors requests the wholesale electric executive committee to reconsider the changes made by the executive committee to the subcommittee work products in light of this resolution and make changes accordingly, and

the Board of Directors considers that participants need sufficient time to consider comments prior to taking action; thus, henceforth all comments shall be provided to meeting participants at least three business days in advance of the meeting at which they will be discussed, absent compelling reason(s). It shall be the responsibility of any party filing late comments to demonstrate such compelling reason(s). The committee members, by balanced segment vote, shall determine whether to consider such late comments at that meeting.

Mr. Novak asked if the three-day rule applied only to these particular recommendations, or would the rule carry forward to all future recommendations. Mr. Cleveland answered that it would carry forward. Mr. Lucas asked for clarification on the first resolution. Mr. Desselle answered that the WEQ and REQ recommendations should be consistent, but the changes made by the WEQ EC are inconsistent with the REQ standards. The resolution asks the WEQ EC to reconsider whether or not those changes should have been made. Ms. McQuade noted that there was confusion in the WEQ EC as to how the recommendation form was to be used. The WEQ EC inadvertently moved a section of the recommendation, thought to be administrative, to a part of the recommendation, which had the same effect as deleting it. Mr. Kruse asked if it was necessary for this resolution to come from the board, rather than from the WEQ EC's own motion. Mr. Desselle stated that the board should convey the message that there should be consistency between the two quadrants. The board also wants to ensure that where the EC deviates from the subcommittee's recommendation, which can be technical, they understand the implication of that change.

The Board Resolution passed unanimously.

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5. Smart Grid Updates

Mr. Zhou provided a power point presentation on the NAESB efforts for PAP03, PAP04, PAP09 and PAP10. Mr. Desselle noted that the PAP10 effort will occur in a separate subcommittee, which will be populated with NAESB members and any of the organizations that have been participating in the smart grid efforts. It is a unique arrangement and collaboration with various other organizations. He encouraged EC members to participate and maintain awareness of this work effort.

6. Updates on Specific Efforts

Publications: Ms. McQuade provided an update of the NAESB publication schedule. WEQ Version 2.2 will be published in the July-August time frame and will include the smart grid and NITS standards currently under development. The Retail Quadrant has scheduled Version 1.3 to be published in first quarter 2011 and the WGQ is scheduled to publish Version 2.0 in November 2010.

WEQ, Update on FERC Order No. 890 efforts: Ms. York provided an update on the Order No. 890 efforts. The OASIS subcommittee just released its draft standards for NITS for informal comments, due July 12. The subcommittee will review the comments received. In addition, the WEQ EC established a task force to develop the work scope for Systems Across Multiple Transmission Services (SAMTS). The task force has completed a draft scope that will be presented to the EC for approval. Afterwards, it will be sent to the subcommittee for standards drafting. This work will likely begin in August. The completion of the scope is timely, as NAESB will be filing a progress report to the FERC on this item next week.

WEQ/Retail Electric, Update on Demand Response and Demand Side Management: Mr. True provided an update of the DR and DSM activities. The retail demand response work group is working on completing its phase 2 efforts. The work group has continued to review the formal comments from the first phase of standards development. Once that effort is completed, the work will be sent out for an informal comment period prior to consideration by the DSM-EE subcommittee. The retail and wholesale demand response glossaries will be compared against each other to ensure consistency.

The retail energy efficiency group has been considering phasing the standards development in a manner similar to the demand response work. That work group is finalizing the scope of their work product.

The wholesale demand response work group created three task forces (glossary, model business practices and performance evaluation methods) to accomplish this work. The glossary task force has reviewed and synchronized the wholesale and retail demand response glossary terms and presented their work product to the wholesale demand response work group. The Performance Evaluation sub-working group has met, via conference call, to discuss the performance evaluation methodologies found in the IRC Matrix. Individual participants have volunteered to review their selected baseline methodology, and come back to the group with suggested changes to the performance evaluation method. At this point, the group does not have finalized changes that they would propose to the DSM Working Group-Wholesale Standards. The Model Business Practice sub-working group has met several times to review the language in the model business practices. Marie Pieniazek created a revision table to track versioning of the standards and is reviewing the Capacity section to review and revise language. Ms. Pratt is reviewing the Regulation section for the same and Mr. True is reviewing and revising the Energy section.

On April 15, 2010, the FERC issued its final rule and adopted the WEQ Phase 1 DR M&V standards. In the final rule, the FERC noted that NAESB was best suited to develop the Phase 2 DR M&V standards and noted, "additional substantive standards would appear beneficial in creating transparent and consistent measurement and verification of demand response products and services in wholesale electric markets. The measurement and verification standards needed to accomplish this goal should be a focus of NAESB's Phase II M&V Standards development efforts." The FERC also set a one-year deadline to either complete the Phase 2 standards or report the progress made in the Phase 2 efforts.

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RFP Status for the Electric Industry Registry: Ms. McQuade noted that NAESB put out an RFP seeking an administrator for the Electric Industry Registry (EIR). The RFP was distributed on February 22, 2010 and proposals were due to NAESB by May 21, 2010. The goal is to have the registry moved to NAESB by the end of the year.

7. 2010 Executive Committee Reports

Mr. Buccigross reviewed the 2010 WGQ Annual Plan; Ms. McQuade reviewed the 2010 Retail Annual Plan; and Ms. York reviewed the 2010 WEQ Annual Plan. Mr. Desselle moved to adopt the Annual Plans as reviewed and Ms. Crockett seconded the motion. The motion passed a simple majority vote.

8. Plan for September 2010 Board Meeting

Ms. McQuade noted that the September 23, 2010 Board meeting will be held in Houston, Texas and asked the participants to submit any agenda items they wish to discuss during the meeting to the NAESB office. She also noted that the September Board meeting will be the strategic session for 2011. She also noted that Sandia National Labs would be presenting at the meeting on how the emerging smart grid impacts upstream and midstream natural gas operations. The 2010 Board meeting schedule can be found through the following link: http://www.naesb.org/misc/2010_schedule.doc.

9. Old and New Business

Ms. McQuade stated that several Managing Committee officers have met with the FERC commissioners, as well as NARUC, to discuss smart grid, demand response, energy efficiency, e-Tariff and FERC Order No. 890. They have also met with the CEOs of ISO New England and New York ISO to bring them up to date on NAESB's smart grid and demand response efforts.

10. Adjourn

The meeting adjourned at 11:26 a.m. Central.

12. Board Attendance and Voting Record (Vacancies Omitted)

WGQ PRODUCERS SEGMENT		**ATTENDANCE**
Richard D. Smith	Regulatory & Compliance Manager, Noble Energy Inc.	
Mark Stultz	Vice President – Policy and Regulatory Affairs, US America Gas and Power, BP Energy Company	
Keith Sappenfield	Regional Director – US Regulatory Affairs, EnCana Oil & Gas (USA), Inc.	Phone
Randy E. Parker	Global Regulatory Advisor, ExxonMobil Gas and Power Marketing Company	
Pete Frost	Director – Regulatory Affairs, ConocoPhillips Gas and Power Marketing	
WGQ PIPELINE SEGMENT		
Cathie Legge	Manager – Customer Service, Alliance Pipeline, LP	In Person
Bill Grygar	Vice President, Panhandle Eastern Pipe Line	
Susanna B. Barry	Vice President – Commercial Operations, Tennessee Gas Pipeline Company	Phone
Randy Young	Vice President – Regulatory Compliance and Corporate Services, Boardwalk Pipeline Partners, LP	In Person
Richard Kruse	Senior Vice President, Spectra Energy Transmission	
WGQ LOCAL DISTRIBUTION COMPANY (LDC) SEGMENT		
Craig Colombo	Energy Trader III, Dominion Resources	In Person
Adrian Chapman	Vice President – Regulatory Affairs & Energy Acquisition, Washington	Phone

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12. Board Attendance and Voting Record (Vacancies Omitted)

	Gas	
Mike Novak	Asst. General Manager, National Fuel Gas Distribution Corporation	Phone
Lee Stewart	Senior Vice President, Gas Transmission, Southern California Gas Company	Phone
WGQ END USERS SEGMENT		
Valerie Crockett	Senior Program Manager – Energy Markets & Policy, Tennessee Valley Authority	In Person
Timothy W. Gerrish	Director of Origination-Energy Marketing and Trading, Florida Power & Light	In Person
Tina Burnett	Natural Gas Resources Administrator, The Boeing Company	
Lori-Lynn C. Pennock	Senior Fuel Supply Analyst, Salt River Project	In Person
Jim Templeton	Principal, Comprehensive Energy Services	In Person
WGQ SERVICES SEGMENT		
Rusty Braziel	Managing Director, Bentek Energy, LLC	In Person
Marty Patterson	Senior Vice President Commercial Services, American Midstream Partners, LP	Phone
Paul Kahler	Midstream Regulatory Advisor, Cenovus Energy Inc.	
Lori Leeder	Relationship Manager/Business Development – Asset Optimization, Vega Energy Partners, Ltd	In Person
REQ SERVICE PROVIDERS/SUPPLIERS SEGMENT		
Wendell Miyaji	Senior Director – Systems, Comverge, Inc.	In Person
Jim Minneman	Controller, PPL Solutions LLC	Phone
J Cade Burks	Executive Vice President of ista	In Person
Austin Morris	Managing Partner – Energy, SunGard Consulting Services, LLC	
REQ UTILITIES SEGMENT		
David Koogler	Director – State Regulation, Dominion Virginia Power	Phone
Dennis Derricks	Director Regulatory Policy and Analysis, Wisconsin Public Service Corporation	
Ruth Kiselewich	Director – Demand Side Management Programs, Baltimore Gas & Electric Company	Phone
Debbie McKeever	Market Advocate, Oncor	In Person
REQ END USERS/PUBLIC AGENCIES SEGMENT		
James P. Cargas	Senior Assistant City Attorney, City of Houston	In Person

WEQ TRANSMISSION SEGMENT		**SUBSEGMENT**	
Dan Klempel	Director Transmission Regulatory Compliance, Basin Electric Power Cooperative	Muni/Coop	
Chuck Feagans	Senior Manager, Reliability Policy, Tennessee Valley Authority	Fed/State/Prov.	Phone
John E. Lucas	Director – Transmission Policy and Services, Southern Company Transmission	IOU	In Person

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12. Board Attendance and Voting Record (Vacancies Omitted)

Jill Horswell	Director Transmission, Southern California Edison	at large	In Person
Edward J. Davis	Policy Consultant, Entergy Services, Inc.	at large	
WEQ GENERATION SEGMENT			
Douglas L. Curry	Administrator and CEO, Lincoln Electric System	Muni/Coop	
Belinda Thornton	General Manager – Energy Origination, Tennessee Valley Authority	Fed/State/Prov.	
Lou Oberski	Director – Electric Market Policy, Dominion Resources Services, Inc.	IOU	In Person
Wayne Moore	Regulatory Affairs & Energy Policy Director and Compliance Officer – Generation, Southern Company Services, Inc.	IOU	In Person
Gloria Godson	Vice President Energy Policy, Conectiv Energy Supply, Inc.	Merchant	
Shah Hossain	Senior Regulatory Specialist, Westar Energy, Inc.	at large	Phone
WEQ MARKETERS/BROKERS SEGMENT			
Roy True	Manager of Regulatory and Market Affairs, ACES Power Marketing	Muni/Coop	Phone
Jeff Ackerman	Manager – Colorado River Storage Project Energy Management and Marketing Office, Western Area Power Administration	Fed/State/Prov.	In Person
Gavin Cunningham	Manager – FirstEnergy Solutions Corp.	at large	
Jack Cashin	Senior Manager of Policy, Electric Power Supply Association (EPSA)	at large	
Sam Forrest	Vice President – Energy Marketing and Trading, Florida Power & Light	IOU	
R. Scott Brown	Vice President and Director, Exelon Generation Power Team	IOU	
WEQ DISTRIBUTION/LOAD SERVING ENTITIES (LSE) SEGMENT			
Arthur G. Fusco	Vice President and General Counsel, Central Electric Power Cooperative Inc.	Muni/Coop	Phone
Paul McCurley	Manager – Power Supply, National Rural Electric Cooperative Association	Muni/Coop	
Nelson Peeler	Vice President System Operations, Duke Energy	IOU	In Person
Joe Hartsoe	Managing Director – Federal Policy, American Electric Power Service Corp.	at large	Phone
Bruce Ellsworth	New York State Reliability Council	At-Large	In Person
WEQ END USERS SEGMENT			
Jesse D. Hurley	Chief Executive Officer, Shift Research, LLC	at large	In Person
Aaron Breidenbaugh	Senior Manager – Regulatory Affairs and Public Policy – New York, EnerNOC, Inc.	at large	
Thomas G. Dvorsky	Director of the Office of Electricity, Gas, and Water at the New York State Department of Public Service, rep.	Regulator	

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12. Board Attendance and Voting Record (Vacancies Omitted)

	National Association of Regulatory Utility Commissioners		
Marie Pieniazek	Consultant, Rep: Energy Curtailment Specialists, Inc.	at large	Phone
Rick Lentz	Fellow with SunGard	at large	In Person
Michehl Gent	Open Access Technology International, Inc.	At-Large	In Person
WEQ INDEPENDENT GRID OPERATORS/PLANNERS			
Michael Desselle	Vice President Process Integrity, Southwest Power Pool		In Person
Kent Saathoff	Vice President of System Operations, ERCOT		
Kevin Kirby	Vice President Market Operations, ISO New England, Inc.		Phone
Rana Mukerji	Vice President Market Structures, New York Independent System Operator, Inc. (NYISO)		Phone
Andy Ott	Senior Vice President Marketing, PJM Interconnection, LLC		In Person
Bill Phillips	Vice President Standards Compliance & Strategy, Midwest ISO (MISO)		Phone
Peter Sergejewich	Director of Corporate Planning, Independent Electricity System Operator (IESO)		Phone
WEQ TECHNOLOGY AND SERVICES			
Jim Buccigross	Vice President Energy Industry Practice, 8760 Inc.		Phone
Laurent M. Liscia	Executive Director, Organization for the Advancement of Structured Information Standards (OASIS)		
David A. Wollman	Leader, Smart Grid Team – Standards and Electrical Metrology Groups, National Institute of Standards and Technology (NIST)		Phone
RGQ SERVICE PROVIDERS/SUPPLIERS SEGMENT			
Leigh Spangler	President, Latitude Technologies Inc.		
Rick Vogel	Vice President – Sales and Natural Gas Operations, Sierra Southwest Cooperative Services, Inc.		
Dave Darnell	President & CEO, Systrends USA		
Greg Lander	President, Capacity Center		
RGQ DISTRIBUTORS SEGMENT			
Alonzo Weaver	Vice President of Engineering and Operations, Memphis Light, Gas & Water Division (APGA)		
Ralph Cleveland	Senior Vice President – Engineering and Operations, AGL Resources, Inc.		
RGQ END USERS/PUBLIC AGENCIES SEGMENT			

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13. Other Attendance

Name	Organization	Attendance
Jonathan Booe	NAESB	In Person
Bill Boswell	NAESB	In Person
Kathryn Burch	Spectra Energy Transmission	In Person
Christopher Burden	Williams Gas Pipeline	Phone
Cory Cummings	NAESB	In Person
Dale Davis	Williams Gas Pipeline	In Person
Bob Gee	Gee Strategies	In Person
Mark Gracey	El Paso Gas Pipeline Company	In Person
Bill Griffith	El Paso Natural Gas	In Person
Alan Johnson	NRG Energy	Phone
Susan Munson	ERCOT	In Person
Rae McQuade	NAESB	In Person
Joelle Ogg	Brunenkant Law Firm, LLP	In Person
Phil Precht	Baltimore Gas and Electric	Phone
Alan Pritchard	Duke Energy	Phone
Denise Rager	NAESB	In Person
Veronica Thomason	NAESB	In Person
Kim Van Pelt	Panhandle Eastern Pipeline	In Person
Jill Vaughn	Preferred Legal Services	In Person
Darla Wishart	NAESB	In Person
Charles Yeung	SPP	In Person
Kathy York	Tennessee Valley Authority	In Person
Randy Young	Boardwalk Pipeline Partners	In Person
Joe Zhou	Xtensible Solutions	In Person

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via posting

TO:	NAESB Board Critical Infrastructure Committee Members and posting for Interested Industry Parties
FROM:	Jonathan Booe, NAESB Counsel
RE:	Meeting Notes for the NAESB Board Critical Infrastructure Committee
DATE:	July 19, 2010

Dear Critical Infrastructure Committee Members,

A Critical Infrastructure Committee conference call was held on July 19, 2010. The meeting was called to order at 1:00 pm C. Mr. Burks presided over the meeting and Mr. Booe served as counsel for the meeting. The notes below serve as a record for the meeting.

Notes for the July 19, 2010 NAESB Board Critical Infrastructure Meeting

Administrative: Mr. Burks welcomed the participants to conference call and thanked them for attending. Mr. Booe provided the antitrust guidance. The draft agenda was reviewed. Ms. Crockett made a motion to adopt the agenda as drafted and Mr. Spangler seconded the motion. The motion passed without opposition.

Discussion of Topics for Strategic Planning Session

Mr. Hurley provided a review of the status of the Draft Lieberman Senate Bill (Senate Bill S. 3480) and the Draft Harman House of Representatives Bill (House Bill H.R. 5548). Ms. McQuade noted that the Lieberman Bill is expected to be considered in September and that the Harmon Bill has been changed to look very similar to the Senate Bill. Mr. Burks suggested that the Committee ask Mr. Hurley to provide a 10 minute overview of the Lieberman Bill during the upcoming NAESB Board Strategic Session. The participants supported his recommendation. Mr. Burks also suggested that each Quadrant review the Bill and produce a report addressing the potential affects the Bill may have on NAESB. Mr. Hurley stated that he predicts that the Bill has a 50% chance of passing depending on the priority it receives from the Administration. He also noted that it has been rumored that the Lieberman Bill may be merged with the Rockefeller-Snowe Bill and become an omnibus bill with ample funding. Currently the Bill gives the Department of Homeland Security (DHS) control of the budget. Mr. Gallagher noted that the Bill significantly alters the way the electric industry interacts with NERC and that a coalition was formed by the industry to get lobbyists involved in the development. Ms. McQuade noted that it would be beneficial if the Bill gave direction to work with existing standards organizations. Mr. Hurley stated that the Bill only references NIST. Mr. Hurley stated that if NAESB could produce a set of talking points supporting the organizations position and offering constructive solutions that he would discuss the key points with his contacts in Washington D.C. Ms. McQuade asked Ms. Ogg for her impressions of the activity in Washington surrounding the Bill. Ms. Ogg stated that there is not currently much discussion of the Bill as it is very complicated and does not offer a popular sound byte. She also stated that she would work with Ms. McQuade and Mr. Hurley on the NAESB talking points. Mr. Burkes also volunteered to help. Ms. McQuade asked Mr. Gallagher for assistance on the talking points and he agreed.

Mr. Hurley noted that some of the cyber security issues may be turning to the natural gas industry very soon. Mr. Griffith stated that INGAA formed a group to review the Bill a week prior and that he will provide a report of the results. Ms. McQuade suggested that someone contact the AGA and advise the same action. Mr. Hurley asked if Ms. McQuade had any issues with sharing the talking points with the US Telecom Association. She stated that she did not.

Discussion of Senate and House Bills

Mr. Hurley provided additional detail concerning the Lieberman Bill and noting that the Bill structurally organizes all aspects of national cyber security, both offense and defense, through the National Cyber security Center (NCC) and that all standards will be developed in coordination with NIST. He state that the Bill offers no funding for compliance and that reliance on foreign software and hardware will be forbidden. Mr. Burkes asked what the estimated cost will be for compliance and Mr. Hurley responded that it is still undetermined.

Other Business/Next Meeting and

There were four action items discussed at the meeting:

1) NAESB office to distribute to Lieberman Bill to EC Chairs and Vice Chairs for review
2) Ms. McQuade, Ms. Ogg, Mr. Hurley, Mr. Burkes and Mr. Gallagher to develop talking points

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Notes for the July 19, 2010 NAESB Board Critical Infrastructure Meeting

Action Items:

describing how NAESB can support the Lieberman Bill and how it affects NAESB.

3) Mr. Hurley to provide a 10 minute overview of the Lieberman Bill for the September Board Strategic Session
4) Mr. Griffith to provide a report of the INGAA review of the Lieberman Bill.

Mr. Burke stated that during the next meeting the participants can discuss the results of the action items and discuss the status of the NISTIR. Mr. Hurley noted that his company is going to seek approval of NAESB as a PKI certifier.

Adjourn: Ms. Crockett moved to adjourn the meeting at 2:02 pm Central.

Work Papers Provided for the Meeting:

Meeting Related Documents:

Draft Lieberman Senate Bill (Senate Bill S. 3480): http://assets.fiercemarkets.com/public/sites/govit/liebermancarper.pdf

Draft Harman House of Representatives Bill (House Bill H.R. 5548): http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h5548ih.txt.pdf

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Notes for the July 19, 2010 NAESB Board Critical Infrastructure Meeting

CRITICAL INFRASTRUCTURE COMMITTEE MEMBERS

Name	Organization	Attendance
Jim Buccigross	8760, Inc.	
Ralph Cleveland	AGL Resources, Inc.	
Joelle Ogg	Brunenkant & Cross, LP	Phone
Chris Eisenbrey	Edison Electric Institute	
Bob Gee	Gee Strategies Group	
J. Cade Burks	ista	Phone
Leigh Spangler	Latitude Technologies	Phone
Paul McCurley	NRECA	Phone
Bill Boswell	NAESB General Counsel	
Rick Smead	Navigant Consulting, Inc.	
Diane Barney	New York State Department of Public Service Staff	
Bruce Ellsworth	New York State Reliability Council	
Michehl Gent	Open Access Technology International, Inc	
Chris Kotting	Public Utilities Commission of Ohio	
Thomas Pearce	Public Utilities Commission of Ohio	
Jesse D. Hurley	Shift Research, LLC	Phone
Michael Desselle	Southwest Power Pool	
Dave Darnell	Systrends USA	
Susanna B. Barry	Tennessee Gas Pipeline Company	
Chuck Feagans	Tennessee Valley Authority	Phone
Valerie Crockett	Tennessee Valley Authority	Phone
Christopher Freitas	US Department of Energy	
Brett Perlman	Vector Consultants	
William Gallagher	Vermont Public Power Supply Authority	Phone

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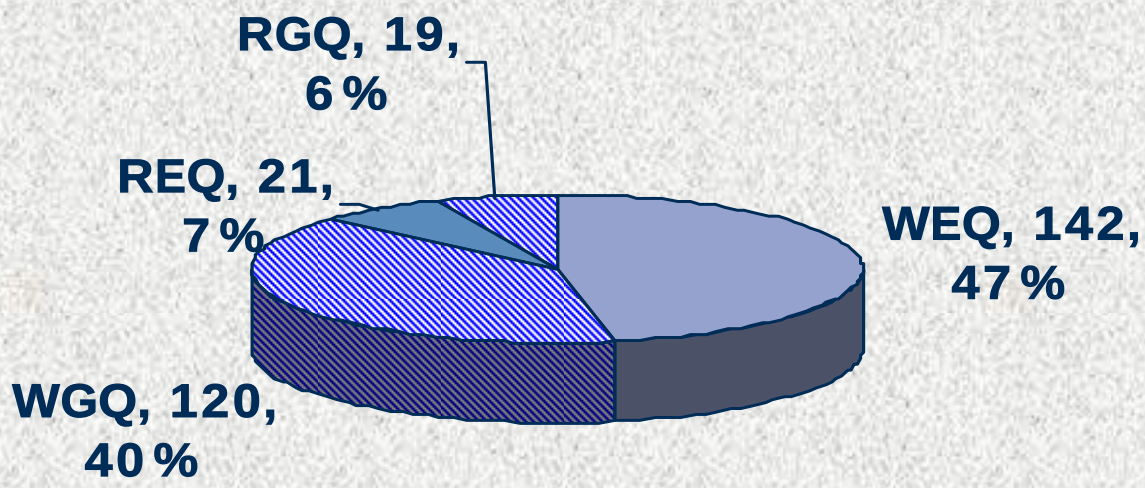
Notes for the July 19, 2010 NAESB Board Critical Infrastructure Meeting

OTHER ATTENDEES

Attendee	Organization
Ron Tomlinson	Dominion
Ed Davis	Entergy
Bill Griffith	El Paso
Peter Sergejewich	IESO
Ed Skiba	Midwest ISO
Jonathan Booe	NAESB
Rae McQuade	NAESB
Kathy York	TVA

North American Energy Standards Board

Organizational Profile



Membership Profile

June 11, 2010

Total Membership

302

Quadrant Statistics	WEQ	WGQ	REQ	RGQ	Total
Membership YE 2009	138	122	18	19	297
Reclassification	0	0	0	0	0
Net Change	+4	-2	+3	0	+5
Membership YTD	142	120	21	19	302

North American Energy Standards Board Membership List
As of June 11, 2010

NAESB Membership Statistics – Changes by Quadrant for 2010 as of June 11, 2010

NAESB Membership Report - Quadrant/Segment Membership Analysis		Number of Members
WGQ Segments	**TOTAL**	**120**
	End Users	16
	Distributors	19
	Pipelines	42
	Producers	13
	Services	30
REQ Segments	**TOTAL**	**21**
	End Users/Public Agencies	5
	Utilities	7
	Service Providers/Suppliers	9
RGQ Segments	**TOTAL**	**19**
	End Users/Public Agencies	1
	Distributors	6
	Service Providers/Suppliers	12
WEQ Segments	**TOTAL**	**142**
	End Users	11
	Distributors	21
	Transmission	47
	Generation	24
	Marketers	26
	None Specified	1
	Independent Grid Operators/Planners	9
	Technology /Services	3

North American Energy Standards Board Membership List
As of June 11, 2010

WEQ	New Members:	+8
	8760, Inc. (Technology/Services), Organization for the Advancement of Structured Information Standards (OASIS) (Technology/Services), Public Utilities Commission of Ohio (End Users, Regulator); National Institute of Standards and Technology (NIST) (Technology/Services), Avista Corporation (Transmission, IOU), Brookfield Energy Marketing, Inc. (Marketers/Brokers, NIOU), Nebraska Public Power District (Transmission, Muni/Coop), Energy Curtailment Specialists, Inc. (End Users, End Use)	
	Member Resignations:	-4
	Southeastern Power Administration (Generation, Fed/State/Prov), Progress Energy (Marketers/Brokers, IOU), APS Marketing and Trading (Marketers/Brokers, IOU), TransServ International, Inc. (WEQ, IGO)	
WGQ	New Members:	+3
	Cenovus Energy, Inc. (Services), American Midstream Partners, LP (Services), Eastern Shore Natural Gas Company (LDC)	
	Member Resignations:	- 5
	Pacific Gas & Electric (Pipeline), Foothills Energy Ventures, LLC (Producer), Anadarko Energy Services Company (Services); Goodrich Petroleum Company LLC (Producer), Mirant Energy Trading, LLC (End Users)	
REQ	New Members:	+3
	Maryland Public Service Commission (End Users/Public Agencies), Public Service Utilities Commission of Ohio (End Users/Public Agencies), Comverge, Inc.	
	Member Resignations:	- 0
RGQ	New Members:	+ 1
	Sierra Southwest Cooperative Services, Inc. (Service Providers/Suppliers)	
	Member Resignations:	- 1
	Interstate Gas Supply (Services)	
TOTAL	New Members:	14
	Member Resignations:	10

North American Energy Standards Board Membership List
As of June 11, 2010

	Organization	Seg[1]	Contact	Sub-Seg[2]
Retail Electric Quadrant Members:				
1	Alabama Power	u	Judy W. Ray	
2	Ameren Services Company	u	Patrick Eynon	
3	Baltimore Gas & Electric Co.	u	Ruth Kiselewich, Phil Precht	
4	City of Houston	e	James P. Cargas	
5	Comverge, Inc.	s	Wendell Miyaji	
6	Dominion Retail	s	William Barkas, Richard Zelenko	
7	Dominion Virginia Power	u	David F. Koogler, Mary Edwards	
8	Electric Reliability Council of Texas (ERCOT)	s	Susan Munson, Kent Saathoff	
9	Exelon Energy Delivery	u	Toni Garza	
10	ista	s	Judy Bailey, J. Cade Burks, Jennifer Teel	
11	Maryland Public Service Commission	e	Dan Norfolk	
12	North Carolina Advanced Energy Corporation	s	Robert K. Koger	
13	Oncor	u	Larry Williford, Debbie McKeever	
14	Pennsylvania Office Of Consumer Advocate	e	Tanya J. McCloskey, Sonny A. Popowsky	
15	Pennsylvania Public Utility Commission	e	Robert F. Wilson, Annunciata E. Marino	
16	PPL Solutions, LLC	s	James M. Minneman, Kim Wall	
17	Public Utilities Commission of Ohio	e	Christopher Kotting	
18	Southern Company Services	s	Barbara Hingst	
19	SunGard Consulting Services, LLC	s	Austin Morris	
20	Ventyx, Inc.	s	Nathan Chang	
21	Wisconsin Public Service Corporation	u	Dennis Derricks, Ken Thiry	
Wholesale Gas Quadrant Members:				
1	8760, Inc.	s	Jim Buccigross	
2	Alliance Pipeline LP	pl	Cathie Legge, Brian Troicuk	
3	Ameren Corporation	l	Scott Glaeser, Ken Dothage, Jim Massmann	
4	American Midstream Partners, LP	s	Marty Patterson	
5	ANR Pipeline Company	s	Sandy Meyers, Joseph E. Polland, Rene Staeb, Debbie Forth, Carol Wehlmann, Radha Raman	
6	Apache Corporation	pr	Maribeth Bedevian	
7	Arizona Public Service Company	e	Tom Carlson, Kelly Daly	
8	Atmos Energy	pl	Steve Easley	
9	Ballard Natural Gas, LLC	s	Susan Thibodeaux	
10	Baltimore Gas & Electric Co.	l	Phil Precht, Ron Jennings	

[1] The segment abbreviations are: **REQ**: u – utilities, e – end users/public agencies, s – service providers/suppliers. **RGQ**: d – distributors, e – end users/public agencies, s – service providers/suppliers. **WEQ**: m – marketer/broker, d – distribution, i – independent grid operators/planners, t – transmission owner, e – end user, g – generator, ts – technology/services. **WGQ**: s – services, pl – pipeline, l – LDC, pr – producer, e – end user.

[2] The sub-segment apply only to the WEQ and the abbreviations are – muni – municipal/cooperative, iou – investor owned utility, itc – independent transmission company, fed – federal/state/provincial facility/agency, lind – large industrial, sgen – self generation, end use – end user that may be represented in other segments, merc – merchant, N – no designation, reg – regulatory agency, niou – not investor owned utility. To get a full description of the subsegment, please reference the WEQ Procedures: http://www.naesb.org/pdf/weq_quadrant_procedures.doc

North American Energy Standards Board Membership List
As of June 11, 2010

	Organization	Seg[1]	Contact	Sub-Seg[2]
11	Barclays Bank PLC	s	Guy Kern-Martin	
12	Bentek Energy, LLC	s	E. Russell Braziel	
13	BG Energy Merchants, LLC	s	Martha Braddy, Denise Almoina, Susan Bailey, Melody Fontenot	
14	Boardwalk Pipelines, LP	pl	Randy Young, Mitch Whitehead	
15	Boeing Co., The	e	Tina Burnett	
16	BP Energy	pr	Mark Stultz, Rhonda Denton	
17	Calpine Energy Services, LP	e	Shonnie Daniel, Jay Dibble	
18	Cargill Incorporated	s	Lester Welch	
19	Carolina Gas Transmission Corporation	pl	Rae Davis, Dana B. Randall	
20	Cenovus Energy, Inc.	s	Paul Kahler	
21	CenterPoint Energy Gas Services, Inc.	s	James G. Beste, Larry Kunkle	
22	CenterPoint Energy Gas Transmission Company	pl	Larry Thomas	
23	CenterPoint Energy Mississippi River Transmission Corporation	pl	Robert Trost	
24	Cheniere Pipeline Company	pl	Whit Scott	
25	Chevron Natural Gas	pr	Charles (Chuck) Cook	
26	Chevron Pipe Line Company	pl	Mary Anne Collins, Deborah Plattsmier, Jeff Kirk	
27	Cimarex Energy Co.	pr	Charlotte Baker	
28	Citigroup Energy Inc.	s	Carrie Southard, Angela Davis	
29	Colorado Springs Utilities	l	Joe M. Holmes	
30	Columbia Gas Transmission	pl	Claire Burum	
31	Comprehensive Energy Services	e	Jim Templeton	
32	ConocoPhillips Gas and Power	pr	Peter Frost	
33	Consolidated Edison Company of NY	l	Scott Butler, Paul Olmsted	
34	Constellation Energy Commodities Group Inc.	s	Lisa Simpkins, Joseph Kirwan, Andrea Kullman, Jennifer Scott	
35	Dauphin Island Gathering Partners	pl	Katie Rice	
36	DB Energy Trading	s	William Donnelly, Travis McCullough	
37	Defense Energy Support Center	e	Veronica Jones, Kevin Ahern	
38	Department of Energy	e	Christopher Freitas	
39	Devon Energy Corporation	pr	Bill Green, Dianne Dunbar	
40	Dominion Resources	l	Craig Columbo	
41	Dominion Transmission, Inc.	pl	Gary Sypolt, Ron Tomlinson	
42	DTE Energy Trading, Inc.	s	Gregory V. Staton, James Buck, Dena Crawford, Marcia L. Hissong, Ann Marie Jambor, Cynthia Klots, Shelley Greene	
43	Eastern Shore Natural Gas Company	l	Elaine B. Bittner	
44	El Paso Natural Gas	pl	William Griffith	
45	El Paso Exploration & Production Company	pr	David A. Webster, Stephanie Karm	
46	Enbridge (U.S.) Inc.	pl	Brad Petzold	
47	EnCana Marketing (USA) Inc.	s	Keith Sappenfield	
48	EnCana Oil & Gas (USA) Inc.	pr	Keith Sappenfield	

North American Energy Standards Board Membership List
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	Organization	Seg[1]	Contact	Sub-Seg[2]
49	Energy Transfer Partners, L.P.	pl	Josie Castrejana, Miki Kolobara	
50	Entergy Services, Inc.	e	Laura Berryman, Terry Shields	
51	Enterprise Products Partners L.P.	pl	Jeff Molinaro	
52	Equitrans, LP	pl	Joseph M. Dawley	
53	ExxonMobil Gas & Power Marketing Company a division of Exxon Mobil Corporation	pr	Randy E. Parker, John W. Poe	
54	Florida Power & Light Company	e	Dona Gussow, Art Morris	
55	Gas Transmission Northwest Corp.	pl	Jay Story	
56	Golden Pass Pipeline, LLC	pl	Susan Braden	
57	Great Lakes Gas Transmission	pl	Gene Fava	
58	High Mount Exploration and Production, Inc.	pr	David Ogden, Gary Weaver, Sheri Heslington	
59	Iberdrola USA Management Corporation	l	Mark Marini	
60	Imperial Irrigation District	e	William Rapp	
61	Integrys Energy Group, Inc.	l	David E. Wear	
62	Iroquois Gas Transmission System	pl	Tom Gwilliam	
63	JP Morgan Ventures Energy Corp	S	Paul Tramonte	
64	Kern River Gas Transmission Co	pl	Brenda Horton	
65	Laclede Gas Co.	l	Kenneth Neises	
66	Latitude Technologies	s	Leigh Spangler	
67	Louis Dreyfus Energy Services	s	Jennifer Farris, W. Scott Harwood	
68	Lower Colorado River Authority	e	Mickey Bell	
69	Macquarie Cook Energy, LLC	s	Angela Jones	
70	Marathon Oil Company	pr	Robin Perrine	
71	Mewbourne Oil Company	pr	Michael F. Shepard	
72	National Fuel Gas Distribution	l	Michael Novak	
73	National Fuel Gas Supply Corp.	pl	Joseph Kardas	
74	National Grid Gas Distribution Companies	l	Bob Superty	
75	Natural Gas Pipeline Co of America	pl	Paul Love, Stan Thomas, Mike Schisler, Paul Haas	
76	Nexen Marketing	s	Shelley Leavitt	
77	NextEra Energy Power Marketing, LLC	e	Marty Jo Rogers	
78	NiSource, Inc.	l	George Simmons, Sorana Linder	
79	Noble Americas Corp	pl	Joseph Limone	
80	Noble Energy, Inc.	pr	Richard Smith, Tammy M. Stevens	
81	Northern Border Pipeline Company	pl	Scott Coburn	
82	Northern Natural Gas	pl	Nancy A. Hetrick	
83	Northwest Natural Gas Company	l	Randolph Friedman	
84	NOVA Gas Transmission Ltd.	pl	Doug Miller	
85	OGE Energy Resources, Inc.	s	Cary Metz	
86	ONEOK	l	Richard Tangeman	
87	ONEOK Partners GP, LLC	pl	Teri Tingler	
88	Panhandle Eastern Pipe Line	pl	William Grygar, Kim Van Pelt	
89	PECO Energy Co.	l	Carlos Thillet	

North American Energy Standards Board Membership List
As of June 11, 2010

	Organization	Seg[1]	Contact	Sub-Seg[2]
90	Pemex Gas Y Petroquimica Basica	s	Juan Enrique Gonzalez Azuara	
91	Peoples Gas System (A division of Tampa Electric Co)	l	Wraye Grimard	
92	Platts	s	Bill Murphy	
93	Portland Natural Gas Transmission System	pl	David Haag	
94	PPL EnergyPlus, LLC	e	Anne Lovett	
95	Questar Pipeline Co.	pl	Jerry H. Gross	
96	Quorum Business Solutions Inc.	s	Anne Golenternek, Michael Lewis	
97	Reliance Gas Transportation Infrastructure Limited	pl	Jagjit S. Yadav	
98	Salt River Project Agricultural Improvement & Power District	e	Lori-Lynn C. Pennock	
99	Sempra Energy - Southern California Gas Co.	l	Lee Stewart, Rodger Schwecke	
100	Sequent Energy Management, L.P.	s	Pat Metteauer	
101	Shell Energy North America (US), L.P.	s	Eric Gillaspie	
102	SolArc, Inc.	s	Mark Davis	
103	Southern California Edison Company	e	Roman Bakke, Curt Roney	
104	Southern Company Services, Inc.	e	Alan Kilpatrick, Bryan Mitchell	
105	Southern Natural Gas Co.	pl	Renee Hyde, Tracey Nicholson, Ludean Wyatt	
106	Southern Star Central Gas Pipeline	pl	Philip Rullman, Tim L. Thompson	
107	Southwest Gas Corporation	l	Larry Black	
108	Spectra Energy Transmission	pl	Richard Kruse	
109	SunGard	s	Lucia Nail	
110	Tennessee Gas Pipeline Company	pl	Sue Barry, Mark Gracey	
111	Tennessee Valley Authority	e	Valerie Crockett	
112	Tiger Natural Gas	s	Tracy Phillips	
113	TransCanada Pipelines	pl	Doug Miller	
114	Transwestern Pipeline Company, LLC	pl	Blair V. Lichtenwalter, Mary Draemer, David Mendoza	
115	Vector Pipeline L.P.	pl	Amy Bruhn	
116	Vega Energy Partners, Ltd	s	Julie Pincus, Lori Leeder	
117	Washington Gas Light Co.	l	Adrian Chapman, Mark Lowe, Paul Buckley	
118	Williams Gas Marketing, Inc.	s	Rich Ficken	
119	Williams Gas Pipeline	pl	Dale Davis, Christopher Burden	
120	Williston Basin Interstate Pipeline	pl	Keith Tiggelaar, Gwen Schoepp, Kelly Brooks, Lori Myerchin	
Wholesale Electric Quadrant Members:				
1	8760, Inc.	ts	Jim Buccigross	
2	ACES Power Marketing LLC	m	Roy J. True, Amadou Fall	muni
3	Alabama Municipal Electric Authority	d	Ray Phillips	muni
4	Alberta Electric System Operator	i	Diana Pommen, Henry Ren	
5	American Electric Power Service Corp.	d	Barbara Radous, Joseph Hartsoe, Phil Cox	iou
6	American Municipal Power, Inc.	m	Chris Norton, Alice Walker	muni
7	American Public Power Association	d	Allen Mosher	muni

North American Energy Standards Board Membership List
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	Organization	Seg[1]	Contact	Sub-Seg[2]
8	American Wind Energy Association	g	Tom Vinson	merc
9	Arizona Public Service Company	t	Mark W. Hackney	iou
10	Arkansas Electric Cooperative Corporation	g	Ricky Bittle	muni
11	Avista Corporation	t	Jeff Schlect	iou
12	Basin Electric Power Cooperative	t	Dan Klempel	muni
13	Basin Electric Power Cooperative	m	David Raatz	muni
14	Basin Electric Power Cooperative	g	Jason Doerr	muni
15	Black Hills Corporation	t	Larry D. Williamson	iou
16	Bonneville Power Administration	d	Sydney D. Berwager	other
17	Bonneville Power Administration	g	Francis Halpin, Robin Chung	fed
18	Bonneville Power Administration	m	Brenda Anderson	fed
19	Bonneville Power Administration	t	Barbara Rehman, Tom Davis	fed
20	BP America Inc.	e	Rhonda Denton	lind
21	British Columbia Transmission Corporation	t	Rohan Soulsby	fed
22	Brookfield Energy Marketing, Inc.	m	Nicolas Bosse	niou
23	California Department of Water Resources	g	Glenn Solberg, Chi Doan	fed
24	California ISO	i	Yakout Mansour	
25	Central Electric Power Cooperative	d	Arthur Fusco	muni
26	Cleco Power, LLC	t	Cindy Guillot	iou
27	Comprehensive Energy Services	e	Jim Templeton	enduse
28	Conectiv Energy Supply, Inc.	g	Gloria Godson	merc
29	Consolidated Edison Company of New York, Inc.	t	Scott Butler	iou
30	Consumers Energy Company	d	Andrew C. Dotterweich, Frank Johnson	iou
31	Dairyland Power Cooperative	t	Chuck Callies	muni
32	Deseret Power Electric Co-op	g	Curt Winterfeld	muni
33	Dominion Energy Marketing, Inc.	g	Lou Oberski, Jalal Babik	iou
34	Duke Energy Americas, LLC (DEA)	g	Walt Yeager	iou
35	Duke Energy Corp.	d	Alan Pritchard	iou
36	Dynegy Power Marketing, Inc.	g	Ben Trammell	merc
37	Edison Electric Institute	n	David Owens, Dave Dworzak, James P. Fama	n
38	Electric Power Supply Association	m	Jack Cashin, Barry Green	at large
39	Electric Reliability Council of Texas (ERCOT)	i	Bill Blevins, Paul Wattles, Joel Mickey	
40	Empire District Electric Company, The	t	Bary K. Warren	iou
41	Energy Curtailment Specialists, Inc. (ECS)	e	Marie Pieniazek	enduse
42	EnerNOC, Inc.	e	Aaron Breidenbaugh	enduse
43	Entegra Power Group, LLC	g	Rebecca Turner	merc
44	Entergy Services, Inc.	t	Edward J. Davis, Narinder Saini	iou
45	Exelon Generation - Power Team	m	Jack Crowley	iou
46	First Energy Service Company	d	Robert M. Martinko, Thomas C. Burgess	iou
47	FirstEnergy Solutions Corp.	m	Mark Travaglianti	iou
48	Florida Municipal Power Agency	g	Frank Gaffney	muni

North American Energy Standards Board Membership List
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	Organization	Seg[1]	Contact	Sub-Seg[2]
49	Florida Municipal Power Agency	d	Frank Gaffney	muni
50	Florida Power & Light Company	m	Gerry Yupp, Tim Gerrish	iou
51	Florida Power & Light Company	t	Marty Mennes, Bob Birch	iou
52	Georgia Transmission Corporation	t	Patrick McGovern	muni
53	Hydro – Quebec Transenergie	t	Glenn Sylvain	fed
54	Iberdrola USA Management Corporation	t	Mark Marini	iou
55	Idaho Power Company	t	Kathy Anderson	iou
56	Independent Electricity System Operator (IESO)	i	Cristian Dragnea, Biju Gopi	
57	Indiana Municipal Power Agency	g	Scott Berry	muni
58	ISO New England, Inc.	i	Matthew F. Goldberg	
59	Lincoln Electric System	g	Douglas Bantam	muni
60	Los Angeles Department of Water and Power	t	Mohammed Johar Beshir	muni
61	Los Angeles Department of Water and Power	m	Bradford L. Packer, Joel F. Cordero	muni
62	Manitoba Hydro	t	Blaine Poff	fed
63	Manitoba Hydro	m	Blaine Poff	fed
64	Michigan Public Power Agency	d	James R. Nickel	muni
65	MidAmerican Energy Company	m	Dennis Kimm	iou
66	Midwest Independent Transmission System Operator	i	William (Bill) Phillips, Ed Skiba	
67	Midwest Reliability Organization	t	Dan Schoenecker	at large
68	Missouri River Energy Services	d	Brian Zavesky	muni
69	Modesto Irrigation District	t	Roger Van Hoy	muni
70	National Association of Regulatory Utility Commissioners	e	Lou Ann Westerfield	reg
71	National Grid	t	Edward M. Kremzier	iou
72	National Institute of Standards and Technology	ts	David A. Wollman	
73	National Rural Electric Cooperative Assoc.	d	Paul McCurley	muni/coop
74	Nebraska Public Power District	t	Don Schmit	muni/coop
75	New York Independent System Operator (NYISO)	i	Rana Mukerji	
76	New York State Reliability Council	d	P. Donald Raymond	at large
77	North American Electric Reliability Corporation	d	Gerry Adamski, Andy Rodriquez	at large
78	North Carolina Electric Membership Corporation	d	David Beam	muni
79	NCMPA1	d	Martin Summe, George Landis	muni
80	Northeast Utilities Service Company	t	David Boguslawski, Calvin A. Bowie	iou
81	Northwestern Corporation	t	Mike Cashell	iou
82	NRG Energy, Inc.	g	Alan Johnson, Jennifer J. Vosburg	merc
83	NV Energy	m	Sheryl Torrey	iou
84	NV Energy, Inc.	t	Patricia Englin	iou
85	Open Access Technology International, Inc.	e	Michehl Gent	at large
86	Open Access Technology International, Inc.	t	Paul R. Sorenson	at large
87	Organization for the Advancement of Structured Information Standards (OASIS)	ts	Laurent M. Liscia	

North American Energy Standards Board Membership List
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	Organization	Seg[1]	Contact	Sub-Seg[2]
88	PacifiCorp	m	John Apperson	iou
89	PacifiCorp	t	Shay Labray	iou
90	PHI Power Delivery	t	Ken Gates	iou
91	PJM Interconnection	i	Patrick Brown, Cathy Wesley	
92	Portland General Electric	t	Frank Afranji, John Walker	iou
93	Powerex Corp	m	Michael L McWilliams, Sharole Tylor	fed
94	PowerSouth Energy Cooperative	d	William Ronald Graham	muni
95	PPL Electric Utilities Corporation	t	Randy Kreider	iou
96	Progress Energy	t	Phillip W. Lewis, Michael Anthony, Leslie Williams, Lee Schuster	iou
97	Public Service Company of New Mexico	m	Steven Maestas, Darren Wilkins, Patricia Merville, Roger Vaughn	iou
98	Public Service Electric and Gas Company	t	Kenneth D. Brown	iou
99	Public Utilities Commission of Ohio	e	Christopher Kotting	reg
100	Puget Sound Energy, Inc.	t	George Marshall, Bob Harshbarger	iou
101	RRI Energy Services, Inc.	g	Trent Carlson	merc
102	Sacramento Municipal Utility District	d	Steve Sorey	muni
103	Salt River Project Agricultural Improvement and Power District	t	Wendy Weathers, Michael J. Pfeister	fed
104	Salt River Project Agricultural improvement and Power District	m	Richard Lehman	fed
105	San Diego Gas & Electric Company	t	Patricia vanMidde	iou
106	Santee Cooper	t	Tom Abrams	fed
107	Seattle City Light	d	Marilynn Semro, Thomas P. Rowan, Doug Rough	muni
108	Seminole Electric Cooperative, Inc.	m	Steve Wallace	muni
109	Shell Energy America (US), L.P.	m	Robert Reilley, Paul Kerr	niou
110	Shift Research, LLC	e	Jesse D. Hurley	at large
111	SonicWALL, Inc.	e	Boris Yanovsky	enduse
112	South Carolina Electric & Gas Company	t	S. Porcher Stoney	iou
113	South Carolina Electric & Gas Company	m	Kevin Spitzform	iou
114	Southern California Edison	t	Weston Williams	iou
115	Southern California Edison Co.	g	Tracy Bibb	iou
116	Southern Company Services, Inc.	g	John Ciza	iou
117	Southern Company Services, Inc.	m	Joel Dison	iou
118	Southern Company Services, Inc.	t	R.D. (Dean) Ulch, John Lucas, JT Wood, James Y. Busbin, Daryl McGee	iou
119	Southwest Power Pool	i	Carl Monroe, Michael Desselle, Charles Yeung	
120	Southwest Transmission Cooperative, Inc.	t	Larry D. Huff	muni
121	Southwestern Power Administration	t	Tracey Stewart	fed
122	SunGard	e	Andrew Tritch	at large
123	Tampa Electric Company	m	Gail M. McKaig	iou
124	Tenaska, Inc.	g	Scott Helyer	merc
125	Tennessee Valley Authority	g	Kathy York	fed

North American Energy Standards Board Membership List
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	Organization	Seg[1]	Contact	Sub-Seg[2]
126	Tennessee Valley Authority	m	Belinda Thornton, Valerie Crockett	fed
127	Tennessee Valley Authority	t	Chuck Feagans	fed
128	TransAlta Energy Marketing Canada	m	Kim McRunnel	niou
129	Tri-State Generation and Transmission Association, Inc.	t	Keith V. Carman	muni
130	Tri-State G&T Association, Inc.	g	Janelle Marriott	muni
131	Tucson Electric Power Company	t	Raquel Aguilar, Judy Fregoso, Ed Beck	iou
132	United Illuminating Company, The	t	Rose Pysh	iou
133	Vermont Public Power Supply Authority	g	William J. Gallagher	muni
134	Westar Energy, Inc.	g	Shah Hossain, Grant Wilkerson	iou
135	Western Area Power Administration	t	JB Hite	fed
136	Western Area Power Administration	m	Jeffrey Ackerman	fed
137	Western Electricity Coordinating Council	t	Michelle Mizumori, Louise McCarren	at large
138	We Energies (Wisconsin Electric)	d	Linda Horn	iou
139	We Energies (Wisconsin Electric)	g	James R. Keller	iou
140	WPPI Energy	d	Mike Stuart	muni
141	Wisconsin Public Service Corporation	g	Christopher Plante, Charles W. Severance, Neal Balu	iou
142	Xcel Energy Inc.	m	David Lemmons	iou
Retail Gas Quadrant Members:				
1	AGL Resources Inc.	d	Gregory Becker	
2	Allegro Development	s	Kimberly Page	
3	American Public Gas Association (APGA)	d	Alonzo Weaver, Joe Stengel	
4	Asgard Energy, LLC	s	Rhett C. Shumway	
5	Capacity Center	s	Greg Lander	
6	Clarity Systems, Ltd.	s	Steve O'Neil	
7	Dominion Retail, Inc.	s	Richard A. Zollars	
8	Duke Energy Corp	d	Dan Jones	
9	Exelon Energy	s	Sheree M. Petrone	
10	International LNG Alliance	s	David Sweet	
11	Latitude Technologies	s	Leigh Spangler	
12	National Fuel Gas Distribution Corporation	d	Mike Novak	
13	Pennsylvania Office of Consumer Advocate	e	Tanya J. McCloskey	
14	Sierra Southwest Cooperative Services, Inc.	s	Rick Vogel	
15	Sprague Energy Corp.	s	Paul Scoff	
16	Systrends USA	s	Dave Darnell	
17	UGI Utilities, Inc.	d	Paul Szykman	
18	Vectren Retail, LLC	s	Tami Wilson	
19	Wisconsin Public Service Corporation	d	Dennis Derricks, Ken Thiry	

North American Energy Standards Board
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Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD

2010 Annual Plan for the Wholesale Gas Quadrant as Approved by the Board of Directors on June 24, 2010

Item Description	Completion[1]	Assignment[2]
1. Gas-Electric Interdependency		
Respond to directives of FERC Order No. 698 issued 6-25-07, Docket Nos. RM05-5-001 and RM96-1-027 as related to the NAESB reports submitted in Docket No. RM05-28-000:		
a. Provide for Enhanced Granularity for Public Utilities in Identifying Critical Operational Flow Orders. (R08020) Status: Completed	4th Q, 2009	BPS, IR/Tech jointly with WEQ BPS
2. Promotion of a More Efficient Capacity Release Market		
Review FERC Order Nos. 712 and 712A and modify NAESB standards as appropriate (Docket Nos. RM08-1-000, RM08-1-001).		
a. Review recent FERC order on flow-through of Discounted or Negotiated Rates (Docket No. RP09-70 et al, October 15, 2009) and develop business practice standards as appropriate Status: Completed, No Standards Needed.	2nd Q, 2010	BPS/Interpretations
3. Capacity Release EDI Review		
Review capacity release transactions upload and related responses to determine suitability for EDI		
a. Develop Business Practice Standards as appropriate Status: Underway	3rd Q, 2010	BPS
b. Prepare fully staffed recommendation Status: Underway	3rd Q, 2010	BPS, IR/Technical
4. Customer Security Administration		
Review and develop standards as appropriate to support Customer Security Administration Standards (Comment Submittal, 10-29-07, R08008) Status: Underway	3rd Q, 2010	BPS, IR/Technical, EDM
5. Electronic Delivery Mechanisms		
Review minimum technical characteristics in Appendices B, C, and D of the WGQ QEDM Manual, and make changes as appropriate. Status: Completed	2nd Q, 2010	EDM
6. FERC Strategic Plan FY2009-2014		
a. For the FERC Strategic Plan, under the section "Promote efficient design and operation of natural gas facilities", review and develop standards as needed to support EBB posting requirements regarding waste heat feasibility (NAESB Standard No. 4.2.23) Status: Completed	2nd Q, 2010	BPS, IR/Technical

North American Energy Standards Board
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Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD

2010 Annual Plan for the Wholesale Gas Quadrant as Approved by the Board of Directors on June 24, 2010

	Item Description	Completion[1]	Assignment[2]
7.	**Common Codes**		
a.	Review common code specifications for common location codes and determine if changes are necessary to the existing specifications to support both intrastate and interstate pipelines Status: Not Started	4th Q, 2010	BPS
	Program of Standards Maintenance & Fully Staffed Standards Work		
	Business Practice Requests	Ongoing	Assigned by the EC[3]
	Continue review against plan for migration to ANSI ASC X12 new versions as needed and coordinate such activities with DISA.	Ongoing	ANSI X12 Subcommittee
	Information Requirements and Technical Mapping of Business Practices	Ongoing	Assigned by the EC[3]
	Interpretations for Clarifying Language Ambiguities	Ongoing	Assigned by the EC[3]
	Maintenance of Code Values and Other Technical Matters	Ongoing	Assigned by the EC[3]
	Maintenance of Contracts Standards	As Requested	Contracts Subcommittee
	Maintenance of eTariff Standards	As Requested	Assigned by the EC[3]
	Provisional Activities		
1	Review and develop standards as needed, related to Docket No. RM09-2-000, (Contract Reporting Requirements of Intrastate Natural Gas Companies).		
2	Review and develop standards as needed related to the FERC Strategic Plan 2009-2014		

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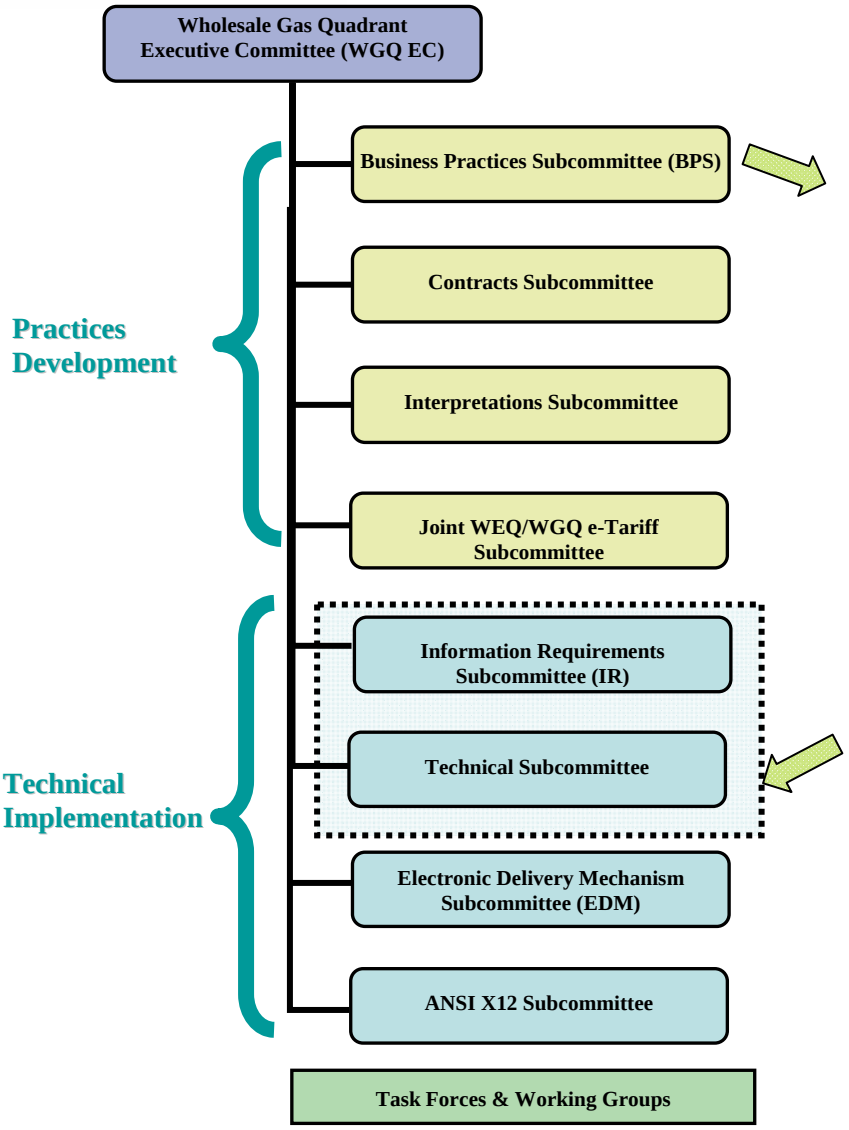

The translation of business practices to usable uniform business transactions is accomplished through the definition of information requirements for the data, and mapping of that data into specific electronic transactions. This translation is performed by IR and Technical subcommittees and completes the standards development process, often referred to as "full staffing." Both IR and Technical work in tandem to complete this crucial technical implementation activity. Until these steps have been completed, the process is incomplete, and in many cases, the business practices cannot be used.

NAESB 2010 WGQ EC and Subcommittee Leadership:

Executive Committee: Jim Buccigross, Chair and Dale Davis, Vice-Chair
Business Practices Subcommittee: Kim Van Pelt, Valerie Crockett, Mike Novak and Richard Smith
Information Requirements Subcommittee: Dale Davis
Technical Subcommittee: Mike Stender, Kim Van Pelt
Contracts Subcommittee: Keith Sappenfield
Electronic Delivery Mechanism Subcommittee: Leigh Spangler, Christopher Burden
Interpretations Subcommittee: Paul Love
Joint WEQ/WGQ e-Tariff Subcommittee: Keith Sappenfield, Jane Daly

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End Notes, WGQ 2010 Annual Plan:

[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 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.

[3] The EC assigns maintenance of existing standards on a request-by-request basis.

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NORTH AMERICAN ENERGY STANDARDS BOARD
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As Approved by NAESB Board of Directors on June 24, 2010

	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) Parallel Flow Visualization/Mitigation for Reliability Coordinators in the Eastern Interconnection. Note: Consideration should be given to provisional item 4. Work is being coordinated with the NERC IDC Working Group. Status: Underway	2010	BPS
	b) Time Error and Inadvertent (BAL-004 and BAL-006) Coordination with NERC Status: Monitor. (Upon initiation of this item by NAESB. a completion date will be determined. Based on discussions with NERC staff regarding the Balancing Authority Controls Standards Drafting Team's timeline the completion date has been changed to tbd.)	TBD	TIMTF
	c) DCS and AGC (BAL-002 and BAL-005) Coordination with NERC Status Monitor. (Upon initiation of this item by NAESB. a completion date will be determined. Based on discussions with NERC staff regarding the Balancing Authority Controls Standards Drafting Team's timeline the completion date has been changed to tbd.)	TBD	TIMTF
	d) Monitor and develop NAESB business practices as needed to complement NERC reliability standards for FAC-012 and FAC-013. Status: Monitor.	TBD	SRS
2	**Develop business practice standards in support of the FERC RM05-25-000 and RM05-17-000 (OATT Reform)[1]**		
	a) Develop version 2 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 Development is using joint standards development process with NERC. Request R050004 was expanded to include the Order No. 890 (Docket Nos. RM05-25-000 and RM05-17-000) and Order No. 890-A (Docket Nos. RM05-17-001, 002 and RM05-25-001, 002), "Preventing Undue Discrimination and Preference in Transmission Services," issued April 11, 2007). i) Group 3: Network Service On OASIS		

[1] FERC Order No. 890, issued February 16, 2007 can be accessed from the following link - http://www.naesb.org/doc_view4.asp?doc=ferc021607.doc

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	Item Description	Completion[1]	Assignment[2]
1)	Use of OASIS to Make Electronic Requests to Designate and Terminate Network Resource	3rd Q, 2010	OASIS
	Status: Underway		
2)	Ability to Query Requests to Designate and Terminate Network Resources and Allow for Queries of All Information Provided with Designation Requests	3rd Q, 2010	OASIS
	Status: Underway		
3)	Masking of Designated Network Resource Operating Restrictions and Generating Cost Information	3rd Q, 2010	OASIS
	Status: Underway		
4)	Procedural Requirements for Submitting Designations over new OASIS Functionality	3rd Q, 2010	OASIS
	Status: Underway		
5)	Specify How Designated Network Service Informational Postings are Posted on OASIS	3rd Q, 2010	OASIS
	Status: Underway		
6)	Develop standards for the treatment of OASIS Requests when the Customer Fails to Provide the Necessary Attestation	3rd Q, 2010	OASIS
	Status: Underway		
7)	Procedural Requirements for Submitting Both Temporary and Indefinite Terminations of Network Resources	3rd Q, 2010	OASIS
	Status: Underway		
8)	Procedures for Submitting and Processing Requests for Concomitant Evaluations of Transmission Requests and Temporary Terminations	3rd Q, 2010	OASIS
	Status: Underway		
ii)	Group 4: Pre-Emption; Request No. R05019		
1)	Pre-Emption	2011	OASIS
	Status: Not Started		
2)	Request No. R05019	2011	OASIS
	Status: Not Started		

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	Item Description	Completion[1]	Assignment[2]
iii)	Group 5: Paragraph 1377[2] – Group 5 work should precede group 4 work		
1)	Paragraph 1377-Coordination of Requests Across Multiple Transmission Systems Status: Underway, Scoping Group work product underway	4th Q, 2010	OASIS
2)	Re-Bid Of Partial Service across Multiple Transmission Providers' Systems Status: Underway, Scoping Group work product underway	4th Q, 2010	OASIS
3)	Group DNR requests from a system with point-to-point requests on other systems for synchronization Status: Underway, Scoping Group work product underway	4th Q, 2010	OASIS

[2] Paragraph 1377 of FERC Order No. 890, issued February 16, 2007: The Commission agrees that transmission requests across multiple transmission systems should be coordinated by the relevant transmission providers. We will not, however, amend the pro forma OATT to require such coordination. Rather, we require transmission providers working through NAESB to develop business practice standards related to coordination of requests across multiple transmission systems. In order to provide guidance to NAESB, we will articulate the principles that should govern processing across multiple systems. All the transmission providers involved in a request across multiple systems should consider a request that requires studies across multiple systems to be a single application for purposes of establishing the deadlines for rendering an agreement for service, revising queue status, eliciting deposits and commencing service. In order to preserve the rights of other transmission customers with studies in the queue, the priority for the single application should be based on the latest priority across the transmission providers involved in the multiple system request. We note that regional entities like wesTTrans are already coordinating requests across multiple transmission systems and we believe such coordination is an acceptable solution to this issue.

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	Item Description	Completion[1]	Assignment[2]
iv)	Group 6: Miscellaneous (Paragraphs 1390[3] and 1627[4] of FERC Order No. 890)		
	1) Paragraph 1390 of Order 890 – Terminations related to: deficient requests, customer failure to pay required annual reservation fee, and customer modifications to applications which are meaningfully different. Status: Not Started	2011	OASIS
	2) Paragraphs 1627 of Order 890 – Posting of additional information on OASIS regarding firm transmission curtailments Status: Not Started	2011	OASIS
	3) Redispatch Cost Posting to allow for posting of third party offers of planning redispatch services. Status: Not Started	2011	OASIS

[3] Paragraph 1390 of FERC Order No. 890, issued February 16, 2007: We will not modify the pro forma OATT to address requests to allow the transmission provider to terminate idle transmission service requests. NAESB's business practice 001-4.11 allows the transmission provider to retract a request if the transmission customer does not respond to an acceptance within the time established in NAESB business practice standard 001-4.13. Therefore, we interpret TDU Systems comments to refer to circumstances when a transmission customer fails to respond to the transmission provider's request for additional information during the course of a request study. As discussed above, by the time the transmission provider offers a system impact study agreement, it should have all of the information that it needs to complete the study. Pursuant to section 17.4 of the pro forma OATT, the transmission provider can deem a transmission service request deficient if the transmission customer does not provide all of the information the transmission provider needs to evaluate the request for service. We will revise section 17.7 of the pro forma OATT so that the transmission provider is able to terminate a request for transmission service if a transmission customer that is extending the commencement of service does not pay the required annual reservation fee within 15 days of notifying the transmission provider that it would like to extend the commencement of service. We will not change the pro forma OATT to allow the transmission provider to terminate a transmission service request if the transmission customer changes its application for service. We believe the existing pro forma OATT is sufficient to allow a transmission provider to manage situations where the transmission customer modifies its application for service to the point that the customer is requesting transmission service that is meaningfully different than its initial request.

[4] Paragraph 1627 of FERC Order No. 890, issued February 16, 2007: We agree with suggestions for the posting of additional curtailment information on OASIS and, therefore, require transmission providers, working through NAESB, to develop a detailed template for the posting of additional information on OASIS regarding firm transmission curtailments. Transmission providers need not implement this new OASIS functionality and any related business practices until NAESB develops appropriate standards. These postings must include all circumstances and events contributing to the need for a firm service curtailment, specific services and customers curtailed (including the transmission provider's own retail loads), and the duration of the curtailment. This information is in addition to the Commission's existing requirements: (1) when any transmission is curtailed or interrupted, the transmission provider must post notice of the curtailment or interruption on OASIS, and the transmission provider must state on OASIS the reason why the transaction could not be continued or completed; (2) information to support any such curtailment or interruption, including the operating status of facilities involved in the constraint or interruption, must be maintained for three years and made available upon request to the curtailed or interrupted customer, the Commission's Staff, and any other person who requests it; and, (3) any offer to adjust the operation of the transmission provider's system to restore a curtailed or interrupted transaction must be posted and made available to all curtailed and interrupted transmission customers at the same time.

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	Item Description	Completion[1]	Assignment[2]
b)	Develop the needed business practices as companion to the NERC standards for ATC related efforts		
i)	Develop standards to support existing Request No. R05004.		
1)	The processing of transmission service requests, which use TTC/ATC/AFC, in coordination with NERC changes to MOD 001 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 Status: Underway	3rd Q, 2010	OASIS
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)	Network Services: Determine and develop needed business practice standards or other support is needed to support use of OASIS for Network Service transactions (R04006E). (Related to AP 2(a)(iii)) Status: Underway	3rd Q, 2010	OASIS
ii)	Registry (TSIN): Determine and develop needed business practice standards to support the registry functions currently supported by NERC (R04037, R06027).		
1)	Transition the TSIN Registry from NERC to NAESB as the enhanced Electric Industry Registry (EIR), (R06027). Status: Underway	2010	NAESB/NERC Administration, JESS
iii)	Document procedures used to implement the displacement/interruption terms of the Pro Forma tariff (R05019). Status: Deleted as a duplicate of 2009 AP item 2.a.ii.2		
iv)	Make remaining incremental enhancements to OASIS as an outgrowth of the NAESB March 29, 2005 conference on the future of OASIS (R05026). Scoping statement completed by SRS and assignments made to BPS and OASIS.		
1)	Eliminate Masking of TSR tag source and sink when requested status is denied, withdrawn refused, displaced, invalid, declined, annulled or retracted Status: Not Started	2011	OASIS
2)	Initiate standard that eliminates the disparity of posting "sensitive" information. This standard should also include procedures of user certification that allows access to this class of information. Status: Underway (upon further development of this item by NAESB, a completion date will be determined)	2011	OASIS

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	Item Description	Completion[1]	Assignment[2]
3)	Enhance the TSR result postings to allow showing of (i) limiting transmission elements and (ii) available generation dispatch options that would allow acceptance of reservation request. Status: Not Started (upon initiation of this item by NAESB, a completion date will be determined)	2011	OASIS
v)	Develop, coordinate interoperability testing, and implement e-Tag version 1.8.1 Status: Completed	1st Q, 2010	JESS
vi)	Review and correct WEQ-004 Coordinate Interchange Business Practice Standard as needed based on activities in NERC Project 2008-12, Coordinate Interchange Standards Revisions and supporting EOP-002-2 R4 and R6. [note: this is a new item] Status: Underway Completion date dependent upon coordination activities with NERC	2010	JESS
b)	Develop and/or maintain standard communication protocols and cyber-security business practices as needed.		
i)	Develop PKI certification program for e-Tag and OASIS Status: Not Started (upon initiation of this item by NAESB, a completion date will be determined)	2010	Board Certification Program Committee
ii)	Develop PKI standards for OASIS. Status: Not Started (upon initiation of this item by NAESB, a completion date will be determined)	2011	OASIS
iii)	Develop Industry Implementation Plan for meeting PKI Standard requirements for e-tagging. Status: Underway. Full e-Tag implementation (server & client side) is linked to the transition of the Registry from NERC to NAESB and NAESB implementation.	TBD – dependent on item above (i) and EIR	JESS

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	Item Description	Completion[1]	Assignment[2]
4	**Review and develop business practices standards to Demand Response, Demand Side Management and Energy Efficiency Programs** 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.		
a)	Review the NAESB Business Practices for Measurement and Verification of Wholesale Electricity Demand Response (WEQ-015) in conjunction with the IRC developed Demand Response Matrix and identify business practice requirements that could be improved or made clearer through the addition of specific technical detail. The wholesale and retail demand response work groups and the Smart Grid Standards Subcommittees should actively and timely communicate and coordinate work products to ensure consistency between the three work groups. Each work group should take into account the work products developed by the other. Status: In Progress	Phase 2	WEQ Section of the Joint WEQ/REQ DSM-EE Subcommittee
b)	For each performance evaluation type/service type combination identified in WEQ-015, using the IRC matrix as a starting point, assess and determine what standards or guidelines, if any, should be developed to aid all participants in the use of measurement and verification methods for demand response programs in organized wholesale electric markets. If the determination is made that standards or guidelines will be developed, those items will be added as sub-items to 4(b). Status: In Progress	Phase 2	WEQ Section of the Joint WEQ/REQ DSM-EE Subcommittee
c)	Develop glossary for business practice standards Status: Ongoing	Ongoing	Joint WEQ/REQ DSM Subcommittee
d)	Develop business practice standards used to measure and verify reductions in energy and demand from energy efficiency in wholesale and retail markets.[3] This includes developing business practice standards to measure and verify energy reductions that are made to comply with a Renewable Portfolio Standard that included energy efficiency or a stand-alone Energy Efficiency Portfolio Standard. Status: Underway	4th Q, 2010	Joint WEQ/REQ DSM-EE Subcommittee
e)	Create common interfaces and data structures necessary for enrolling DR sites into a DR program (Request No. R10002) Status: Not Started	4th Q, 2010	Joint WEQ/REQ DSM-EE Subcommittee with coordination with Smart Grid Standards Task Force and REQ BPS

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	Item Description	Completion[1]	Assignment[2]
5	**Maintain existing body of Version 2.x standards**		
a)	Make consistency changes to Version 2.2 standards as directed by the WEQ Leadership Committee on December 12, 2007 OASIS Consistency Changes (R08001, R08002, R08003, R08005) Status: Not Started (upon initiation of this item by NAESB, a completion date will be determined)	2011	OASIS
b)	Consistent with ¶51 of FERC Order No. 890-A, add AFC and TFC values to the "System_Attribute" data element of the NAESB Standard WEQ-003: OASIS S&CP Data Dictionaries. (R08011) Status: Not Started. This Standards Request was assigned to the OASIS in May 2008.	2011	OASIS
c)	Correct WEQ 013-2.6.7.2. – Resale off OASIS (R08027) Status: Not Started	TBD	OASIS
d)	Add language to WEQ-001-4 Online Negotiation and Confirmation process to clarify Table 4-3 (R09003) Status: Not Started	TBD	OASIS
e)	Create a new OASIS mechanism that allows for the merger of like reservations without the use of the resale mechanism (R09015) Status: Not Started	TBD	OASIS
6.	**Develop Smart Grid Wholesale and Retail Electric Standards -** The wholesale and retail demand response work groups and the Smart Grid task force should actively and timely communicate and coordinate work products to ensure consistency between the three work groups. Each work group should take into account the work products developed by the other.		
a)	Develop requirements and use cases for PAP 03 – Pricing Model		
i).	Phase 1 Status: Completed	1st Q, 2010	Joint WEQ/REQ SGS Subcommittee
ii)	Phase 2 Status: Underway	3rd Q, 2010	Joint WEQ/REQ SGS Subcommittee
b)	Develop requirements and use cases for PAP 04 – Scheduling Model		
i)	Phase 1 Status: Completed	1st Q, 2010	Joint WEQ/REQ SGS Subcommittee
ii)	Phase 2 Status: Underway	3rd Q, 2010	Joint WEQ/REQ SGS Subcommittee
c)	Develop requirements and use cases for PAP 09 – Demand Response/Distributed Energy Resources		

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	Item Description	Completion[1]	Assignment[2]
i)	Phase 1 Status: Completed	1st Q, 2010	WEQ Section of the Joint WEQ/REQ SGS Subcommittee
ii)	Phase 2 Status: Underway	3rd Q, 2010	WEQ Section of the Joint WEQ/REQ SGS Subcommittee
d)	Develop standards to support PAP 10 – Standards Energy Usage Information		
i)	Act as a convener (develop and implement a plan to expedite harmonized standards development and adoption within the associated standards bodies) and develop business practice standards as needed and assigned to NAESB for PAP 10 – Standard Energy Usage Information Status: Completed	2nd Q, 2010	Joint WEQ/REQ PAP 10 SGS Subcommittee
ii)	Develop Information Model and related business practices Status: Underway	4th Q, 2010	Joint WEQ/REQ PAP 10 SGS Subcommittee
7.	**Develop or modify standards to Support FERC Order No. 676-E, (Docket No. RM 05-5-013)**		
a)	Review standards 001-14.1.3 and 001-15.1.2 based on FERC Order No. 676-E (See ¶ 39[5]) Status: Not Started	2011	OASIS
b)	Develop standards to support the Transmission Provider right to reassess the availability of conditional firm (See ¶ 72[6]) Status: Not Started	2011	OASIS

[5] 39. In regards to Entergy's question of whether the transmission provider's calculated and posted available flowgate capability values should be used to fulfill the posting requirements set forth in Standard 001-14 and 001-15 in instances where there is no requirement to convert this calculation to available transfer capability values, we agree with Entergy that this requirement can be met by the transmission provider posting its available flowgate capability values. As to EPSA's argument that Standard 001-15 falls short of the goals of Order No. 890, we find that, with the exception of Standard 001-15.1.2, compliance with Standard 001-15 provides all of the information required by Order No. 890. However, Standards 001-14.1.3 and 001-15.1.2 permit transmission providers to post an available transfer capability change narrative within five business days of meeting the criteria under which a narrative is required to be posted. In Order No. 890, the Commission rejected calls for delays prior to posting data and required posting as soon as possible. We do not find the NAESB standard meets this criterion and therefore decline to incorporate Standards 001-14.1.3 and 001-15.1.2 by reference. Transmission providers must post their narratives as soon as feasibly possible. Posting within one day would appear in most cases to be reasonable.

[6] 72. However, we reiterate here the Commission's finding in Order No. 890 that a transmission provider is permitted to extend its right to reassess the availability of conditional firm service. Since the Version 002.1 Standards do not specifically address this issue, we would ask the industry, working through NAESB, to continue to look at additional business practice standards facilitating a transmission provider's extension of its right to perform a reassessment

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	Item Description	Completion[1]	Assignment[2]
c)	Prepare status reports every six months regarding the development of standards for the coordination of transmission service requests across multiple transmission systems (See ¶ 105[7]). This annual plan item is tied to Annual Plan Item 2(a)(iii) Status: Not Started	Ongoing	NAESB Office

[7] 105. We agree that insufficient progress has been made on this issue. While we acknowledge that development of standards addressing this issue is included in NAESB's 2009 WEQ Annual Plan, we nevertheless urge NAESB to address this issue as soon as possible. Accordingly, we request that NAESB provide the Commission with a status report concerning its progress on this issue every six months, counting from the date this final rule is published in the Federal Register, until NAESB's adoption of the applicable standard(s).

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as Approved By the NAESB Board of Directors on March 25, 2010 with Suggested Changes from the WEQ EC on May 5, 2010 and the WEQ Leadership on June 23, 2010

PROVISIONAL ITEMS

1 Develop and or modify business practices related to support of NERC effort on the NERC Resources and Transmission Adequacy (Project 2009-05 Resource Adequacy Assessment).

2 Develop business practices for allocating capacity among requests received during a submittal window Order 890-A (Docket Nos. RM05-17-001, 002 and RM05-25-001, 002 - Paragraph 805).

3 Determine any needed NAESB action in support of the Interchange Distribution Calculator (IDC) and develop any necessary standards.

4 Prepare recommendations for future path for TLR (equity concerns) in concert with NERC, which may include alternative congestion management procedures[4]. Work on this activity is dependent on completing 2010 WEQ Annual Plan 1.a (Parallel Flow Visualization/Mitigation for Reliability Coordinators in the Eastern Interconnection).

5 Develop complementary standards that align with NERC Project 2008-01 Voltage and Reactive Control, for which a white paper is expected after the SAR is authorized to proceed by the NERC Standards Committee.

6 *Provisional Item No. 6 was added to the 2010 Annual Plan as Item No. 1(d).*

7 Determine NAESB action needed to support FERC Action Plan for Smart Grid Technology.

8 Develop business practice standards for cap and trade programs for green house gas

9 Conduct assessment to determine if Electric Industry Requirements documented in WEQ-011 Gas / Electric Coordination should be considered reliability requirements and transition to NERC.

10 Develop needed business practice standards for organization/company codes for NAESB standards – and address current issues on the use of DUNs numbers. Common code usage is linked to the transition of the Registry from NERC to NAESB.

11 Support the second phase of retail development of model business practice standards for demand response programs (Shown as Item 3e on the Retail 2010 Annual Plan).

12 Review the need for, and develop standards where appropriate, in response to issues raised by FERC's National Action Plan on Demand Response.

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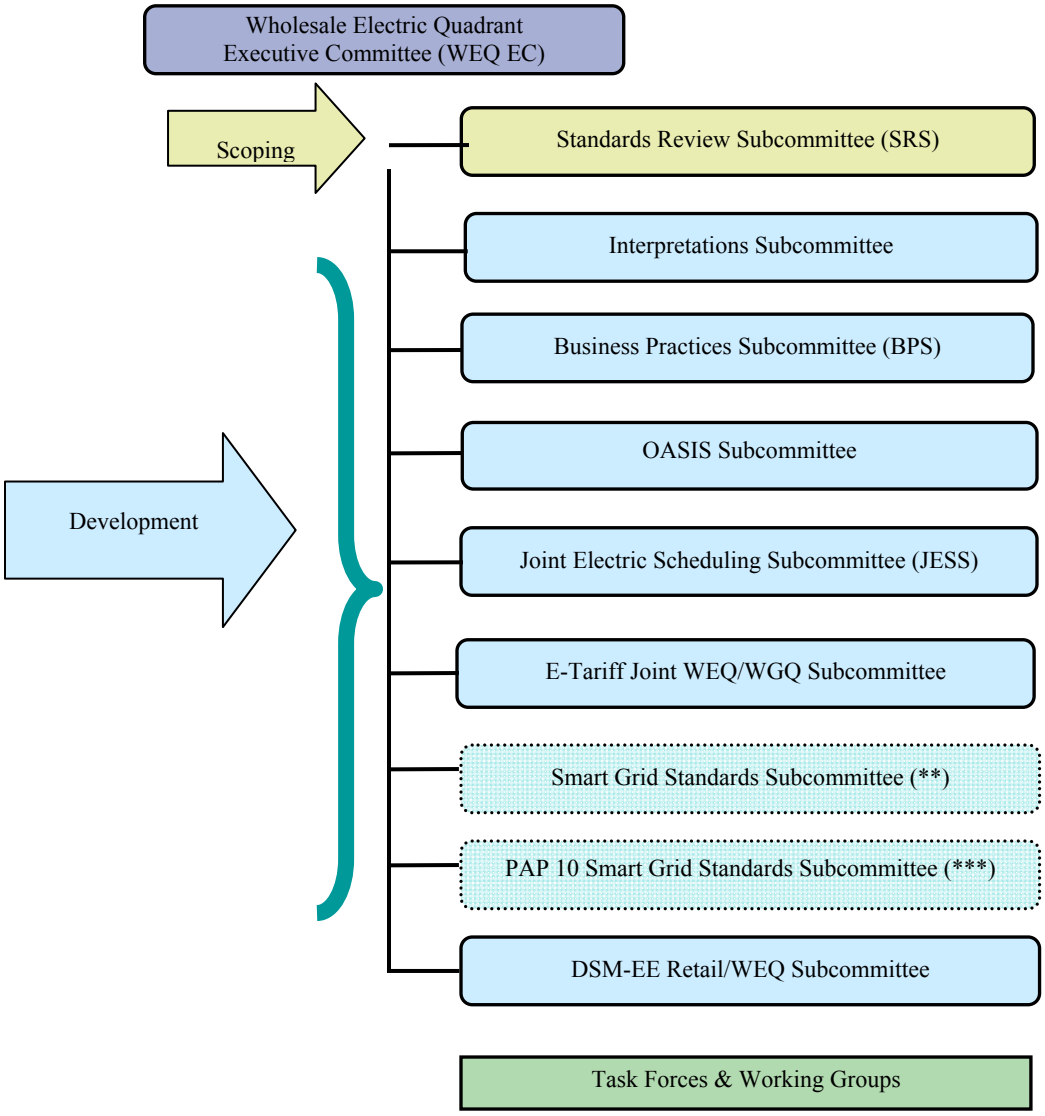
WHOLESALE ELECTRIC QUADRANT EXECUTIVE COMMITTEE AND SUBCOMMITTEE STRUCTURE



NAESB WEQ EC and Subcommittee Leadership:
Executive Committee: Kathy York (WEQ EC Chair) and Alan Johnson (WEQ EC Vice Chair)
Standards Review Subcommittee: Narinder Saini, Ed Skiba
Interpretations Subcommittee: Ed Skiba
Business Practices Subcommittee & Task Forces: Jim Busbin (TLR), Ed Skiba
Open Access Same Time Information System (OASIS): Paul Sorenson, J.T. Wood, Marcie Otondo
Joint Electric Scheduling Subcommittee (JESS): Bob Harshbarger (NAESB), Clint Aymond (NERC)
e-Tariff Joint WEQ/WGQ Subcommittee (e-Tariff): Jane Daly (WEQ), Keith Sappenfield (WGQ)
DSM-EE REQ/WEQ Subcommittee: Ruth Kiselewich and David Koogler (Retail), Roy True and Paul Wattles (WEQ)

(**) The Smart Grid Standards Subcommittee is a joint group of the retail electric and wholesale electric quadrants with other standards development groups such as OASIS (Organization for the Advancement of Structured Information Standards, not Open Access Same Time Information Systems related to NAESB standards and FERC actions), CalConnect, FIX and UCAIug, among others. Direction may be given from NIST, DoE or FERC and the group reports jointly to the NAESB Board Smart Grid

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Strategic Steering Committee and the WEQ EC. The group is chaired by Brent Hodges, Joe Zhou, Wayne Longcore and Robert Burke.

(***) The PAP 10 Smart Grid Standards Subcommittee is a joint group of the retail electric and wholesale electric quadrants with other standards development groups such as OASIS, UCAIug, OpenADE, ZigBee, ASHRAE, EIS Alliance, NARUC and includes other groups. Direction may be given from NIST, DoE or FERC and the group reports jointly to the NAESB Board Smart Grid Strategic Steering Committee and the REQ EC. The group is chaired by Brent Hodges, Phil Precht, Cathy Wesley/Heather Sanders, Sharon Dinges, David Kaufman, Brad Ramsay, Tobin Richardson and Ed Koch.

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End Notes WEQ 2010 Annual Plan:

[1] Dates in the completion column are by end of the quarter for completion by the assigned committee, sub-committee or task force. The dates do not necessarily mean that the standards are fully staffed 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 sub-committee structure can be found at the end of the annual plan document.

[3] Energy efficiency may be a wholesale product, such as capacity. Energy efficiency in retail markets may be from individual energy efficiency measures at the project level or a portfolio of projects that make up an energy efficiency program.

[4] For additional information, please see comments submitted by PJM and MISO for this Annual Plan Item: http://www.naesb.org/pdf3/weq_aplan102907w1.pdf.

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December 10, 2009

TO: NAESB Executive Committee
FROM: Rae McQuade
RE: Schedule of 2010 Meetings

Below is the schedule of 2010 meetings for the Board of Directors, Advisory Council and Executive Committee.

2010 Calendar of Board and Advisory Council Meetings

Date	Meeting	Location
February 13	Advisory Council Meeting	Washington D.C. – Renaissance Washington Hotel (in conjunction with NARUC Winter Meeting)
March 25	Board of Directors	Houston – Marriott IAH
June 24	Board of Directors	Houston – Marriott IAH
September 23	Board of Directors, Meeting of the Members and Strategic Session	Houston – Marriott IAH
December 9	Board of Directors	Houston – Marriott IAH

2010 Calendar of Executive Committee Meetings

Date	Meeting	Location
February 2-4	Executive Committee (WEQ, Retail, WGQ)	Phoenix, AZ hosted by Salt River Project
May 4-6	Executive Committee (WEQ, Retail, WGQ)	Harrisburg, PA hosted by the Pennsylvania PUC
August 17-19	Executive Committee (WEQ, Retail, WGQ)	Colorado Springs, CO hosted El Paso Western Pipeline
October 26-28	Executive Committee (WEQ, Retail, WGQ)	Glen Allen, VA hosted by Dominion

The Retail Executive Committee meetings will be held by conference call and web cast unless otherwise determined by the retail leadership. The Wholesale Gas Executive committee meetings may be changed to only be held as a conference call/web cast dependent on the agenda items.