

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

NORTH AMERICAN ENERGY STANDARDS BOARD RETAIL QUADRANT EXECUTIVE COMMITTEE MEETING MATERIALS

Wednesday, May 1, 2013 -- 10:00 am to 4:00 pm E

ACES, Carmel, IN



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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING RETAIL ENERGY QUADRANT DRAFT AGENDA

 $Wednesday, May~1, 2013-10:00~am~to~4:00~pm~E\\ ACES, 4140~West~99^{th}~Street, Carmel, Indiana-Board~Room$

#	Agenda Item	Page
1.	Welcome	
	Antitrust Guidelines http://www.naesb.org/misc/antitrust_guidance.doc (Guidance)	4
	Welcome to members and attendees	
	 Quorum Establishment: Roll Call of Retail EC Members and Alternates: <u>http://www.naesb.org/pdf4/ec_terms.pdf</u> (EC) and http://www.naesb.org/pdf4/alt_ec_members.pdf (EC Alt) 	5
2.	Consent Agenda (simple majority to approve)	
	• Adoption of Agenda: http://www.naesb.org/pdf4/ec043013a.docx (Agenda)	16
	 Adoption of the EC Meeting Minutes from February 20, 2013: http://www.naesb.org/pdf4/retail-ec022013dm.docx (Draft Minutes) 	26
	 Adoption of changes to the 2013 Retail Annual Plan proposed by the Retail Leadership: http://www.naesb.org/pdf4/retail-leadership040313a1.docx (Annual Plan), with changes proposed after agenda was posted: http://www.naesb.org/misc/retail-2013_annual_plan042313.docx 	40
3.	Interim Structure of the Retail Quadrants as approved by the Board of Directors on April 4, 2013: http://www.naesb.org/pdf4/bd040413a7.docx	46
4.	Discussion on the inclusion of EDI transactions to support net metering in Book 3 – "Billing and Payments"	
5.	Review and Consider for Vote 2012 Retail Annual Plan Item No. 1.a – Develop Technical Electronic Implementation Standards and Data Dictionaries for RXQ.10 - Retail Customer Enrollment, Drop and Account Information Change (super majority vote)	
	• Recommendation: http://www.naesb.org/pdf4/retail 2013 api 1a rec.doc	83
	 Attachment 1 – Change Request: http://www.naesb.org/pdf4/retail 2012 api 10b rec attach.doc 	85
	 Attachment 2 – Change Response: http://www.naesb.org/pdf4/retail-2013-api-1a-rec-attach2.rtf 	87
	 Attachment 3 – Enrollment Response: http://www.naesb.org/pdf4/retail 2013 api 1a rec attach3.rtf 	101
	 Attachment 4 – Enrollment Request: http://www.naesb.org/pdf4/retail-2013-api-1a-rec-attach4.rtf 	141
	• Attachment 5 – Drop Request: http://www.naesb.org/pdf4/retail-2013-api-1a-rec-attach5.rtf	162
	• Attachment 6 – Drop Response: http://www.naesb.org/pdf4/retail-2013-api-1a-rec-attach6.rtf	183
	• Request for Formal Comment: http://www.naesb.org/pdf4/retail-120412 reqcom.doc - comment period ended on March 13, 2013	197
	No Comments Submitted	
6.	Subcommittee / Development Updates (meeting materials for updates will be provided by leadership as they are available):	
	Triage Subcommittee: http://www.naesb.org/pdf4/tr042213a.docx	198
	Business Practices Subcommittee (BPS)	
	BPS Texas Task Force	

Information Requirements & TEIS Subcommittee



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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING RETAIL ENERGY QUADRANT DRAFT AGENDA

Wednesday, May 1, 2013 – 10:00 am to 4:00 pm E ACES, 4140 West 99th Street, Carmel, Indiana – Board Room

	ACES, 4140 West 99 th Street, Carmel, Indiana – Board Room	
#	Agenda Item	Page
	Glossary Efforts	
	 Smart Grid Standards Development Subcommittee Task Forces: http://www.naesb.org/misc/smart_grid_update_042213.docx 	199
7.	Publication Schedule Review	
	WGQ Publication Schedule (Version 2.1): http://www.naesb.org/misc/wgq_publication_schedule_ver2_1.doc	200
	 WEQ Publication Schedule (Version 3.1): http://www.naesb.org/misc/weq_publication_schedule_ver3_1.doc 	216
	• Retail Publication Schedule (Version 2.1): http://www.naesb.org/misc/retail_publication_schedule_ver2_1.doc	219
8.	Board of Directors, Board Committee and Regulatory Updates:	
	• Board Meeting April 4, 2013: http://www.naesb.org/pdf4/bd040413dm.docx	222
	 Membership Update: http://www.naesb.org/misc/membership report 033113.doc (Membership Report) 	233
	Board Revenue Efforts: http://www.naesb.org/pdf4/bd revenue032013notes.docx (3-20-13 Notes), http://www.naesb.org/pdf4/bd revenue032713notes.docx (3-27-13 Meeting Notes), http://www.naesb.org/pdf4/bd revenue032713a1.doc (Self Executing Waiver), http://www.naesb.org/pdf4/bd revenue032713a3.doc (Self Executing Waiver Procedure), http://www.naesb.org/pdf4/bd revenue032013w5.pdf (Correspondence from Michael Desselle, 3-1-13)	243
	• Parliamentary Committee: http://www.naesb.org/pdf4/parliamentary051513a.docx (May 15 Agenda)	258
	• Managing Committee: http://www.naesb.org/pdf4/managing032713notes.docx (March 27 Notes)	261
	Regulatory Updates:	
	 February 21, 2013 - FERC Final Rule - NAESB Standards for Business Practices and Communication Protocols for Public Utilities (Demand Response and Energy Efficiency Measurement and Verification Standards) (Docket No. 05-5-020, Order No. 676-G): http://www.naesb.org/pdf4/ferc order 676-G NAESB m&v-ee standards 022113.pdf 	262
	 April 8, 2013 - NAESB Comments in response to the National Institute of Standards and Technology (NIST) Request for Information on "Developing a Framework to Improve Critical Infrastructure Cybersecurity.": http://www.naesb.org/pdf4/nist_040813 naesb rfi comments.pdf 	309
	 April 18, 2013: NAESB Copyright Procedure Regarding Member and Purchaser Self-Executing Waiver: http://www.naesb.org/pdf4/ferc041813 copyright waiver procedure report.pdf 	321
	 Gas Electric Harmonization - FERC Technical Conference April 25, 2013: http://www.naesb.org/pdf4/ferc030513notice-tech-conference-ad12-12.doc 	322
9.	Other Business	328
	Consider Restructuring Retail Annual Plan	
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- ANSI Energy Efficiency Standardization Coordination Collaborative
- State Commission Activity in Cybersecurity
- Pennsylvania PUC Order: Electronic Data Exchange Working Group: http://www.naesb.org/pdf4/retail-ec022013w1.doc
- Meeting Schedule 2013: http://www.naesb.org/pdf4/2013 schedule.pdf



NORTH AMERICAN ENERGY STANDARDS BOARD

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Antitrust and Other Meeting Policies

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 2013 EXECUTIVE COMMITTEE TERMS 1 – Wholesale Gas Quadrant

PRODUCERS SEGMENT		TERM END:
Rhonda Denton	Regulatory Advisor, BP Energy Company	12-31-2014
Pete Frost	Director - Regulatory Affairs, ConocoPhillips Gas and Power Marketing	12-31-2014
Chuck Cook	Manager - Regulatory Affairs, Chevron	12-31-2013
Richard D. Smith	Regulatory & Compliance Manager, Noble Energy, Inc.	12-31-2013
Randy E. Parker	Global Regulatory Advisor, ExxonMobil Gas and Power Marketing Company (a division of ExxonMobil Corporation)	12-31-2013
PIPELINE SEGMENT		
Mark Gracey	Manager of Contract Management, Tennessee Gas Pipeline Company, LLC	12-31-2014
Kathryn Burch	Project Manager - Standards and Regulatory, Spectra Energy	12-31-2014
Dale Davis	Industry Standards Consultant, Williams Gas Pipeline	12-31-2013
Kim Van Pelt	Manager of Regulatory Compliance, Boardwalk Pipeline Partners, LP	12-31-2015
Tom Gwilliam	Senior Business Analyst, Iroquois Gas Transmission System	12-31-2015
LOCAL DISTRIBUTION C	COMPANY (LDC) SEGMENT	
Abdessamad Nassif	Gas and Forward Trader Sr., Colorado Springs Utilities	12-31-2014
Phil Precht	Management Consultant – Pricing & Regulatory Services Department, Baltimore Gas and Electric Company	12-31-2014
Archie Hickerson	Director - Regulatory Affairs and Planning, AGL Resources	12-31-2013
Pete Connor	Contractor, American Gas Association	12-31-2015
Craig Colombo	Energy Trader III, Dominion Resources	12-31-2015
END USERS SEGMENT		
VACANCY		12-31-2014
Valerie Crockett	Senior Program Manager - Energy Markets & Policy, Tennessee Valley Authority	12-31-2014
Lori-Lynn C. Pennock	Senior Fuel Supply Analyst, Salt River Project	12-31-2013
Art Morris	Gas Originator – Energy Marketing & Trading, Florida Power & Light Company	12-31-2013
Tina Burnett	Natural Gas Resources Administrator, The Boeing Company	12-31-2013

¹ NAESB Executive Committee Designated Alternates Selection Process: http://www.naesb.org/pdf4/designated_alternates_selection_process.docx



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SERVICES SEGMENT		
Rakesh Agrawal	Executive Vice President, Blackstone Technology Group	12-31-2014
Lisa Simpkins	Vice President, Energy Policy – Natural Gas, Constellation Energy Commodities Group	12-31-2014
Leigh Spangler	CEO, Latitude Technologies, Inc.	12-31-2013
Jim Buccigross	Vice President, 8760 Inc.	12-31-2013
Jeff Jarvis	Senior Counsel, Encana Marketing (USA), Inc.	12-31-2013

EXECUTIVE COMMITTEE OFFICERS: Jim Buccigross is WGQ chairman of the Executive Committee, Dale Davis is WGQ vice chairman; Phil Precht is the REQ chairman, Jim Minneman is REQ vice chairman, Dan Jones is the RGQ chairman, Kathy York is the WEQ chairman and Bob Harshbarger is the WEQ vice chairman.



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NORTH AMERICAN ENERGY STANDARDS BOARD 2013 EXECUTIVE COMMITTEE TERMS – Retail Quadrant

RETAIL ELECTRIC UTIL	ITIES SEGMENT	TERM END:
Phil Precht	Management Consultant - Pricing and Regulatory Services Department, Baltimore Gas & Electric Company	12-31-2013
Patrick Eynon	Supervisor – Retail Access, Ameren Services	12-31-2013
VACANCY		12-31-2013
Judy Ray	Industrial Segment Manager – Contract Administrator, Alabama Power Company	12-31-2014
VACANCY		12-31-2014
VACANCY		12-31-2014
RETAIL GAS MARKET IN	NTERESTS SEGMENT	
Dan Jones	Senior Account Manager - Customer Choice, Duke Energy	12-31-2013
VACANCY		12-31-2013
VACANCY		12-31-2013
Richard Zollars	Director - Data and Billing, Dominion Retail, Inc.	12-31-2014
VACANCY		12-31-2014
VACANCY		12-31-2014
RETAIL ELECTRIC END	USERS/PUBLIC AGENCIES SEGMENT	
James Bradford Ramsay	General Counsel – Supervisor/Director – NARUC Policy Department, National Association of Regulatory Utility Commissioners (NARUC)	12-31-2013
Dennis Robinson	Director - Market & Resource Administration, ISO New England	12-31-2013
VACANCY		12-31-2013
Christine Wright	Senior Policy Analyst, Public Utility Commission of Texas	12-31-2014
Susan Anthony	Retail Market Liaison, Electric Reliability Council of Texas (ERCOT)	12-31-2014
VACANCY		12-31-2014
RETAIL ELECTRIC SERV	ICE PROVIDERS/SUPPLIERS SEGMENT	
Bill Barkas	Manager of Retail State Government Relations, Dominion Retail, Inc.	12-31-2013
Jim Minneman	Controller, PPL Solutions, LLC	12-31-2013
VACANCY		12-31-2013
Wendell Miyaji	Vice President – Energy Sciences, Comverge, Inc.	12-31-2014
VACANCY		12-31-2014
VACANCY		12-31-2014



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NORTH AMERICAN ENERGY STANDARDS BOARD 2013 EXECUTIVE COMMITTEE TERMS – Wholesale Electric Quadrant

TRANSMISSION SEGM	ENT	TERM END:	SUBSEGMENT:
Patrick McGovern	Manager - System Services, Georgia Transmission Corporation	12-31-2013	Muni/Coop
Charles (Chuck) B. Feagans III	Manager, Operations Performance & Standards, Tennessee Valley Authority	12-31-2014	Fed/State/Prov.
Corey Sellers	Transmission Service Manager, Southern Company	12-31-2014	IOU
Narinder Saini	Policy Consultant, Entergy Services, Inc.	12-31-2013	IOU
Robert Bean	Transmission Services Trading Section Leader, Arizona Public Service Company	12-31-2014	at large
Bob Harshbarger	OASIS Trading Manager, Puget Sound Energy	12-31-2013	at large
Craig L. Williams	Market Interface Manager, Western Electricity Coordinating Council (WECC)	12-31-2013	At-Large
GENERATION SEGMEN	NT		
William J. Gallagher	Special Contracts Chief, Vermont Public Power Supply Authority	12-31-2013	Muni/Coop
Kathy York	Senior Program Manager – Energy Markets, Policy, and Compliance Reporting, Tennessee Valley Authority	12-31-2014	Fed/State/Prov.
VACANCY		12-31-2014	at large
John Ciza	Project Manager Energy Policy and Regulatory Affairs, Southern Company Services	12-31-2013	IOU
Alan Johnson	Director Regulatory Compliance – Commercial Operations & Commodities, NRG Energy, Inc.	12-31-2014	Merchant
Brad Cox	Vice President – Markets & Compliance, Tenaska Power Services	12-31-2013	Merchant
VACANCY		12-31-2013	at large
Marketers/Broker	RS SEGMENT		
Chris Norton	Director of Market Regulatory Affairs, American Municipal Power, Inc.	12-31-2014	Muni/Coop
Luis A. Suarez	Program Manager Information Security, Tennessee Valley Authority	12-31-2013	Fed/State/Prov.
VACANCY		12-31-2014	at large
VACANCY		12-31-2013	at large
Terri K. Eaton	Director, Regulatory Administration and Compliance, Xcel Energy	12-31-2014	IOU
Roy True	Manager of Regulatory and Market Affairs, Alliance for Cooperative Energy Services Power Marketing LLC (ACES)	12-31-2013	at large



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DISTRIBUTION/LOAD S	SERVING ENTITIES (LSE) SEGMENT	TERM END:	SUBSEGMENT:
Ray Phillips	Manager of Compliance and Special Projects, Alabama Municipal Electric Authority	12-31-2014	Muni/Coop
Richard McCall	Director – Environmental and Transmission Compliance, North Carolina Electric Membership Corporation	12-31-2013	Muni/Coop
Alan Pritchard	Senior Engineer, Duke Energy Corporation	12-31-2014	IOU
VACANCY		12-31-2013	at large
VACANCY		12-31-2014	at large
Richard Gillman	Manager – Policy Development & Analysis, Bonneville Power Administration	12-31-2013	Other
VACANCY		12-31-2013	At-Large
END USERS SEGMENT			
VACANCY		12-31-2013	at large
VACANCY		12-31-2014	at large
Lou Ann Westerfield	Policy Strategist, Idaho Public Utilities Commission, rep. National Association of Regulatory Utility Commissioners	12-31-2014	Regulator
Lila Kee	Chief Product Officer and Vice President of U.S. Business Development, GMO GlobalSign, Inc.	12-31-2013	at large
Jesse D. Hurley	Chief Executive Officer, Shift Systems	12-31-2014	at large
VACANCY		12-31-2013	at large
Paul Sorenson	Vice President - Central Markets Strategy, Open Access Technology International, Inc.	12-31-2013	At-Large
INDEPENDENT GRID O	PERATORS/PLANNERS		
Jeff Schmitt	Manager - Market Analysis, PJM Interconnection, LLC	12-31-2014	
Jim Castle	Manager - Grid Operations, New York Independent System Operator, Inc.	12-31-2014	
Matt Goldberg	Director Reliability & Operations Compliance ISO New England, Inc.	12-31-2014	
Brian Jacobsen	CAISO Manager – Enterprise Model Management, California ISO	12-31-2014	
John Dumas	Director of Wholesale Market Operations, Electric Reliability Council of Texas (ERCOT)	12-31-2013	
Ed Skiba	Consulting Advisor, Standards Compliance & Strategy, Midwest ISO	12-31-2013	
Charles Yeung	Executive Director Interregional Affairs, Southwest Power Pool	12-31-2013	



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TECHNOLOGY AND SERVICES			
Jim Buccigross	Vice President Energy Industry Practice, 8760 Inc.	12-31-2014	
Andy Tritch	Senior Business Analyst, SunGard	12-31-2014	
VACANCY		12-31-2014	
VACANCY		12-31-2014	
VACANCY		12-31-2013	
TJ Ferreira	Director, Power Costs, Inc. (PCI)	12-31-2013	
VACANCY		12-31-2013	



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NORTH AMERICAN ENERGY STANDARDS BOARD 2013 EXECUTIVE COMMITTEE ALTERNATES¹ – Wholesale Gas Quadrant

PRODUCERS SEGMENT		DESIGNATION DATE
Bill Green	Vice President – Gas Sales, Devon Energy Corporation	08-01-2012
Jim Busch	Sr. Regulatory Advisor, BP Energy Company	08-01-2012
PIPELINE SEGMENT		DESIGNATION DATE
Paul Love	Director, Electronic Customer Services, Natural Gas Pipe Line Company of America	01-01-2002
Christopher Burden	Consultant e-Commerce & Service Delivery, Williams Gas Pipeline	03-01-2007
Ronald G. Tomlinson	Manager – Business Technology, Dominion Transmission, Inc.	04-13-2010
Bill Griffith	Consultant, Kinder Morgan Western Region Pipelines	01-19-2012
Randy Young	Vice President – Regulatory Compliance and Corporate Services, Boardwalk Pipeline Partners, LP	06-15-2012
Rachel A. Hogge	Business Technology Services Analyst, Dominion Transmission, Inc.	08-06-2012
Micki Schmitz	Business Systems Analyst, Northern Natural Gas	08-06-2012
Jerry Gross	Questar Pipeline Company	08-22-2012
LOCAL DISTRIBUTION CO	MPANY (LDC) SEGMENT	DESIGNATION DATE
Rick Ishikawa	Interconnect Account Manager in Capacity Products Group, Southern California Gas Company (Sempra Energy)	01-01-2002
Scott Butler	Project Manager, Energy Markets Policy Group, Consolidated Edison Company of New York, Inc.	05-31-2005
Shannon Pierce	Senior Counsel – Interstate Transactions and Gas Operations, AGL Resources	12-16-2010
Deepak Raval	NiSource FERC Specialist, NiSource Inc.	02-13-2012
END USERS SEGMENT		DESIGNATION DATE
Paul A. Jones	Senior Marketing Representative, Salt River Project	06-09-2008
Kathy York	Senior Program Manager – Energy Markets, Policy, and Compliance Reporting, Tennessee Valley Authority	01-13-2011
Mitchell Dutton	Legal Counsel, NextEra Energy Power Marketing, LLC	10-17-2012
SERVICES SEGMENT		DESIGNATION DATE
Keith Sappenfield	Director, US Regulatory Affairs, Midstream and Marketing, Encana Oil and Gas (USA), Inc.	06-09-2008
Sylvia Munson	Industry Specialist, SunGard Energy	01-24-2011
Cleve Hogarth	Vice President & Chief Commercial Officer, Quorum Business Solutions, Inc.	06-15-2012

¹ NAESB Executive Committee Designated Alternates Selection Process: http://www.naesb.org/pdf4/designated_alternates_selection_process.docx



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NORTH AMERICAN ENERGY STANDARDS BOARD 2013 EXECUTIVE COMMITTEE ALTERNATES – Retail Quadrant

RETAIL ELECTRIC UTILITI	DESIGNATION DATE	
Keith P. Hock	Director ARES Business Center, Ameren Services Company	01-01-2002
William J. Welzant	Manager – Electric Choice, Baltimore Gas and Electric Company	11-25-2007
Debbie McKeever	Market Advocate, Oncor	02-03-2010
RETAIL GAS MARKET INTI	ERESTS SEGMENT	
Joe Stengel	Manager, Federal Regulatory Affairs, Philadelphia Gas Works (American Public Gas Association (APGA))	01-01-2002
Paul Cherevka	Project Manager Data Warehouse, Dominion Retail	06-28-2005
RETAIL ELECTRIC END US	DESIGNATION DATE	
Eric Winkler	Project Manager – Demand Resource Qualification, Resource Analysis and Integration, ISO New England	06-15-2012
RETAIL ELECTRIC SERVICE PROVIDERS/SUPPLIERS SEGMENT		DESIGNATION DATE
H. Neal Allen	Energy Efficiency Manager, Southern Company Services	10-15-2009
Brandon S. Siegel	Manager - Market Management, E:SO (ista)	11-19-2009



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NORTH AMERICAN ENERGY STANDARDS BOARD 2013 EXECUTIVE COMMITTEE ALTERNATES – Wholesale Electric Quadrant

TRANSMISSION SEGMEN	VT	SUB-SEGMENT	DESIGNATION DATE
J.T. Wood	Southern Company Services	IOU	02-02-2007
Jane Daly	Rate & Regulatory Advisor, Arizona Public Service Company	IOU	03-09-2007
Ross Kovacs	Transmission Strategic Coordinator, Georgia Transmission Corporation	Muni/Coop	06-18-2009
Sarah E. Edmonds	Director of Transmission Regulation, Strategy and Policy, PacifiCorp	IOU	09-03-2010
Lori Molotch	Transmission Services Trader Senior, Arizona Public Service Company	IOU	12-21-2010
Russ Mantifel	Transmission Policy Analyst, Bonneville Power Administration	Fed/State/Prov.	12-06-2011
Chris Jones	Transmission Policy Analyst, Bonneville Power Administration	Fed/State/Prov.	12-06-2011
Clint Aymond	Senior Engineer, Entergy Services, Inc.	IOU	03-27-2012
Troy Willis	Engineer – V, System Services, Georgia Transmission Corporation	Muni/Coop	04-05-2012
GENERATION SEGMENT		SUB-SEGMENT	DESIGNATION DATE
Francis Halpin	Bonneville Power Administration	Fed/State/Prov.	01-01-2002
Lou Oberski	Director – Electric Market Policy, Dominion Resources Services, Inc (Dominion Energy Marketing, Inc.)	IOU	04-28-2008
Valerie Crockett	Senior Program Manager - Energy Markets & Policy, Tennessee Valley Authority	Fed/State/Prov.	07-05-2012
Tony Suarez	Program Manager Information Security, Tennessee Valley Authority	Fed/State/Prov.	07-05-2012
MARKETERS/BROKERS	SEGMENT	SUB-SEGMENT	
Jeff Ackerman	Manager, CRSP-Energy Mgmt., Western Area Power Administration	Fed/State/Prov	01-01-2002
Brenda Anderson	Bonneville Power Administration	Fed/State/Prov	01-01-2002
Valerie Crockett	Senior Program Manager, Energy Markets & Policy, Tennessee Valley Authority	Fed/State/Prov	01-27-2005
Joel Dison	Project Manager, Southern Company Generation and Energy Marketing (Southern Company Services, Inc.)	IOU	01-16-2008
Kevin M. Pera	Transmission Analyst, Xcel Energy, Inc.	IOU (at large)	08-12-2011
Kathy York	Senior Program Manager – Energy Markets, Policy, and Compliance Reporting, Tennessee Valley Authority	Fed/State/Prov	07-05-2012



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DISTRIBUTION/LSE SEGMENT		SUB-SEGMENT	DESIGNATION DATE
Lee Hall	Coordination Manager – Power Services, Bonneville Power Administration	Other	10-24-2008
James R. Manning	Senior Engineer – Transmission Resources, North Carolina Electric Membership Corporation	Muni/Coop	01-03-2011
Kristin Iwanechko	Manager of Standards Information, North American Electric Reliability Corporation	At-Large	10-27-2011
Michael Gildea	Reliability Standards Advisor, North American Electric Reliability Corporation (NERC)	At-Large	05-08-2012
Chris Jones	Transmission Policy Analyst, Bonneville Power Administration	Other	08-21-2012
Mike Anthony	Manager – Tariff Administration and Business Services, Duke Energy Corporation	IOU	01-16-2013
Rebecca Berdahl	Electrical Engineer, Policy Development & Analysis, Bonneville Power Administration	Other	03-01-2013
END USERS SEGMENT		SUB-SEGMENT	DESIGNATION DATE
Mark W. Hackney	Regional Director – Transmission, Open Access Technology International, Inc.	At-Large	06-29-2010
INDEPENDENT GRID O	PERATORS/PLANNERS SEGMENT	SUB-SEGMENT	DESIGNATION DATE
Paul Wattles	Senior Analyst – Market Design & Development, Electric Reliability Council of Texas (ERCOT)		06-15-2007
Bill Blevins	Sr. Market Support Analyst, Electric Reliability Council of Texas (ERCOT)		06-15-2007
Robert Coughlin	Principal Scientist Reliability & Operations Compliance, ISO New England, Inc.		06-15-2007
Dean Hartung	Manager Real Time Market Operations, PJM Interconnection, LLC		06-15-2007
Carl Monroe	Sr. Vice President Operations & Chief Operating Officer, Southwest Power Pool		06-15-2007
Greg Campoli	Supervisor – Reliability Compliance and Assessment, New York ISO		08-30-2007
Diana Pommen	Director Interjurisdictional Affairs, Alberta Electric System Operator		02-12-2008
Cheryl Mendrala	Principal Engineer, ISO New England, Inc.		03-31-2008
Jimmy Womack	Manager-Tariff Administration, Southwest Power Pool		04-03-2008
Terry Bilke	Director Standards Compliance and Strategy, Midwest ISO		03-06-2009
Eric Winkler	Project Manager – FCM and Tariff Administration, ISO New England, Inc.		06-12-2009
Marie Knox	Sr. Standards Compliance Analyst, Midwest ISO		08-31-2009



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Home Page: www.naesb.org

TECHNOLOGY AND SE	DVICES	SUR-SEGMENT	DESIGNATION DATE
Joshua Phillips	Senior Policy Analyst, Southwest Power Pool		02-06-2013
Dave Francis	Principal Advisor – Standards Compliance and Strategy, Midwest ISO		02-24-2012
Frank Koza	Executive Director – Operations Support, PJM Interconnection, LLC		02-21-2012



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April 12, 2013

TO: NAESB Wholesale Electric, Wholesale Gas and Retail Gas and Electric Quadrant Executive Committee Members,

Alternates and Interested Industry Participants

FROM: Jonathan Booe, NAESB Vice President

RE: Quadrant Executive Committee Meeting Announcements & Agendas – WGQ EC Meeting cancelled and replaced by

WGQ BPS Meeting - Highlighted with Additional Materials and Agenda Updates

NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETINGS Hosted by ACES in Carmel, IN

First, let me thank ACES and Roy True for their continued 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 in-person attendance at NAESB meetings. Below are the meeting arrangements:

Where: ACES, 4140 West 99th Street, Carmel, Indiana 46032

Contact: Veronica Thomason, 713-356-0060

When: Tuesday, April 30, 2013 -- 10:00 a.m. to 4:00 p.m. Eastern – Wholesale Electric Quadrant EC Meeting

Wednesday, May 1, 2013 -- 10:00 a.m. to 4:00 p.m. Eastern - Retail Energy Quadrant EC Meeting

Thursday, May 2, 2013 -- 9:00 a.m. to 12:00 p.m. Eastern – Wholesale Gas Quadrant BPS Meeting in lieu of the

WGQ EC Meeting

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 (naesb@naesb.org) so that proper meeting arrangements can be made by NAESB and our host. If you are an EC member and are not attending please review the process for the selection of designated alternates that may represent you at the EC meetings, and please notify the office when you RSVP that you are unable to attend. 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/weq/weq_ec.asp. If you plan to participate by conference call and web cast, the information to do so is provided in this document. The meetings, conference calls and web casts are 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 although 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 provided, along with the pdf assembled books.

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 an appropriate amount of time. 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, and upon advance request for WGQ Joint IR/Technical subcommittee meetings. The details are provided in the following table. As more room locations are known the table will be updated and reposted.

Date	Time	Meeting/Location
Monday, April 29 th	10:30 am to 12:30 pm Eastern	Retail IR/TEIS Meeting
11011day, 11p111 25	10100 um to 12100 pm 24000m	Room: Conference Room H
		Conference Call Number: 866-740-1260 Access Code: 7133562 Security Code: 4825 Web Cast: http://www.readytalk.com (please use same codes)
	1 pm to 2 pm Eastern	Retail Joint Registration Agent Task Force, Retail IR/TEIS and Retail BPS Meeting
		Room: Conference Room H
		Conference Call Number: 866-740-1260 Access Code: 7133560 Security Code: 1221 Web Cast: http://www.readytalk.com (please use same codes)
	2 pm to 5 pm Eastern	Day 1 of Retail BPS Meeting
		Room: Conference Room H
		Conference Call Number: 866-740-1260 Access Code: 7133560 Security Code: 1221 Web Cast: http://www.readytalk.com (please use same codes)
Tuesday, April 30 th	9 am to 3 pm Eastern	Day 2 of Retail BPS Meeting
		Room: Conference Room H
		Conference Call Number: 866-740-1260 Access Code: 7133560 Security Code: 1221 Web Cast: http://www.readytalk.com (please use same codes)
	10 am to 4 pm Eastern	WEQ EC Meeting
		Room: Board & Training Room
		Conference Call Number: 866-740-1260 Access Code: 7133562 Security Code: 8251 Web Cast: http://www.readytalk.com (please use same codes)
	9 am to 4 pm Eastern	Day 1 of WGQ Joint IR & Technical Subcommittees Meeting
		Room: NRCO Conference Room
		Conference Call Number: 866-740-1260 Access Code: 3560063 Security Code: 7342



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Date	Time	Meeting/Location
Wednesday, May 1st	10 am to 4 pm Eastern	Retail EC Meeting by phone/web cast – for in person attendance, please join NAESB staff at following location
		Room: Board & Training Room
		Conference Call Number: 866-740-1260 Access Code: 7133562 Security Code: 6425 Web Cast: http://www.readytalk.com (please use same codes)
	9 am to 4 pm Eastern	Day 2 of WGQ Joint IR & Technical Subcommittees Meeting
		Room: NRCO Conference Room
		Conference Call Number: 866-740-1260 Access Code: 3560063 Security Code: 7342
	10 am to 5 pm Eastern	Day 1 of WEQ OASIS Subcommittee Meeting
		Room: Jr. Board Room
		Conference Call Number: 866-740-1260 Access Code: 7133560 Security Code: 2253 Web Cast: http://www.readytalk.com (please use same codes)
Thursday, May 2 nd	9 am to 12 pm Eastern	WGQ BPS Meeting
		Room: Board & Training Room
		Conference Call Number: 866-740-1260 Access Code: 7133562 Security Code: 3825 Web Cast: http://www.readytalk.com (please use same codes)
	10 am to 3 pm Eastern	Day 2 of WEQ OASIS Subcommittee
		Room: Jr. Board Room
		Conference Call Number: 866-740-1260 Access Code: 7133560 Security Code: 2253 Web Cast: http://www.readytalk.com (please use same codes)

You can access the materials for this meeting from the NAESB web site, at the page specific for the subcommittee noted (WEQ: http://www.naesb.org/weq/default.asp, wGQ: http://www.naesb.org/weq/default.asp, and Retail: http://www.naesb.org/RGQ/default.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,

Jonathan Booe



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Conference Calling and Web Conferencing Instructions $For \ The \ Executive \ Committee \ and \ Related \ Subcommittee \ Meetings$ $April \ 30-May \ 1,2013$

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, April 30, 2013 – 10:00 am to 4:00 pm E ACES, 4140 West 99th Street, Carmel, Indiana – Board Room

Agenda Item

- 1. Welcome
 - Antitrust Guidelines: http://www.naesb.org/misc/antitrust_guidance.doc
 - · Welcome to members and attendees
 - 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/ec_terms.pdf (EC Alt)
- 2. Consent Agenda (simple majority to approve)
 - Adoption of Agenda: http://www.naesb.org/pdf4/ec043013a.docx (Agenda)
 - Adoption of the EC Meeting Minutes from February 19, 2013: http://www.naesb.org/pdf4/weq_ec021913dm.docx
 (Draft Minutes)

 (Supplemental material may be available prior to the meeting which could include redlines to the draft minutes)
 - Adoption of changes to the 2013 WEQ Annual Plan proposed by the WEQ
 Leadership: http://www.naesb.org/pdf4/bd040413a5.docx (Annual Plan) (no changes have been identified by WEQ EC and Subcommittee leadership, but if changes are made prior to the meeting, supplemental materials will be provided)
- Review and consider for vote WEQ 2012 Annual Plan Items 3.b.i-iii Review e-Tag Specification and make modifications as needed (simple majority vote)
 - Recommendation: http://www.naesb.org/pdf4/weq 2013 ap 3bi-iii rec.doc
 - Attachment: http://www.naesb.org/member login check.asp?doc=weq 2013 ap 3bi-iii rec attach redline.doc (redline); http://www.naesb.org/member login check.asp?doc=weq 2013 ap 3bi-iii rec attach clean.doc (clean
 - Request for Formal Comments: http://www.naesb.org/pdf4/weq_030713_reqcom.doc comment period ended on April 5, 2013
 - Comments Submitted by the WEQ Standards Review
 Subcommittee: http://www.naesb.org/pdf4/weq_030713_weq_srs.doc
 - Comments Submitted by Bonneville Power Administration: http://www.naesb.org/pdf4/weq_030713 bpa.docx
 - Comments Submitted by Southwest Power Pool: http://www.naesb.org/pdf4/weq_030713_spp.doc
 - Comments Submitted by The ISAS Leadership: http://www.naesb.org/pdf4/weq_030713 isas leadership.doc
 - Late Comments Submitted by the JESS: http://www.naesb.org/pdf4/weq_030713 weg jess late.doc
- 4. Review and consider for vote R12010 Requirements for scheduling interchange in 15 minute intervals. FERC order 764 directs transmission entities to accept scheduling interchange in 15 minute intervals within the operating hour. Currently no NAESB standards require, state, or give guidance that the default for these intervals should be on the quarter hour increment (i.e. 0 (top of the hour), 15, 30, and 45, etc.). In order to ensure a smooth, interconnection wide, transition to 15 minute scheduling a default definition of 15 minute schedules needs to be developed. (super majority vote)
 - Recommendation: http://www.naesb.org/pdf4/r12010_rec.doc
 - Request for Formal Comments: http://www.naesb.org/pdf4/weq_030713_reqcom.doc comment period ended on April 5, 2013
 - Comments Submitted by the WEQ Standards Review
 Subcommittee: http://www.naesb.org/pdf4/weq-030713 weg srs_r12010.doc



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

Tuesday, April 30, 2013 – 10:00 am to 4:00 pm E ACES, 4140 West 99th Street, Carmel, Indiana – Board Room

Agenda Item

- Comments Submitted by ERCOT, IESO, ISO New England, MISO, New York ISO, and SPP: http://www.naesb.org/pdf4/weq_030713_iso_rto_r12010.doc
- Comments Submitted by Southern Company: http://www.naesb.org/pdf4/weq-030713 southernco r12010.doc
- Late Comments Submitted by the JESS: http://www.naesb.org/pdf4/weq_030713_weq_jess_r12010_late_coverletter.doc (coverletter); http://www.naesb.org/pdf4/weq_030713_weq_jess_r12010_late.doc
- 5. Update on Status of EIR: http://www.naesb.org/pdf4/eir_enhancement_request_process.doc (EIR Enhancement Process); http://www.naesb.org/pdf4/eir_enhancement_request_form.doc (EIR Enhancement Request Form); http://www.naesb.org/pdf4/oati_webregistry_phase3 announcement 042213.pdf (EIR Phase Three)
- Update on Status of NERC and NAESB
 Coordination: http://www.naesb.org/misc/naesb-nerc-coordination-update-042213.docx (Update); http://www.naesb.org/misc/naesb-nerc-coordination-update-042213.docx (Coordination Items)
- 7. Subcommittee / Development Updates
 - Triage Subcommittee: http://www.naesb.org/pdf4/tr042213a.docx
 - Business Practices Subcommittee (BPS): http://www.naesb.org/misc/pfv update 042213.docx
 - Smart Grid Standards Development Subcommittee and Task
 Forces: http://www.naesb.org/misc/smart_grid_update_042213.docx
 - OASIS Subcommittee: http://www.naesb.org/misc/oasis update-042213.docx
 - Joint Electric Scheduling Subcommittee (JESS)
 - Standards Review Subcommittee (SRS)
 - Public Key Infrastructure (PKI) Subcommittee: http://www.naesb.org/pdf4/weq_pki-041613reqcom.docx (Work Paper out for Informal Comment)
- 8. Publication Schedule Review
 - WGQ Publication Schedule (Version 2.1): http://www.naesb.org/misc/wgq_publication-schedule-ver2_1.doc
 - WEQ Publication Schedule (Version 3.1): http://www.naesb.org/misc/weq_publication_schedule_ver3_1.doc
 - Retail Publication Schedule (Version 2.1): http://www.naesb.org/misc/retail-publication-schedule-ver2-1.doc
- 9. Board of Directors, Board Committee and Regulatory Updates:
 - Board Meeting April 4, 2013: http://www.naesb.org/pdf4/bd040413dm.docx
 - Membership Update: http://www.naesb.org/misc/membership report 033113.doc (Membership Report)
 - Board Revenue Efforts: http://www.naesb.org/pdf4/bd_revenue032713notes.docx (3-20-13 Meeting Notes), http://www.naesb.org/pdf4/bd_revenue032713a1.doc (Self Executing Waiver), http://www.naesb.org/pdf4/bd_revenue032713a3.doc (Self Executing Waiver Procedure), http://www.naesb.org/pdf4/bd_revenue032013w5.pdf (Correspondence from Michael Desselle, 3-1-13)



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

Tuesday, April 30, 2013 – 10:00 am to 4:00 pm E ACES, 4140 West 99th Street, Carmel, Indiana – Board Room

Agenda Item

- Interim Structure of the Retail Quadrants as approved by the Board of Directors on April 4, 2013: http://www.naesb.org/pdf4/bd040413a7.docx
- Parliamentary Committee: http://www.naesb.org/pdf4/parliamentary051513a.docx (May 15 Agenda)
- Managing Committee: http://www.naesb.org/pdf4/managing032713notes.docx (March 27 Notes)
- Regulatory Updates:
 - February 21, 2013 FERC Final Rule NAESB Standards for Business Practices and Communication Protocols for Public Utilities (Demand Response and Energy Efficiency Measurement and Verification Standards) (Docket No. 05-5-020, Order No. 676-G): http://www.naesb.org/pdf4/ferc_order_676-G_NAESB_m&v-ee_standards 022113.pdf
 - April 8, 2013 NAESB Comments in response to the National Institute of Standards and Technology (NIST)
 Request for Information on "Developing a Framework to Improve Critical Infrastructure
 Cybersecurity.": http://www.naesb.org/pdf4/nist_040813_naesb_rfi_comments.pdf
 - April 18, 2013: NAESB Copyright Procedure Regarding Member and Purchaser Self-Executing Waiver: http://www.naesb.org/pdf4/ferc041813 copyright waiver procedure report.pdf
 - Gas Electric Harmonization FERC Technical Conference April 25, 2013: http://www.naesb.org/pdf4/ferc030513notice tech conference ad12-12.doc
- 10. Other Business
 - Meeting Schedule 2013: http://www.naesb.org/pdf4/2013 schedule.pdf
- 11. Adjourn

Attire - Business Casual



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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING RETAIL ENERGY QUADRANT DRAFT AGENDA

Wednesday, May 1, 2013 – 10:00 am to 4:00 pm E ACES, 4140 West 99th Street, Carmel, Indiana – Board Room

Agenda Item

- 1. Welcome
 - Antitrust Guidelines http://www.naesb.org/misc/antitrust_guidance.doc (Guidance)
 - Welcome to members and attendees
 - 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/ec_terms.pdf
 (EC Alt)
- 2. Consent Agenda (simple majority to approve)
 - Adoption of Agenda: http://www.naesb.org/pdf4/ec043013a.docx (Agenda)
 - Adoption of the EC Meeting Minutes from February 20, 2013: http://www.naesb.org/pdf4/retail-ec022013dm.docx (Draft Minutes)
 - Adoption of changes to the 2013 Retail Annual Plan proposed by the Retail
 Leadership: http://www.naesb.org/pdf4/retail-leadership040313a1.docx (Annual Plan), with changes proposed after agenda was posted: http://www.naesb.org/misc/retail-2013 annual plan042313.docx
- Interim Structure of the Retail Quadrants as approved by the Board of Directors on April 4, 2013: http://www.naesb.org/pdf4/bd040413a7.docx
- 4. Discussion on the inclusion of EDI transactions to support net metering in Book 3 "Billing and Payments"
- 5. Review and Consider for Vote 2012 Retail Annual Plan Item No. 1.a Develop Technical Electronic Implementation Standards and Data Dictionaries for RXQ.10 Retail Customer Enrollment, Drop and Account Information Change (super majority vote)
 - Recommendation: http://www.naesb.org/pdf4/retail 2013 api 1a rec.doc
 - Attachment 1 Change Request: http://www.naesb.org/pdf4/retail-2012-api-10b-rec-attach.doc
 - Attachment 2 Change Response: http://www.naesb.org/pdf4/retail-2013 api 1a rec attach2.rtf
 - Attachment 3 Enrollment Response: http://www.naesb.org/pdf4/retail 2013 api 1a rec attach3.rtf
 - Attachment 4 Enrollment Request: http://www.naesb.org/pdf4/retail-2013-api-1a-rec-attach4.rtf
 - Attachment 5 Drop Request: http://www.naesb.org/pdf4/retail-2013-api-1a-rec-attach5.rtf
 - Attachment 6 Drop Response: http://www.naesb.org/pdf4/retail 2013 api 1a rec attach6.rtf
 - Request for Formal Comment: http://www.naesb.org/pdf4/retail-120412 reqcom.doc comment period ended on March 13, 2013
 - No Comments Submitted
- Subcommittee / Development Updates (meeting materials for updates will be provided by leadership as they are available):
 - Triage Subcommittee: http://www.naesb.org/pdf4/tr042213a.docx
 - Business Practices Subcommittee (BPS)
 - BPS Texas Task Force
 - Information Requirements & TEIS Subcommittee



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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING RETAIL ENERGY QUADRANT DRAFT AGENDA

Wednesday, May 1, 2013 – 10:00 am to 4:00 pm E ACES, 4140 West 99th Street, Carmel, Indiana – Board Room

Agenda Item

- Glossary Efforts
- Smart Grid Standards Development Subcommittee Task
 Forces: http://www.naesb.org/misc/smart_grid_update_042213.docx
- 7. Publication Schedule Review
 - WGQ Publication Schedule (Version 2.1): http://www.naesb.org/misc/wgq_publication_schedule_ver2_1.doc
 - WEQ Publication Schedule (Version 3.1): http://www.naesb.org/misc/weq_publication_schedule_ver3_1.doc
 - Retail Publication Schedule (Version 2.1): http://www.naesb.org/misc/retail_publication_schedule_ver2_1.doc
- 8. Board of Directors, Board Committee and Regulatory Updates:
 - Board Meeting April 4, 2013: http://www.naesb.org/pdf4/bd040413dm.docx
 - Membership Update: http://www.naesb.org/misc/membership_report_033113.doc (Membership Report)
 - Board Revenue Efforts: http://www.naesb.org/pdf4/bd_revenue032713notes.docx (3-20-13 Notes), http://www.naesb.org/pdf4/bd_revenue032713a1.doc (Self Executing Waiver), http://www.naesb.org/pdf4/bd_revenue032713a3.doc (Self Executing Waiver Procedure), http://www.naesb.org/pdf4/bd_revenue032013w5.pdf (Correspondence from Michael Desselle, 3-1-13)
 - Parliamentary Committee: http://www.naesb.org/pdf4/parliamentary051513a.docx (May 15 Agenda)
 - Managing Committee: http://www.naesb.org/pdf4/managing032713notes.docx (March 27 Notes);
 - Regulatory Updates:
 - February 21, 2013 FERC Final Rule NAESB Standards for Business Practices and Communication Protocols for Public Utilities (Demand Response and Energy Efficiency Measurement and Verification Standards) (Docket No. 05-5-020, Order No. 676-G): http://www.naesb.org/pdf4/ferc_order_676-G NAESB m&v-ee standards 022113.pdf
 - April 8, 2013 NAESB Comments in response to the National Institute of Standards and Technology (NIST)
 Request for Information on "Developing a Framework to Improve Critical Infrastructure
 Cybersecurity.": http://www.naesb.org/pdf4/nist_040813 naesb_rfi_comments.pdf
 - April 18, 2013: NAESB Copyright Procedure Regarding Member and Purchaser Self-Executing Waiver: http://www.naesb.org/pdf4/ferc041813 copyright waiver procedure report.pdf
 - Gas Electric Harmonization FERC Technical Conference April 25, 2013: http://www.naesb.org/pdf4/ferc030513notice tech conference ad12-12.doc
- 9. Other Business
 - Consider Restructuring Retail Annual Plan
 - ANSI Energy Efficiency Standardization Coordination Collaborative
 - State Commission Activity in Cybersecurity
 - Pennsylvania PUC Order: Electronic Data Exchange Working Group: http://www.naesb.org/pdf4/retail-ec022013w1.doc
 - Meeting Schedule 2013: http://www.naesb.org/pdf4/2013_schedule.pdf
- 10. Adjourn



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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING RETAIL ENERGY QUADRANT DRAFT AGENDA

Wednesday, May 1, 2013 – 10:00 am to 4:00 pm E ACES, 4140 West 99th Street, Carmel, Indiana – Board Room

Agenda Item

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April 12, 2013

TO: NAESB Retail Quadrants Executive Committee and Interested Industry Participants

FROM: Caroline Trum, NAESB Staff Attorney

RE: Retail Quadrants Executive Committee Meeting Draft Minutes

NORTH AMERICAN ENERGY STANDARDS BOARD RETAIL QUADRANTS EXECUTIVE COMMITTEE MEETING Wednesday, February 20, 2013 – 10:00 am to 4:00 pm Mountain DRAFT MINUTES

1. Welcome

Mr. Precht called the meeting to order and welcomed the Retail Gas Quadrant (RGQ) and Retail Electric Quadrant (REQ) Executive Committee (EC) members, alternates and other participants. Mr. Precht thanked Ms. Pennock and SRP for hosting the meeting. Ms. Trum delivered the NAESB antitrust guidelines and meeting policies reminder and called the roll of the RGQ and REQ EC members and alternates. Quorum was established for both quadrants.

2. Consent Agenda

Mr. Precht reviewed the consent agenda with the participants, which included the adoption of the <u>agenda</u>, the approval of the <u>draft meeting minutes</u> from the October 24, 2012 EC meeting and the adoption of changes to the <u>2013 RXQ Annual Plan</u> to be proposed to the Board of Directors. Ms. McKeever, seconded by Ms. Munson, moved to adopt the consent agenda. There were no objections. The motion passed by a simple majority.

3. Discussion on the Progress of the Board Retail Structure Review Subcommittee

Mr. Minneman provided the <u>update</u> on the progress of the Board Retail Structure Review Subcommittee to develop a proposal for the restructuring of the Retail Quadrants. The proposal developed by the committee is posted to the NAESB website and recommends collapsing the RGQ into the REQ and creating a new Retail Gas segment within the REQ. This restructuring would be an interim solution to be implemented for a time period of a minimum of two years, after which time the Board of Directors would evaluate to determine if the restructuring should be made more permanent by a change in the NAESB bylaws. A presentation on the proposal was made to the Board of Directors during the December meeting and the committee will present the final proposal at the April Board of Directors meeting. The committee has a meeting scheduled for Friday, February 22, 2013 where it is expected that the proposal will be voted upon and will likely be the last meeting of the committee before presentation of the proposal to the Board of Directors. Mr. Booe encouraged all those interested to participate in the meeting.

4. Review and Consider for Vote 2012 Retail Annual Plan Item No. 10.b – Retail Customer Authorization Form

Mr. Precht reviewed the <u>recommendation</u> for the <u>Retail Customer Authorization Form</u> with the EC members. During the formal comment period, NAESB received comments from <u>Xcel Energy</u>, <u>Integrys Energy</u>, <u>Direct Energy</u>, and <u>Exelon/Constellation</u>. The Retail BPS, DSM/EE and Data Privacy Task Force met to review the comments received and submitted a set of <u>late comments</u> in response. An additional set of late comments was submitted by Mr. Tillman on behalf of <u>Southern Company</u>. Mr. Precht reviewed the changes made to the Retail Customer Authorization Form as a result of the comments submitted during the formal comment period. Mr. Tillman explained that his late comments built upon the late comments of the subcommittee and correct minor typographical and formatting errors. There were no questions or comments from the EC members on either set of late comments or the recommendation.

Ms. Ray, seconded by Mr. Zollars, moved that the RGQ and REC ECs adopt the late comments submitted by Mr. Tillman and the recommendation for 2012 Retail Annual Plan Item No. 10.b. The motion passed a super majority



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vote [Vote 1]. The <u>recommendation</u> and <u>Retail Customer Authorization Form</u> as adopted by the ECs are posted to the NAESB website.

5. Review and Consider for Vote 2012 Retail Annual Plan Item No. 7.b.i – Develop standard to support PAP 10, Energy Usage Information Model, Phase 2, Harmonization with CIM and SEP 2.0

Mr. Booe stated that the WEQ EC had made modifications and approved a companion recommendation to 2012 Retail Annual Plan Item No. 7.b.i during their meeting the previous day. He reminded the ECs that as a directive from the Board of Directors, the quadrants need to make sure joint standards are consistent and urged the REQ EC to consider the modifications made by the WEQ EC to the recommendation.

Mr. Burns reviewed the <u>recommendation</u> with the EC members. He explained that REQ-18 was built upon the NAESB PAP 10 energy usage information model which was based upon an IEC model. After NAESB membership ratified the REQ-21 business practice standards, the IEC made changes to its model which necessitated modifications to the NAESB model and the REQ-18 business practice standards. The modifications to the business practice standards serve as enhancements that that capture the modifications made to the IEC model as well as the NAESB ESPI standard and would bring WEQ-18 in alignment with REQ-22. During the formal comment period, NAESB received one set of <u>comments</u> from Mr. Tillman on behalf of Southern Company which address the font format used for the text of the recommendation.

Mr. Booe reviewed the <u>modifications</u> made by the WEQ for the companion recommendation to 2012 WEQ Annual Plan Item 6.a. The WEQ decided that due to the significant modifications made to WEQ-019.3.1.25, WEQ-019.3.1.26, and WEQ-019.3.1.40 (WEQ companion business practice standards to REQ.18.4.1.25, REQ.18.4.1.26, and REQ.18.4.1.40) it would be prudent to mark the three section numbers as reserved and create new section numbers at the end of the suite of standards. Ms. Crockett stated that a driving factor for the numbering change was due to the fact that NAESB has historically followed similar policies when making numerous modifications to standards and section headers to aid the FERC in their tracking of NAESB standards and to avoid confusion when the FERC evaluates the standards for adoption. Using the "reserved" approach for retiring standards reference numbers is typical for standards development organizations, as they implement a method of tracking version control and change control.

Mr. Winkler, seconded by Mr. Minneman, moved that the REQ EC adopt the recommendation for 2012 Retail Annual Plan Item No. 7.b.i with the incorporation of the modifications made by the WEQ to the recommendation for 2012 WEQ Annual Plan Item No. 6.a.

Mr. Tillman asked if the renumbering would cause any concern or confusion for the user. Mr. Burns responded that because of the change in numbering, manual changes would need to be applied to tool that developed the model.

Mr. Precht asked what the next steps would if NAESB membership ratified the recommendation. Mr. Booe responded that NAESB would forward the new REQ-18 standard on to SGIP in the event that the organization would like to adopt the modifications to the NAESB standard as part of its catalogue of standards.

There were no more questions or comments on the recommendation or the motion. The motion passed a super majority vote [Vote 2]. The recommendation as adopted by the REQ EC can be found through the following hyperlink: http://naesb.org/member_login_check.asp?doc=req_ec022013a1.docx.

6. Review 2012 Retail Annual Plan item No. 5.a – Develop Process Flows and Online Navigational Aids to Support the Procedures and to Be Provided as Retail Orientation Materials

Mr. Precht stated that the BPS had concluded work on the recommendation and voted it out of subcommittee. Mr. Jones added that the recommendation would be sent out for formal comment shortly. He explained that BPS took the narrative which explains the standards request process for the Retail Quadrants and created a process flow to map out how a recommendation is developed at the subcommittee level and with the use of the full staffing process. During the work on the process flow, the BPS noticed discrepancies within the narrative which it rectified and will be included as part of the recommendation. The process flows and narratives are intended to be used as orientation material for new members to the Retail Quadrants and will be posted to the NAESB website.



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Mr. Booe stated that the recommendation will follow the flow of the original development of the process flows and online navigational aids developed by the BPS: a presentation to the RXQ EC for a simple majority vote, followed by approval by the NAESB Managing Committee. Mr. Precht indicated that the recommendation would be presented to the RXQ EC during the next meeting.

7. Subcommittee Updates

Triage Subcommittee

Mr. Booe presented the update from the Triage Subcommittee. Since the last meeting, there was one triage disposition of four requests. One request related to FERC Order No. 764 was assigned to the Joint Electronic Scheduling Subcommittee within the WEQ. Two requests were assigned to the WGQ BPS. The requests are for the addition of new data elements and will go through the full-staffing process. The final request, submitted by the OpenADE Task Force, was assigned to the REQ. The OpenADE Task Force submitted a previous request to NAESB used to create REQ-21 – Energy Service Providers Interface Model Business Practices and has been tracking the progress of the NAESB standards development as well as NAESB's work on the Green Button Initiative. The request suggests potential modifications to REQ-21 based on how utilities have been implementing the standards. NAESB will be re-activating the ESPI Task Force to review the request. An announcement about the first meeting should be distributed shortly.

Business Practice Subcommittee (BPS)

Mr. Jones provided the update of the BPS. The subcommittee last met on February 18 - 19, 2013. During that meeting, the subcommittee worked on the recommendation for Book 3 - Billing and Payments. The participants are discussing the details for how transactions take place for billing and payment, the definitions of terms to describe the transactions, and the updates needed to the process flows for the book. The project is larger than originally anticipated but once complete will represent a comprehensive description of billing and payment.

Simultaneously with the BPS activity, the Information Requirements/Technical Electronic Implementation Subcommittee (IR/TEIS) is working on developing technical electronic implementation standards and data dictionaries for Book 3. During its last meeting, the BPS discussed developing a joint survey with the IR/TEIS for Book 3 to determine from the industry if details about net metering and EDI transactions needed to be included with the Book 3 business practice standards and technical implementation. Mr. Jones indicated that the BPS and IR/TEIS would be meeting jointly on March 27, 2013 to discuss the survey further.

During the last BPS meeting, the participants also discussed issues raised by the Texas Task Force regarding the creation of code values and model business practices for the movement of electronic data. This work by the BPS will be done in connection with the Texas Task Force effort for 2013 Retail Annual Plan Item 2.b – Modify as needed the NAESB EDM Version 1.6 as the Data Transport Mechanism for ERCOT TX SET EDI Transactions.

Additionally at the last subcommittee meeting, the participants had preliminary discussions regarding the potential development of business practice standards for mass customer switching issues. The BPS effort will focus on the mechanisms for the mass switching of customers from Supplier A to Supplier B and not the legality or reasons necessitating the switch.

BPS Texas Task Force

Ms. McKeever provided the update for the Texas Task Force. She indicated that the task force was working to update the Retail Electronic Data Mechanism Manual and hoped to have the work complete to be included in the next publication.

Information Requirements and TEIS (IR/TEIS) Subcommittee

Ms. Ray provided the update of the IR/TEIS Subcommittee. The subcommittee has been meeting via conference call. The subcommittee has been working on developing the technical implementation for Book 3: Billing & Payments and Book 10: Retail Customer Enrollment, Drop and Account Information. During the last meeting, the subcommittee voted out a recommendation for 2013 Retail Annual Plan Item No. 10.a – Develop Technical



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Electronic Implementation Standards and Data Dictionaries for Book 10. Ms. Ray thanked Ms. Do and the members of the subteam responsible for evaluating Book 10 and developing the recommendation.

Ms. Ray stated that the subcommittee is still having problems with participation and encouraged any interested parties to join the next conference call on March 18, 2013. Mr. Booe indicated that NAESB staff had been discussing the issue and may reach out to individuals who attended in the original subcommittee meeting but have not continued participation.

Glossary Efforts

Mr. Eynon provided the update on the activities of the Glossary Subcommittee. The subcommittee has met three times since the last EC meeting to approve nine new terms associated with Book 3- Billing and Payments. Mr. Booe stated that during its meeting, the WEQ EC moved a provisional annual plan item to active that related to NERC definitions. He suggested Mr. Eynon contact the co-chairs of the WEQ Standards Review Subcommittee to evaluate the WEQ annual plan item for coordination.

Smart Grid Efforts

Mr. Booe provided the update on the Smart Grid efforts. The ESPI Task Force is being reactivated to handle Request R13001 and will hold a meeting in the near future. The Data Privacy Task Force held its first meeting since reactivation in November to discuss Request No. R12008. The task force will hold another meeting on February 25, 2013 to continue evaluation of the request and work on a recommendation.

Related to the work on data privacy, the Department of Energy has indicated its interest in creating standards of conduct or best practices for data privacy. This work is similar to the previous work completed by the Data Privacy Task Force and NAESB is working with the Department of Energy to assist in the coordination of this effort.

NAESB has been notified that PAP20 Group is working with NIST to develop a formal recommendation will propose that NAESB make its schema available to and to consider working with an international standards body to broaden its acceptance. Once received, the recommendation will be evaluated by the NAESB Managing Committee.

Mr. Booe noted that SGIP is in the process of becoming a private entity after being formally a government funded organization. The new SGIP will be structured similarly to NAESB and is reaching out to those entities who were involved in the organization when it was government funded for membership. Mr. Booe stated that NAESB intends to join the new SGIP.

8. Publication Schedule Review

Mr. Rager reviewed the current NAESB publication schedule. The WGQ will publish Version 2.1 on March 31, 2013. During its meeting tomorrow, the WGQ EC will be considering a number of recommendations and minor corrections which if approved and ratified, will be included in Version 2.1. The WEQ moved its publication date for Version 3.1 from the end of the second quarter of 2013 to fourth quarter 2013 to accommodate subcommittee activities which will need to be included in the next publication. The Retail Quadrants are scheduled to publish Version 2.1 in June of this year.

9. Board of Directors, Board Committee, and Regulatory Updates

Board Meeting - December 6, 2012

Mr. Booe provided the update from the last NAESB Board meeting, held on <u>December 6, 2012</u>. During the meeting, the Board of Directors approved the 2013 budget and discussed the various activities of board committees, including the progress of the Retail Structure Review Committee.

A majority of the discussion during the meeting was focused on the November 20, 2012 filing NAESB made with the FERC concerning NAESB copyright policy. The filing was intended to remind the industry about NAESB policy and expectations of the industry when citing NAESB standards in filings. NAESB asks that all members who



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wish to use verbatim language from NAESB standards in filings request a waiver from NAESB before making the filing. NAESB has received a number of those requests.

During the Board meeting, Mr. Desselle announced his intent to ask a Board committee to evaluate copyright issues and determine how NAESB can best serve the industry.

Membership Update

Mr. Booe provided the NAESB membership <u>update</u>. NAESB currently has 287 members. Since the last EC meeting, NAESB has had four members resign, two from the REQ and two from the RGQ, and two new members join, including one in the utilities segment of the REQ.

Board Revenue Efforts

Mr. Booe provided the update on the efforts of the Board Revenue Committee. The Board Revenue Committee held one meeting on October 19, 2012 to discuss the proposal made during the September Board meeting that an assessment be levied against NAESB members to pay down the organization's negative retained earnings. The committee determined that NAESB is financially stable and at the current time an assessment is not necessary. The committee will monitor the situation and reconvene to discuss potential action if negative retained earnings exceed 25% of budget.

NAESB is in the process of implementing the Board approved proposal of the Revenue Committee to create added benefits for NAESB membership. To prepare for the transition, NAESB has updated its server and related software. An announcement will be distributed in upcoming weeks and a white paper will be sent to all subcommittee chairs in advance of the cutover date.

Managing Committee

The <u>update</u> on the activities of the Managing Committee was provided in the meeting materials.

Regulatory Updates

Mr. Booe provided the regulatory update. Since the last EC meeting, NAESB has made three filings with the FERC. The November 30, 2012 <u>filing</u> was a status report regarding the Public Key Infrastructure (PKI) effort, and on <u>January</u> 29, 2013 NAESB <u>filed</u> the PKI and related business practice standards with the Commission. The third filing was on December 20, 2012 and contained errata to WEQ Version 003.

10. Other Business

ANSI Energy Efficiency Standardization Coordination Collaborative

Mr. Winkler stated that ANSI effort began last year at the urging of the Department of Defense and Department of Energy to explore the need for gap analysis in the standards related to energy efficiency. ANSI is currently in the process of evaluating all energy efficiency standards from all standards bodies for standards gaps and has organized five working groups covering a variety of topics including modeling, certification and training. Mr. Winkler indicated he was representing NAESB on the measurement and verification work group. He noted that the participation in the ANSI effort lacks representation from the industry participates who have the most at stake, specifically utilities. He encouraged any of those interested to contact him about participating in the effort.

Pennsylvania PUC Order: Electronic Data Exchange Working Group

Mr. Minneman provided the update on the Pennsylvania PUC Order. On February 14, 2013 NAESB facilitated a call with Mr. Wurst, the chair of the Pennsylvania working group reviewing the order, NAESB staff, Mr. Minneman, Ms. Wright, and Mr. Helm to discuss how NAESB may be able to assist the efforts being made in Pennsylvania. The participants discussed the development of the Texas Smart Meter Portal and its implementation. The next step for NAESB will depend on the actions of the Pennsylvania working group.

Mr. Booe noted that this could be a potential area for NAESB to develop model business practices. Ms. McKeever voiced her support for NAESB developing best practices or guidelines for the creation of portals. Mr. Precht noted



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that this effort could increase membership by drawing the attention of state commissioners and utilities who might be interested in the development of such business practices.

Advisory Council

Mr. Booe stated that the Advisory Council meeting held on February 2, 2013 was well attended. A majority of the meeting was spent discussing gas-electric harmonization issues and Mr. Lander gave a presentation on a white paper he had developed within his company proposing different solutions for how to better harmonize the markets. Additional topics of conversation during the meeting included NAESB's smart grid and cyber security activities. NAESB provided the Advisory Council members with a preview of the cyber security fact sheets which will be presented to the NAESB Board during the April meeting.

2013 Meeting Schedule

The 2013 meeting schedule was provided in the meeting materials and is available on the NAESB website.

11. Adjourn

The meeting adjourned at 11:50 AM Mountain on a motion by Ms. McKeever, seconded by Mr. Minneman.



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12. Attendance and Vote

SERVICE PROVIDERS/SUP	PLIERS SEGMENT	ATTENDANCE	VOTE 1	VOTE 2
Bill Barkas	Manager of Retail State Government Relations, Dominion Retail, Inc.	In Person	Support	Support
Jim Minneman	Controller, PPL Solutions, LLC	By Phone	Support	Support
Wendell Miyaji	Vice President - Energy Sciences, Comverge, Inc.	By Phone		
UTILITIES SEGMENT				
Phil Precht	Management Consultant - Pricing and Regulatory Services Department, Baltimore Gas & Electric Company	In Person	Support	Support
Patrick Eynon	Supervisor - Retail Access, Ameren Services	By Phone	Support	Support
Judy Ray	Industrial Segment Manager – Contract Administrator, Alabama Power Company	By Phone	Support	Support
END USERS/PUBLIC AGEN	CIES SEGMENT			
James Bradford Ramsay	General Counsel – Supervisor/Director – NARUC Policy Department, NARUC			
Christine Wright	Senior Policy Analyst, Public Utility Commission of Texas			
Susan Munson	ERCOT Retail Market Liaison, Electric Reliability Council of Texas (ERCOT)	In Person	Support	Support
Eric Winkler	Project Manager – Demand Resource Qualification, Resource Analysis and Integration, ISO New England	By Phone	Support	Support
RETAIL GAS QUADRANT				
SERVICE PROVIDERS/SUP	PLIERS SEGMENT			
Richard Zollars	Director - Data and Billing, Dominion Retail, Inc.	By Phone	Support	N/A
END USERS SEGMENT				
Dan Jones	Supervisor - Certified Supplier Business Center, Duke Energy	By Phone	Support	N/A
END USERS/PUBLIC AGEN	CIES SEGMENT			



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Other Participant Attendance				
Participant	Organization	Attendance		
Jonathan Booe	NAESB	In Person		
Martin Burns	Hypertek, Inc.	By Phone		
Robert Connell	B&V	In Person		
Valerie Crockett	TVA	In Person		
David Darnell	Systrends	In Person		
Mary Do	Latitude Technology	In Person		
Debbie McKeever	Oncor	In Person		
Leigh Spangler	Latitude Technology	In Person		
Veronica Thomason	NAESB	In Person		
Leonard Tillman	Balch & Bingham	By Phone		
Caroline Trum	NAESB	In Person		
Jill Vaughn	Court Reporter	In Person		



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NORTH AMERICAN ENERGY STANDARDS BOARD 2013 ANNUAL PLAN for the RETAIL GAS and ELECTRIC QUADRANTS

As Adopted by the Board of Directors on April 4, 2013 with Changes from the Retail Leadership

	Iten	n Number & Description ¹	Completion ²	Assignment ³⁴
1.	Dev	elop Technical Electronic Implementation Standards and Data Dictionaries		
	a.	Book 10: Retail Customer Enrollment, Drop and Account Information Change	1 st Q, 2013	IR/TEIS
		Status: Complete		
	b.	Review and update the technical implementation of Book 3 – Billing and Payment.	<u>32^{rdnd}</u> Q, 2013	IR/TEIS
		Status: Underway		
2.	Add	itional Registration Agent Processes		
	a.	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: Not Started	2014, date dependent on completion of items 5(g)	IR/TEIS
	b.	Modify as needed the NAESB EDM Version 1.6 as the data transport mechanism—for ERCOT TX SET EDI transactions.	<u>2nd Q.</u> 2013	Retail Electric part of the BPS/Retail Electric Texas Task
		Status: Underway		Force Force
3	Dev	elop Smart Grid Wholesale and Retail Electric Standards		
	a.	Harmonize Smart Grid glossary with Retail Glossary	Ongoing	REQ/RGQ Glossary
		Status: Ongoing		Subcommittee
4.	enab to ol	somer Information - Develop Model Business Practices and Process Flows to ble a Retail Customer, or a third party acting on behalf of the Retail Customer, otain the Retail Customer's energy usage information on an on-going basis ide of a Smart Grid environment	2013, date may be dependent on item 5(b).	BPS
	Stati	us: Not Started, this development is tied to the development for item 5(b)		
5.	Busi	ate Existing Model Business Practices – Review and update all existing Model ness Practices, filling in any gaps that may exist and making the language istent throughout all Books. ⁵		
	a.	Book 3 – Billing and Payments	32 ^{rdnd} Q, 2013	BPS
		Status: Underway		
	b.	Book 8 – Customer Information	23 ^{rdnd} Q, 2013	BPS
		Status: Not Started		
	c.	Book 9 – Customer Billing and Payment Notification via Uniform Electronic Transactions	4 th Q, 2013	BPS
		Status: Not Started	• • • • • • • • • • • • • • • • • • • •	DDG.
	d.	Book 10 – Customer Enrollment, Drop, and Account Information Change Status: Not Started	2014	BPS



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	Item	Item Number & Description ¹		Assignment ³⁴
	e.	Book 11 - Customer Enrollment, Drop, and Account Information Change Using a Registration Agent Status: Not Started	2014	BPS
	f.	Book 13 – Measurement and Verification (M&V) of Demand Response Programs ⁶ Status: Not Started	2014	BPS
	g.	Book 14 – Service Request, Disconnection and Reconnection in the Registration Agent Model Status: Not Started	2014	BPS
	h.	Book 15 – Specifications for Common Electricity Product and Pricing Definition ⁸	2014	BPS
	i.	Status: Not Started Book 16 – Specifications for Common Schedule Communication Mechanism for Energy Transactions ⁸ Status: Not Started	2014	BPS
	j.	Book 17 – Specifications for Retail Standard Demand Response Signals ⁸ Status: Not Started	2014	BPS
	k.	Book 18 – Retail Customer Energy Usage Information Communication ⁸ Status: Not Started	2014	BPS
	1.	Book 21 – Energy Services Provider Interface ⁸ Status: Not Started	2014	BPS
	m.	Book 22 – Third Party Access to Retail Customer Information ⁸ Status: Not Started	2015	BPS
	n.	Book 23 – Supplier Marketing Practices Status: Not Started	2015	BPS
	0.	Book 24 – Enrollment, Drop, Account Information Change in Demand Response Programs ⁸ Status: Not Started	2015	BPS
6.		te common interfaces and data structures necessary for enrolling DR sites into R program		
	a.	Develop a new standardized form to obtain the Retail Customer's Authorization for the release of their information to a third party Status: Complete	1 st Q, 2013	REQ BPS, REQ DSM-EE Subcommittee, REQ Smart Grid PAP 10 Subcommittee Data Privacy Task Force
7.	Sessi a.	Investigate and determine if changes to standards are needed to support adequate session encryption (SSL/TLS issues US-Cert Vulnerability Note VU#864643)	<u>3</u> 1 ^{rdst} Q, 2013	IR/TEIS



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	Item	Number & Description ¹	Completion ²	Assignment ³⁴
		Status: Underway		
	b.	Modify or develop standards as needed to apply the analysis of the above item $(7(a))$	<u>3</u> 1 ^{rdst} Q, 2013	IR/TEIS
		Status: Not Started		
8.	Data	Privacy		
Pro	a. gram o	Review and consider changes to the existing Privacy and Cyber Security Requirements NAESB REQ.22 as requested by Smart Grid Interoperability Panel Cyber Security Working Group (R12008) — in coordination with the Department of Energy effort to develop a voluntary code of conduct Status: Underway f Standards Maintenance & Fully Staffed Standards Work ⁷	4 th O. 2013	REQ Data Privacy Task Force
	Busi		0 .	Assigned by the EC
		ness Practice Requests	Ongoing	Assigned by the EC
	Info	ness Practice Requests rmation Requirements and Technical Mapping of Business Practices	Ongoing	Assigned by the EC Assigned by the EC
		•		2
	Ong	rmation Requirements and Technical Mapping of Business Practices	Ongoing	Assigned by the EC
	Ongo	rmation Requirements and Technical Mapping of Business Practices bing Interpretations for Clarifying Language Ambiguities	Ongoing Ongoing	Assigned by the EC Assigned by the EC

Provisional Activities

Joint Effort:

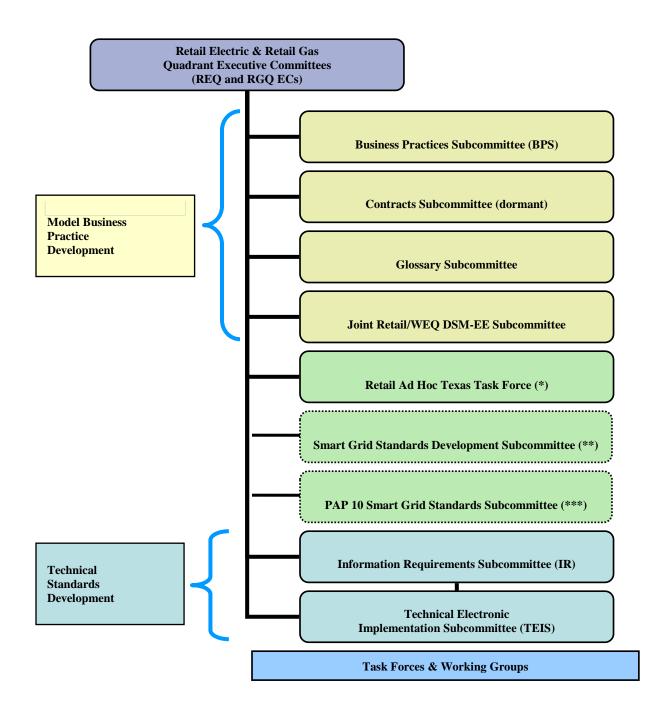
- 1 Review security standards as may be deemed necessary, such as Public Key Infrastructure (PKI).
- Develop NAESB Certification checklist criteria for Retail Quadrants to be used in the NAESB Certification Program. The certification checklist may address test scripts, a checklist of items to be tested, data connectivity for test scripts and EDM testing.
- 3. Consider development of business practices to support use of mobile devices.
- 4. Review RXQ.6 pending results of 2013 WGQ Annual Plan Item 7a Review Final Rules published by the Commodity Futures Trading Commission (CFTC) to determine if new rules on various definitions will impact any of the NAESB contracts, specifically their General Terms and Conditions.
- 5. Consider development of business practices to support the use of software applications for customer authorizations.

Retail Electric Quadrant Effort Only:

- 6. 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.
- 7. Review and develop model business practices to support renewable portfolio programs



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NAESB Retail Subcommittee Leadership: 8

Executive Committee: Dan Jones, Chair (RGQ), Phil Precht, Chair (REQ) Business Practices Subcommittee: Phil Precht (REQ), Dan Jones (RGQ)

Information Requirements Subcommittee/Technical Electronic Implementation Subcommittee: Judy Ray (REQ)

Glossary Subcommittee: Patrick Eynon (REQ)



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DSM-EE Subcommittee: Ruth Kiselewich (Retail), Roy True (WEQ), and Paul Wattles (WEQ) Retail Ad Hoc Texas Task Force: Debbie McKeever (REQ)

- (*) The Retail Ad Hoc Texas Task Force may draft MBPs, process flows, implementation guides and technical standards supportive of the Registration Agent and submit them to the BPS. The group is chaired by Debbie McKeever.
- (**) 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 and WEQ ECs. The group is chaired by 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 and WEQ ECs. The group is chaired by Phil Precht, Cathy Wesley, Sharon Dinges, David Kaufman, Brad Ramsay, Tobin Richardson and Ed Koch.

The PAP 10 Smart Grid Standards Subcommittee has created a Energy Services Providers Interface Task Force led by Dave Mollerstuen of Tendril, Steve Van Ausdall of Xtensible and Chad Maglaque of Xtreme Consulting Group to address the OpenADE request R10008.



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Retail 2013 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 and subcommittee. 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 has split into several separate groups to support concurrent development of separate standards sets.

⁵ Note: BPS will not review Book 5 (Quadrant Specific Electronic Delivery Mechanism), Book7 (Internet Electronic Transport), or Book 20 (Smart Grid Standards Data Element Table)

⁶ Note: This will be for language and format only, BPS will not edit for content.

⁷ 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.

⁸ 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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NORTH AMERICAN ENERGY STANDARDS BOARD 2013 ANNUAL PLAN for the RETAIL GAS and ELECTRIC QUADRANTS

As Adopted by the Board of Directors on April 4, 2013 with Changes from the Retail Leadership

	Item	Number & Description ¹	Completion ²	Assignment ³⁴
1.	Deve	elop Technical Electronic Implementation Standards and Data Dictionaries		
	a.	Book 10: Retail Customer Enrollment, Drop and Account Information Change	1 st Q, 2013	IR/TEIS
		Status: Complete		
	b.	Review and update the technical implementation of Book 3 – Billing and Payment.	32 ^{rdnd} Q, 2013	IR/TEIS
		Status: Underway		
2.	Addi	tional Registration Agent Processes		
	a.	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	2014, date dependent on completion of items 5(g)	IR/TEIS
		Status: Not Started		
	b.	Modify as needed <u>Book 5 – RGO/REO Quadrant-Specific Electronic</u> <u>Delivery Mechanism to support data file names and associated Model</u> <u>Business Practices</u> the NAESB EDM Version 1.6 as the data transport mechanism for ERCOT TX SET EDI transactions.	2 nd Q, 2013	Retail Electric part of the BPS/Retail Electric Texas Task Force/IR/TEIS
		Status: Underway		
3	Deve	lop Smart Grid Wholesale and Retail Electric Standards		
	a.	Harmonize Smart Grid glossary with Retail Glossary Status: Ongoing	Ongoing	REQ/RGQ Glossary Subcommittee
4.	enabl to ob outsi	omer Information - Develop Model Business Practices and Process Flows to be a Retail Customer, or a third party acting on behalf of the Retail Customer, tain the Retail Customer's energy usage information on an on-going basis de of a Smart Grid environment s: Not Started, this development is tied to the development for item 5(b)	2013, date may be dependent on item 5(b).	BPS
5.	Busin	tte Existing Model Business Practices – Review and update all existing Model ness Practices, filling in any gaps that may exist and making the language stent throughout all Books. ⁵		
	a.	Book 3 – Billing and Payments Status: Underway	<u>32^{rdnd}</u> Q, 2013	BPS
	b.	Book 8 – Customer Information Status: Not Started	23 ^{rdnd} Q, 2013	BPS
	c.	Book 9 – Customer Billing and Payment Notification via Uniform Electronic Transactions Status: Not Started	4 th Q, 2013	BPS
	d.	Book 10 – Customer Enrollment, Drop, and Account Information Change Status: Not Started	2014	BPS



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As Adopted by the Board of Directors on April 4, 2013 with Changes from the Retail Leadership

	Item	Number & Description ¹	Completion ²	Assignment ³⁴
	e.	Book 11 - Customer Enrollment, Drop, and Account Information Change Using a Registration Agent Status: Not Started	2014	BPS
	f.	Book 13 – Measurement and Verification (M&V) of Demand Response Programs ⁶ Status: Not Started	2014	BPS
	g.	Book 14 – Service Request, Disconnection and Reconnection in the Registration Agent Model Status: Not Started	2014	BPS
	h.	Book 15 – Specifications for Common Electricity Product and Pricing Definition ⁸ Status: Not Started	2014	BPS
	i.	Book 16 – Specifications for Common Schedule Communication Mechanism for Energy Transactions ⁸ Status: Not Started	2014	BPS
	j.	Book 17 – Specifications for Retail Standard Demand Response Signals ⁸ Status: Not Started	2014	BPS
	k.	Book 18 – Retail Customer Energy Usage Information Communication ⁸ Status: Not Started	2014	BPS
	l.	Book 21 – Energy Services Provider Interface ⁸ Status: Not Started	2014	BPS
	m.	Book 22 – Third Party Access to Retail Customer Information ⁸ Status: Not Started	2015	BPS
	n.	Book 23 – Supplier Marketing Practices Status: Not Started	2015	BPS
	0.	Book 24 – Enrollment, Drop, Account Information Change in Demand Response Programs ⁸ Status: Not Started	2015	BPS
6.		te common interfaces and data structures necessary for enrolling DR sites into		
	a.	Develop a new standardized form to obtain the Retail Customer's Authorization for the release of their information to a third party Status: Complete	1 st Q, 2013	REQ BPS, REQ DSM-EE Subcommittee, REQ Smart Grid PAP 10 Subcommittee Data Privacy Task Force
7.	Sessi	ion Encryption		
	a.	Investigate and determine if changes to standards are needed to support adequate session encryption (SSL/TLS issues US-Cert Vulnerability Note VU#864643)	<u>3</u> 4 ^{rdst} Q, 2013	IR/TEIS



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	Item	Number & Description ¹	Completion ²	Assignment ³⁴
		Status: Underway		
	b.	Modify or develop standards as needed to apply the analysis of the above item $(7(a))$	31^{rdst} Q, 2013	IR/TEIS
		Status: Not Started		
8.	Data	Privacy		
	a.	Review and consider changes to the existing Privacy and Cyber Security Requirements NAESB REQ.22 as requested by Smart Grid Interoperability Panel Cyber Security Working Group (R12008) — in coordination with the Department of Energy effort to develop a voluntary code of conduct	4 th O. 2013	REQ Data Privacy Task Force
		Status: Underway		
Dro				
110	gram o	f Standards Maintenance & Fully Staffed Standards Work ⁷		
110		of Standards Maintenance & Fully Staffed Standards Work ⁷ ness Practice Requests	Ongoing	Assigned by the EC
110	Busi	<u> </u>	Ongoing Ongoing	Assigned by the EC Assigned by the EC
110	Busi Info	ness Practice Requests	0 0	2
110	Busi Infor	ness Practice Requests rmation Requirements and Technical Mapping of Business Practices	Ongoing	Assigned by the EC
110	Busi Infor Ongo	rmation Requirements and Technical Mapping of Business Practices oing Interpretations for Clarifying Language Ambiguities	Ongoing Ongoing	Assigned by the EC Assigned by the EC

Provisional Activities

Joint Effort:

- 1 Review security standards as may be deemed necessary, such as Public Key Infrastructure (PKI).
- 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.
- 3. Consider development of business practices to support use of mobile devices.
- 4. Review RXQ.6 pending results of 2013 WGQ Annual Plan Item 7a Review Final Rules published by the Commodity Futures Trading Commission (CFTC) to determine if new rules on various definitions will impact any of the NAESB contracts, specifically their General Terms and Conditions.
- 5. Consider development of business practices to support the use of software applications for customer authorizations.

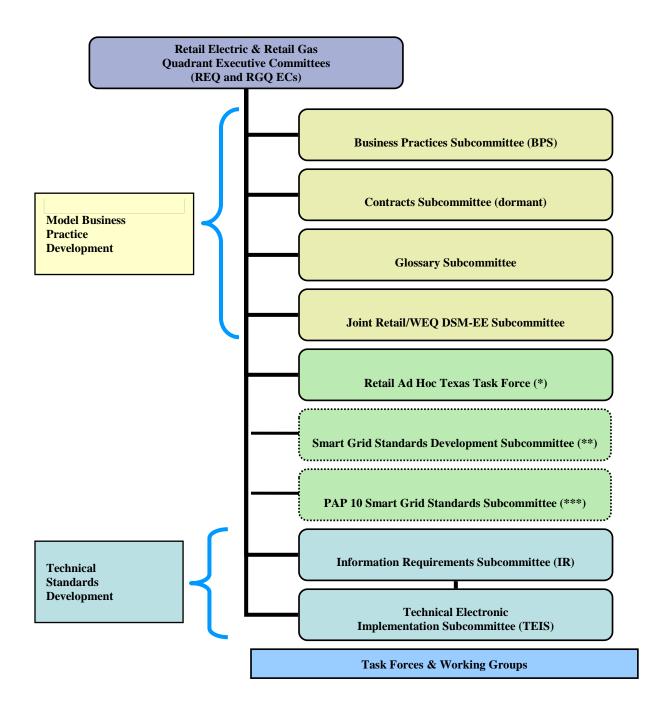
Retail Electric Quadrant Effort Only:

- 6. 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.
- 7. Review and develop model business practices to support renewable portfolio programs



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NAESB Retail Subcommittee Leadership: 8

Executive Committee: Dan Jones, Chair (RGQ), Phil Precht, Chair (REQ) Business Practices Subcommittee: Phil Precht (REQ), Dan Jones (RGQ)

Information Requirements Subcommittee/Technical Electronic Implementation Subcommittee: Judy Ray (REQ)

Glossary Subcommittee: Patrick Eynon (REQ)



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DSM-EE Subcommittee: Ruth Kiselewich (Retail), Roy True (WEQ), and Paul Wattles (WEQ) Retail Ad Hoc Texas Task Force: Debbie McKeever (REQ)

- (*) The Retail Ad Hoc Texas Task Force may draft MBPs, process flows, implementation guides and technical standards supportive of the Registration Agent and submit them to the BPS. The group is chaired by Debbie McKeever.
- (**) 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 and WEQ ECs. The group is chaired by 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 and WEQ ECs. The group is chaired by Phil Precht, Cathy Wesley, Sharon Dinges, David Kaufman, Brad Ramsay, Tobin Richardson and Ed Koch.

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Retail 2013 Annual Plan End Notes:

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via posting & email

TO: NAESB Board of Directors

cc: NAESB Retail Structure Review Committee (RSRC) RE: Report from the NAESB RSRC for Board Consideration

DATE: March 1, 2013

Dear NAESB Board of Directors,

Attached please find the report of the RSRC to the NAESB Board of Directors regarding the structure of the retail quadrants and the requirement detailed in the bylaws that each quadrant have a minimum of forty members, at least four segments and at least five members per segment - as approved by the NAESB Board of Directors on December 6, 2012. The report is part two of a two -part report. The first part was presented and approved by the Board of Directors at its December 6, 2012 meeting. The Board of Directors on December 6 approved:

- 1) the RSRC to begin the process of merging the quadrants and adjusting the segments such that the merged retail quadrants meet the requirements in the bylaws and takes into consideration preserving existing members and leadership,
- 2) the RSRC to bring the full recommendation with implementation to the board for its approval in April 2013, and
- the structural change to be put in place through a motion of the board for a period of a minimum of two years, after which the board will review its success and determine if this interim solution should be codified in the NAESB Operating Practices, Bylaws and Certificate.

With this report, the RSRC asks the Board to approve the implementation of the direction noted above, including the segment definitions, assignments to segments of existing members, and other structural changes that may arise during the discussions on implementation. The RSRC also reconfirms with the board that the implementation be considered an interim step for a minimum of two years, to provide time to determine if the structure in place is supportive of the requirements of the bylaws. As such, a retail membership progress report will be presented at each Board meeting during the two year interim period, and will include any issues that arise as part of the restructured quadrant and segments.

The NAESB Board of Directors on April 4, 2013 accepted the report and its recommendations.



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North American Energy Standards Board Retail Structure Review Committee (RSRC) Report

To be Presented to the NAESB Board of Directors on April 4, 2013

Report Components:

1.	Background	2
2.	Membership Profile and Work Products	3
3.	Direction for Merging Quadrants	6
4.	Options for Retail Structure	7
5.	Actions to be Taken and Considerations	9
Αp	ppendices:	
Α.	RSRC Committee Members	12
В.	RSRC Meeting Notes	13
<i>C</i> .	Current NAESB Membership Profile	14
D.	Proposed Structure – Membership, Board of Directors and Executive Committee	26
Е.	NAESB Governance Documents Excerpts	30
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BACKGROUND:

The Retail Structure Review Committee was formed in December 2004 by Michael Desselle, Chairman of the NAESB Board of Directors, to address the issue of membership in the retail quadrants and the thresholds set for membership in quadrants and segments, and the number of segments. Periodic reports are made to the Board of Directors on progress made toward meeting the membership thresholds and structural changes in support of the quadrants.

The mission of the group is: "The Retail Structure Review Committee functions solely at the pleasure of the NAESB Board of Directors and reports to the NAESB Board of Directors through the NAESB Board Managing Committee. The committee will make recommendations to the full board to address the membership levels in the retail electric and retail gas quadrants through possible changes to NAESB Bylaws, structural changes to the quadrants or their segments including merger of the two quadrants."

The committee has typically discussed issues as part of the retail quadrants leadership meetings held the day before the board meetings. However on September 18, 2012, the committee held a meeting to begin discussing in earnest the changes that may be needed to the structure to address the inability of the retail quadrants to meet the membership thresholds outlined in the bylaws.

The bylaws specify that a quadrant should have at least forty members, and at least four segments with five members per segment. The board has waived these requirements in the past, with the expectation that the quadrants would grow based on the relevance of their work products. While the quadrants have produced a significant body of work, they have not been able to meet the thresholds outlined in the bylaws, since the inception of NAESB in 2002. In 2009, structural changes were made to the retail quadrants which resulted in an increase in members in the retail electric quadrant, but not in the retail gas quadrant.

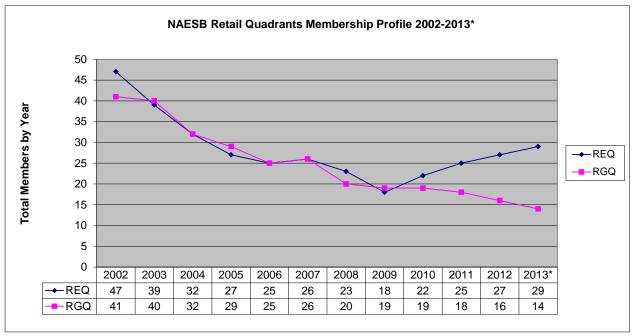
In response to the discussions at the Board of Directors meeting on September 20, and the discussions at the Retail Executive Committees meeting on October 24, a conference call and web cast meeting was held on October 31 with follow up calls held on November 6, November 15 and November 30 to draft the first part of a two-part recommendation to the board for its consideration on December 6, 2012. The board adopted the recommendation and asked that the second part of the recommendation be presented for consideration at its April 4, 2013 meeting.



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MEMBERSHIP PROFILE AND WORK PRODUCTS:

The membership in the retail quadrants began in 2002 meeting the threshold of forty members per quadrant, but declined quickly thereafter as can be seen in the charts below.





^{*} The data for 2013 is as of February 2013



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This decline in membership in the retail quadrants should not be seen as a disinterest in the benefit of using energy industry best practices or uniform telecommunication protocols at the state level. There are other groups and trade associations that have developed practices and guidelines, many under the direction of state regulatory agencies, and as such, those groups have not seen the need for a more rigorous ANSI-accredited process of standards development, such as is provided by NAESB, or in using NAESB as a balanced industry resource to support state regulatory policies. The decline in membership of the utility companies and local distribution companies can be explained through their reliance on key individuals to represent their interests and development of best practices and guidelines through trade associations and other regional groups. Industry consolidation can also be seen as a reason for the decline in membership. While this is true for all quadrants, it is proportionally more of an impact to the quadrants and segments with fewer members. Moreover, the consolidations shrink the pool of potential members for the quadrants.

The work products of the two quadrants can be seen below:

	Retail Electric Quadrant	Retail Gas Quadrant		
Reference	Description	Reference	Description	
RXQ.0	Overview of Model Business Practices and Master List of Defined Business Terms	RXQ.0	Overview of Model Business Practices and Master List of Defined Business Terms	
RXQ.1	Market Participant Interactions Model Business Practices MBPs	RXQ.1	Market Participant Interactions Model Business Practices MBPs	
RXQ.2	Creditworthiness MBPs	RXQ.2	Creditworthiness MBPs	
RXQ.3	Billing and Payment MBPs	RXQ.3	Billing and Payment MBPs	
RXQ.4	Distribution Company-Supplier Disputes MBPs	RXQ.4	Distribution Company-Supplier Disputes MBPs	
RXQ.5	Quadrant-Specific Electronic Delivery Mechanism MBPs	RXQ.5	Quadrant-Specific Electronic Delivery Mechanism MBPs	
RXQ.6	Contracts Related MBPs	RXQ.6	Contracts Related MBPs	
	RXQ.6.1 - Electronic Data Interchange Trading Partner Agreement (TPA)		RXQ.6.1 - Electronic Data Interchange Trading Partner Agreement (TPA)	
	RXQ.6.2 - Outline of a Non-Disclosure Agreement		RXQ.6.2 - Outline of a Non-Disclosure Agreement	
	RXQ.6.3 - Distribution Company- Supplier Service Agreement Outline		RXQ.6.3 - Distribution Company-Supplier Service Agreement Outline	
	RXQ.6.4 - Billing Services Agreement Outline for Consolidated Billing		RXQ.6.4 - Billing Services Agreement Outline for Consolidated Billing	
	RXQ.6.5 - Base Contract for Retail Sale and Purchase of Natural Gas or Electricity		RXQ.6.5 - Base Contract for Retail Sale and Purchase of Natural Gas or Electricity	
	REQ.6.6 - Production Connectivity Worksheet for Use in Markets Supporting the Registration Agent Model			
	REQ.6.7 - Distribution Company – Supplier Service Agreement for Use in the Markets Supporting the Registration Agent Model			
	REQ.6.8 - Standard Form Agreement Between a Market Participant and Registration Agent			



	Retail Electric Quadrant		Retail Gas Quadrant
Reference	Description	Reference	Description
	REQ.6.9 - Load Serving Entity Application for Registering with Registration Agent		
RXQ.7	Internet Electronic Transport MBPs	RXQ.7	Internet Electronic Transport MBPs
RXQ.8	Retail Customer Information MBPs	RXQ.8	Retail Customer Information MBPs
RXQ.9	Retail Customer Billing and Payment Notification via Uniform Electronic Transactions MBPs	RXQ.9	Retail Customer Billing and Payment Notification via Uniform Electronic Transactions MBPs
RXQ.10	Retail Customer Enrollment, Drop, and Account Information Change MBPs	RXQ.10	Retail Customer Enrollment, Drop, and Account Information Change MBPs
RXQ.11	Retail Customer Enrollment, Drop, and Account Information Change Using a Registration Agent MBPs	RXQ.11	Retail Customer Enrollment, Drop, and Account Information Change Using a Registration Agent MBPs
RXQ.12	Retail Customer Inquiries MBPs	RXQ.12	Retail Customer Inquiries MBPs
REQ.13	Measurement and Verification (M&V) of Demand Response Programs MBPs		
RXQ.14	Service Request, Disconnection and Reconnection in the Registration Agent Model MBPs	RXQ.14	Service Request, Disconnection and Reconnection in the Registration Agent MBPs
REQ.15	Specifications for Common Electricity Product and Pricing Definition MBPs		
REQ.16	Specifications for Common Schedule Communication Mechanism for Energy Transactions MBPs		
REQ.17	Specifications for Retail Standard Demand Response Signals MBPs		
REQ.18	Retail Customer Energy Usage Information Communication MBPs		
REQ.19	Measurement & Verification of Energy Efficiency Programs MBPs		
REQ.20	Smart Grid Standards Data Elements Table MBPs		
REQ.21	Energy Services Provider Interface MBPs		
	- Green Button Initiative		
REQ.22	Third Party Access to Smart Meter-based Information MBPs		
RXQ.23	Supplier Marketing Practices MBPs	RXQ.23	Supplier Marketing Practices MBPs
REQ.24	Enrollment, Drop and Account Information Change in Demand Response Programs MBPs		
RXQ.25	Supplier Certification MBPs	RXQ.25	Supplier Certification MBPs



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There are 25 different topics and business functions addressed by NAESB for retail standards. Of the 25 business functions addressed, 10 functions (40%) are retail electric market specific. The other 15 business functions are market neutral – i.e., they provide both retail natural gas and retail electricity functionality. This can be easily determined in the chart above, as if there are no corresponding development items shown under the columns for retail gas, then the development was retail electric specific. Although energy efficiency and data privacy could be extended to retail gas and drafted as commodity neutral standards, it was determined by the retail gas interests that NAESB would not undertake such development for retail gas at this time. The ability to draft commodity neutral standards for smart grid applications and for demand response is not so clear cut, and the work products developed were for retail electric market applications only.

The standards developed are governed via the annual plans for the retail gas and retail electric quadrants and can be found in Appendix E. The 2013 annual plan for the retail interests is quite aggressive and continued efforts will be made to reach out to all interested parties, regardless of membership. As an example of the reach-out efforts, for demand response, energy efficiency, data privacy and smart grid related standards development, the retail electric quadrant has recently seen an increase in participation and membership, which we expect to continue. Should the retail gas market show interest in development of standards for other than customer choice programs, or if state regulators determine that NAESB is a resource that they can use to implement retail gas policies, we may also see an increase in retail gas membership, but to date, that has not been the case.

Contributing to the potential for growth in membership, the recent actions by the board to approve a meeting attendance fee for non-members and changes to the web site to delineate member from non-member benefits, we may see more interest in membership – particularly for those participants that follow the development of demand response, energy efficiency, data privacy and smart grid related standards – as these efforts have a high percentage of non-member participation. As there are more pressures brought to bear to introduce cost efficiencies in the retail markets, the need for and awareness of the benefits of standards development will be realized – which could result in an increase in participation and membership in NAESB.

Therefore, while the membership profile does not meet the threshold requirements of the bylaws, there are promising signs of membership increases based on board actions to delineate membership benefits from non-member participation and from development areas such as smart grid that attract interest.

DIRECTION FOR MERGING QUADRANTS APPROVED BY THE BOARD OF DIRECTORS ON DECEMBER 6, 2012:

The Board of Directors on December 6, 2012 approved:

- 1) the RSRC to begin the process of merging the quadrants and adjusting the segments such that the merged retail quadrants meet the requirements in the bylaws and takes into consideration preserving existing members and leadership,
- 2) the RSRC to bring the full recommendation with implementation to the board for its approval in April 2013, and
- 3) the structural change to be put in place through a motion of the board for a period of a minimum of two years, after which the board will review its success and determine if this interim solution should be codified in the NAESB Operating Practices, Bylaws and Certificate.



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OPTIONS DISCUSSED FOR RETAIL QUADRANT STRUCTURE:

Our current retail quadrant structure can be seen in the chart below:

Retail Electric Quadrant	TOTAL		29
	End Users/Public Agencies	13	
	Utilities	7	
	Service Providers/Suppliers	9	
Retail Gas Quadrant	TOTAL		14
	End Users/Public Agencies	1	
	Distributors	5	
	Service Providers/Suppliers	8	

As February 2013, the current quadrants do not meet the threshold of 40 members, and neither quadrant has the minimum four segments required, and for the retail gas quadrant, the end user segment does not have the requisite minimum of five members. The board and EC seats for the retail gas quadrant have a significant number of vacancies.

Three options were discussed as recommendations for a single structure merging the membership of the retail gas and electric quadrants:

1) Merge the retail quadrants and adjust segments such that there are five segments: three specific to retail electric interests (utilities, service providers/suppliers, end users/public agencies) and two specific to retail gas interests (distributors, retail gas market interests other than distributors).

Proposal 1 Merged	TOTAL	43
Quadrant	Utilities	7
	Distributors	
	Retail Gas Market Interests Other than Distribution	
	Retail Electric Service Providers/Suppliers	
	Retail Electric End Users/Public Agencies	13

The distribution segment is at the five member minimum threshold presenting a risk that this proposal would not in the future meet the bylaws requirements. In addition, with this structure, there would be a number of vacancies in the Board and EC seats for the two segments representing the retail gas interests.

In favor of this approach, the thresholds established in the bylaws would be met and the existing members of retail quadrants would have their membership remain intact through the restructure of the segments.



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Also, the commodity-neutral development work and maintenance of commodity-neutral standards would not be disrupted.

The committee did not support this approach.

2) Merge the retail quadrants and adjust segments such that there are five segments: three specific to retail electric interests (utilities, service providers/suppliers, end users/public agencies) and two specific to retail gas interests (distributors, service providers/suppliers).

Proposal 2 Merged	TOTAL	42
Quadrant	Utilities	7
	Distributors	5
	Retail Gas Service Providers/Suppliers	8
	Retail Electric Service Providers/Suppliers	9
	Retail Electric End Users/Public Agencies	13

As with the first proposal, the distribution segment is at the five member minimum threshold presenting a risk that this proposal would not in the future meet the bylaws requirements. In addition, with this structure, there would be a number of vacancies in the Board and EC seats for the two segments representing the retail gas interests. Also, this proposal does not account for one retail gas quadrant end user member. The segments are clearly defined and as retail gas interests build support from end users and public agencies, either another segment could be added or they could be accommodated in the retail electric end users and public agencies segment by simply dropping the description that the segment is specific to the retail electric market interests.

In favor of this approach, the thresholds established in the bylaws would be met. Also, the commodity-neutral development work and maintenance of commodity-neutral standards would not be disrupted.

The committee did not support this approach.

3) Merge the retail quadrants and adjust segments such that there are four segments: three specific to retail electric interests (utilities, service providers/suppliers, end users/public agencies) and one specific to retail gas interests (retail gas). The board and executive committee would each have six seats per segment to have at least one vacancy available for future leadership growth.

Proposal 3 Merged	TOTAL	43
Quadrant	Utilities	7
Retail Electric Service Providers/Suppliers		9
	Retail Electric End Users/Public Agencies	13
	Retail Gas Market Interests	14



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This approach does on the surface, give the impression of minimizing the retail gas market interests. However, as much of the standards work is developed through the efforts of combination companies, it is unlikely that the interests of retail gas markets would be overlooked or dismissed.

The structure does not present the immediate risks with respect to segment thresholds seen in proposals 1 and 2 – that we could soon be faced with a segment that does not meet the bylaws requirements. In addition, with this structure, there are fewer vacancies for the Board and EC seats. In favor of this approach, the thresholds established in the bylaws would be met and the existing members of retail quadrants would have their membership remain intact through the restructure of the segments. Also, the commodity-neutral development work and maintenance of commodity-neutral standards would not be disrupted.

The committee does support this approach.

ACTIONS TO BE TAKEN AND CONSIDERATIONS:

If the recommendation is approved by the board, the following actions should be taken by the committee within the timeframe established by the board, presumably before the next board meeting on September 5, 2013:

- Communicate the board decision to the retail gas and electric quadrant membership, trade associations and Advisory Council
- Confirm that the existing retail gas and electric quadrant board and executive committee members will
 continue to maintain their seats in the new structure
- Update the membership rosters with the resulting new structure
- Make minor conforming changes to the web site

There are considerations of which we should be mindful, and if these considerations have adverse effects on the organization, they should be included in reports to the board so that corrective actions can be taken:

- With the new structure, retail gas interests would now be required to vote on items that are retail electric specific such as demand response, energy efficiency, data privacy and smart grid related standards. There is a slight risk associated with this option. The retail quadrants have essentially worked jointly since the inception of NAESB with the exception of development that is retail electric market specific, and that this option maintains that strong and cohesive working relationship
- Combination companies may decide that only one membership is necessary, resulting in a possible loss of
 membership initially, this may impact the companies in the retail gas market, as more projects are
 underway specific to the retail electric market. However, this loss would be minimal for current
 membership since there are only two companies with memberships in both retail quadrants. The risk could
 also be minimized by emphasizing that double membership would allow for expanded decision making.
- While there is a clear path to development and maintenance of the retail electric standards and work products as three of the four segments are retail electric market specific, the focus should remain broad enough to accommodate the interests of retail gas standards development.
- The committee recognizes that under the restructuring, there would be, at least for the interim period, only three active quadrants, which is not technically correct. However, the committee recommends retaining the term in the hope that after an interim period, the quadrants will grow sufficiently to allow for a retail gas and a retail electric quadrant meeting the bylaws membership threshold provisions.



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 A final point should be noted. The retail quadrants have essentially worked jointly since the inception of NAESB with the exception of development that is retail electric market specific, and that this restructuring not only maintains the cohesive working relationship, but strengthens it as all members of the merged quadrant will have decision making authority for all retail market related work products.



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Appendices

Appendices:

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Appendix A – RSRC Committee Members

NAESB Board Retail Structure Review Committee

Named Members	Organization
Jim Buccigross	8760 Inc.
J. Cade Burks	Big Data Energy Services
Valerie Crockett	Tennessee Valley Authority
Michael Desselle	Southwest Power Pool
Dan Jones*	Duke Energy Corp.
Ruth Kiselewich	Baltimore Gas & Electric Company
Debbie McKeever	Oncor Electric Delivery
Jim Minneman	PPL Solutions
Mike Novak	National Fuel Gas Distribution
Phil Precht*	Baltimore Gas & Electric Company
Keith Sappenfield	Encana Oil and Gas (USA) Inc.

^{*} Not a Board member



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Appendix B – RSRC Meeting Notes

NAESB Board Retail Structure Review Committee Meeting Notes

Meeting Date	Meeting Notes
January 10, 2013	Meeting Notes: http://www.naesb.org/pdf4/rsrc011013mn.doc
January 24, 2013	Meeting Notes: http://www.naesb.org/pdf4/rsrc012413mn.doc
February 22, 2013	Meeting Notes: http://www.naesb.org/pdf4/rsrc022213mn.docx



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Appendix C – Current NAESB Membership Profile

NAESB Membership Statistics - Changes by Quadrant for 2013 as of February 15, 2013

NAESB Membership Re	eport - Quadrant/Segment Membership Analysis	Number of Members
WGQ Segments	TOTAL	115
	End Users	14
	Distributors	17
	Pipelines	43
	Producers	12
	Services	29
REQ Segments	TOTAL	29
	End Users/Public Agencies	13
	Utilities	7
	Service Providers/Suppliers	9
RGQ Segments	TOTAL	14
	End Users/Public Agencies	1
	Distributors	5
	Service Providers/Suppliers	8
WEQ Segments	TOTAL	129
	End Users	7
	Distributors	20
	Transmission	41
	Generation	21
	Marketers	23
	None Specified	1
	Independent Grid Operators/Planners	9
	Technology /Services	7



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Quadrant	New and Resigning Members	Number of Members
WEQ	New Members: 1-Clark Public Utilities (Distribution/LSE, Muni/Coop)	1
	Member Resignations: 1-Lincoln Electric System (Generation, Muni/Coop); 2-First Energy Service Company	2
WGQ	New Members:	0
	Member Resignations:	0
REQ	New Members: 1-CenterPoint Energy Houston Electric, LLC (Utilities)	1
	Member Resignations:	0
RGQ	New Members:	0
	Member Resignations: 1-Exelon Energy (Service Providers/Suppliers), 2-Vectren Retail, LLC (Service Providers/Suppliers)	2
TOTAL	New Members:	2
	Member Resignations:	4



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	Organization	Seg	Contact	Sub- Seg ²
Retail E	lectric Quadrant Members:			
1	ABB Ventyx	S	Robert Pulcini, Karen Wei	
2	Alabama Power	u	Judy W. Ray	
3	Ameren Services Company	u	Patrick Eynon	
4	Baltimore Gas & Electric Co.	u	Ruth Kiselewich, Phil Precht	
5	Big Data Energy Services	s	J. Cade Burks, Jennifer Teel	
6	CenterPoint Energy Houston Electric, LLC	u	John Hudson	
7	City of Houston	e	James P. Cargas	
8	Comverge, Inc.	s	Wendell Miyaji	
9	Dominion Retail	S	William Barkas	
10	Dominion Virginia Power	u	Brandon Stites	
11	Electric Reliability Council of Texas (ERCOT)	e	Susan Munson	
12	Energy Information Standards Alliance	e	Christopher Kotting	
13	Intelometry, Inc.	s	Raymond W. Anderson	
14	ISO New England	e	Dennis Robinson, Douglas Smith, Eric Winkler	
15	ista	S	Judy Bailey	
16	Maryland Public Service Commission	e	Steven Theroux	
17	National Association of Regulatory Utility Commissioners	e	James Bradford Ramsay	
18	New Jersey Board of Public Utilities	e	Kristi Izzo	
19	Oncor	u	Debbie McKeever, Debra Anderson, Mark Carpenter	
20	Pennsylvania Office Of Consumer Advocate	e	Tanya J. McCloskey	
21	Pennsylvania Public Utility Commission	e	Annunciata E. Marino	
22	PPL Solutions, LLC	S	James M. Minneman, Kim Wall	
23	Public Utilities Commission of Ohio	e	Amanda Stallings	
24	Public Utility Commission of Texas	e	Christine Wright	
25	Southern Company Services	S	H. Neal Allen	
26	SunGard Consulting Services, LLC	s	Austin Morris	

¹ The segment abbreviations are: <u>**REQ**</u>: u – utilities, e – end users/public agencies, s – service providers/suppliers. <u>**REQ**</u>: d – distributors, e – end users/public agencies, s – service providers/suppliers. <u>**WEQ**</u>: m – marketer/broker, d – distribution, i – independent grid operators/planners, t – transmission owner, e – end user, g – generator, ts – technology/services. <u>**WGQ**</u>: 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



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	Organization	Seg	Contact	Sub- Seg ²
27	Vermont Public Service Board	e	Mary Jo Krolewski	
28	Wisconsin Public Service Corporation	u	Dennis Derricks, Ken Thiry	
29	ZigBee Alliance	e	Tobin Richardson	
Wholesa	ale Gas Quadrant Members:			
1	8760, Inc.	S	Jim Buccigross	
2	Accenture, LLP	s	Shelley Hurley	
3	AGL Resources Inc	1	Tim Sherwood	
4	Alliance Pipeline LP	pl	Cathie Legge, Brian Troicuk	
5	American Gas Association	1	Andrew K. Soto, Sr., Pete Connor	
6	American Midstream Partners, LP	s	Marty Patterson	
7	ANR Pipeline Company	S	Sandy Meyers, Joseph E. Pollard, Rene Staeb, Debbie Forth, Carol Wehlmann, Radha Raman, Mary Doss	
8	Arizona Public Service Company	e	Tom Carlson	
9	Atmos Energy	pl	Steve Easley	
10	Baltimore Gas & Electric Co.	1	Phil Precht	
11	Barclays Bank PLC	S	Guy Kern-Martin, Michelle Hiley	
12	Bentek Energy, LLC	s	Jack Weixel	
13	BG Energy Merchants, LLC	S	Martha Thalman, Susan Bailey, David Buckley, Victoria Versen	
14	Blackstone Technology Group	S	Rakesh Agrawal	
15	Boardwalk Pipeline Partners, LP	pl	Randy Young, Kim Van Pelt	
16	Boeing Co., The	e	Tina Burnett	
17	BP Energy	pr	Mark Stultz, Rhonda Denton	
18	Calpine Energy Services, LP	e	Shonnie Daniel, Jay Dibble	
19	Cargill Incorporated	S	Lester Welch	
20	Carolina Gas Transmission Corporation	pl	Rae Davis, Dana B. Randall	
21	Castleton Commodities Merchant Trading L.P.	s	Tara Liscombe	
22	CenterPoint Energy Services, Inc.	S	Mickey Moon, Larry Kunkle	
23	CenterPoint Energy Gas Transmission Company	pl	Cindy Suarez, Larry Thomas	
24	CenterPoint Energy Mississippi River Transmission Corporation	pl	Cindy Suarez, Mike Stoll	
25	Cheniere Pipeline Company	pl	Whit Scott	
26	Chevron Natural Gas	pr	Charles (Chuck) Cook	
27	Chevron Pipe Line Company	pl	Mary Anne Collins, Deborah Plattsmier, Jeff Kirk	
28	Cimarex Energy Co.	pr	Charlotte Baker	



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	Organization	Seg	Contact	Sub- Seg ²
29	Citigroup Energy Inc.	S	Carrie Southard, Angela Davis	
30	Colorado Springs Utilities	1	Joe M. Holmes	
31	Columbia Gas Transmission	pl	Claire Burum	
32	ConocoPhillips Gas and Power	pr	Catherine R. Abercrombie, Pete Frost	
33	Consolidated Edison Company of NY	1	Scott Butler	
34	Constellation Energy Commodities Group Inc.	S	Lisa Simpkins, Joseph Kirwan, Andrea Kullman, Jennifer Scott, Stephen C. Knapp	
35	Dauphin Island Gathering Partners	pl	Katie Rice	
36	DB Energy Trading	S	William Donnelly, Travis McCullough	
37	DCP Midstream, LLC	pl	Katrina E. White	
38	Defense Logistics Agency Energy	e	Veronica Jones, Kevin Ahern	
39	Department of Energy	e	Christopher Freitas	
40	Devon Energy Corporation	pr	Bill Green, Josephina Nguyen, Mike Dionisio	
41	Dominion Resources	1	Craig Colombo	
42	Dominion Transmission, Inc.	pl	Becky Miller, Ron Tomlinson	
43	DTE Energy Trading, Inc.	s	Gregory V. Staton, James Buck, Dena Crawford, Marcia L. Hissong, Ann Marie Jambor, Cynthia Klots, Shelley Greene	
44	Eastern Shore Natural Gas Company	pl	Elaine B. Bittner	
45	El Paso Natural Gas Company, L.L.C.	pl	William Griffith	
46	Enbridge (U.S.) Inc.	pl	Elise Cort	
47	Encana Marketing (USA) Inc.	s	Keith Sappenfield, Jeff Jarvis	
48	Encana Oil & Gas (USA) Inc.	pr	Keith Sappenfield, Jeff Jarvis	
49	Energy Transfer Partners, L.P.	pl	Josie Castrejana, Miki Kolobara	
50	Enogex Energy Resources LLC	S	Cary Metz	
51	Entergy Services, Inc.	e	Laura Berryman, Terry Shields	
52	Enterprise Products Partners L.P.	pl	Jeff Molinaro	
53	EP Energy E&P Company, L.P.	pr	Stephanie Karm	
54	Equitrans, LP	pl	Paul W. Diehl	
55	ExxonMobil Gas & Power Marketing Company a division of Exxon Mobil Corporation	pr	Randy E. Parker, John W. Poe	
56	Florida Power & Light Company	e	Tim Gerrish, Art Morris	
57	Gas Transmission Northwest Corp.	pl	Joseph Pollard	
58	Golden Pass Pipeline, LLC	pl	Vickie Long	
59	Great Lakes Gas Transmission	pl	Joseph Pollard	
60	Iberdrola USA Management Corporation	1	Mark Marini	



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	Organization	Seg	Contact	Sub- Seg ²
61	Imperial Irrigation District	e	Susie Carrillo	
62	Integrys Energy Group, Inc.	1	David E. Wear	
63	Iroquois Gas Transmission System	pl	Tom Gwilliam	
64	JP Morgan Ventures Energy Corp	S	Paul Tramonte	
65	Kern River Gas Transmission Co	pl	Brenda Martin	
66	Latitude Technologies	s	Leigh Spangler	
67	Macquarie Energy LLC	S	Darlene Volker, Michele McLendon	
68	Marathon Oil Company	pr	Robin Perrine	
69	Mewbourne Oil Company	pr	Michael F. Shepard	
70	National Fuel Gas Supply Corp.	pl	Deborah Kupczyk	
71	Natural Gas Pipeline Co of America	pl	Paul Love, Gene Nowak	
72	National Grid	1	James A. Stanzione	
73	New Mexico Gas Company Inc.	1	Ericka DeCourcey	
74	Nexen Marketing	s	Deb Strang, Sharron Roberts	
75	NextEra Energy Power Marketing, LLC	e	Marty Jo Rogers	
76	NiSource, Inc.	1	Deepak Raval, Michael D. Watson	
77	Noble Americas Corp	pl	Joseph Limone, Marisa Scauzillo, Vanessa R. Mathieu	
78	Noble Energy, Inc.	pr	Richard Smith, Tammy M. Stevens	
79	Northern Border Pipeline Company	pl	Joseph Pollard	
80	Northern Natural Gas	pl	Nancy A. Hetrick	
81	Northwest Natural Gas Company	1	Randolph Friedman	
82	NOVA Gas Transmission Ltd.	pl	Sherry Hill, Bob Jones	
83	ONEOK	1	Larry Dykes	
84	ONEOK Partners GP, LLC	pl	Teri Tingler, Lisa Nishimuta	
85	PAA Natural Gas Storage, LLC	s	Eileen W. Kisluk	
86	Panhandle Eastern Pipe Line	pl	Michael Langston, Larry Biediger	
87	Peoples Gas System (A division of Tampa Electric Co)	1	Wraye Grimard	
88	Portland Natural Gas Transmission System	pl	Sherry Hill, Bob Jones	
89	PPL EnergyPlus, LLC	e	Anne Lovett	
90	QEP Resources, Inc.	pr	Steve Stanton	
91	Questar Pipeline Co.	pl	Jerry H. Gross	
92	Quorum Business Solutions Inc.	s	Cleve Hogarth, Seth Peters	
93	Salt River Project Agricultural Improvement & Power District	e	Lori-Lynn C. Pennock	



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	Organization	Seg	Contact	Sub- Seg ²
94	Sempra Energy - Southern California Gas Co.	1	Lee Stewart, Rodger Schwecke	
95	Sempra U.S. Gas & Power	pl	Bill Rapp, Elizabeth Peters	
96	Sequent Energy Management, L.P.	S	Pat Metteauer	
97	Shell Energy North America (US), L.P.	S	Eric Gillaspie	
98	SNL Financial	S	Katrina Sumey	
99	Southern California Edison Company	e	Roman Bakke, Rob Grimm	
100	Southern Company Services, Inc.	e	Alan Kilpatrick, Travis DeJuan Law	
101	Southern Star Central Gas Pipeline	pl	Philip Rullman, Doug Field	
102	Southwest Gas Corporation	1	Larry Black, Mark Anderson, Mark Litwin, John Olenick	
103	Spectra Energy Transmission	pl	Richard Kruse, Kathryn Burch	
104	SunGard	s	Sylvia Munson	
105	Tennessee Gas Pipeline Company	pl	Mark Gracey	
106	Tennessee Valley Authority	e	Valerie Crockett	
107	Tiger Natural Gas	S	R.F. (Bob) Smith	
08	TransCanada Pipelines	pl	Sherry Hill, Bob Jones	
109	Transwestern Pipeline Company, LLC	pl	Blair V. Lichtenwalter, Mary Draemer	
10	Vector Pipeline L.P.	pl	Amy Bruhn	
11	Vectren Corporation	1	Elizabeth Beck	
12	WBI Energy Transmission, Inc.	pl	Keith Tiggelaar, Gwen Schoepp, Kelly Brooks, Lori Myerchin	
13	Williams Energy Resources, LLC	S	Tina Still, Cindy Bottomley, Kelly Knopp	
14	Williams Gas Pipeline	pl	Dale Davis, Christopher Burden	
15	WPX Energy Marketing, LLC	S	Rich Ficken	
Vholesa	le Electric Quadrant Members:			
1	8760, Inc.	ts	Jim Buccigross	
2	Alabama Municipal Electric Authority	d	Ray Phillips	mun
3	Alberta Electric System Operator	i	Diana Pommen	
4	Alliance for Cooperative Energy Services Power Marketing LLC (ACES)	m	Roy J. True, Amadou Fall	mun
5	American Electric Power Service Corp.	g	Joanne Goza, Joseph Hartsoe, Phil Cox	iou
6	American Municipal Power, Inc.	m	Chris Norton, Alice Walker	mun
7	American Public Power Association	d	Allen Mosher	mur
8	Arizona Public Service Company	t	Robert Bean	iou
9	Arkansas Electric Cooperative Corporation	g	Ricky Bittle	mun



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	Organization	Seg	Contact	Sub- Seg ²
10	Associated Electric Cooperative, Inc.	t	Jeff Johns	muni
11	Avista Corporation	t	Jeff Schlect, Kenneth Dillon	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	BC Hydro	t	Al Woodruff, Brenda Ambrosi	fed
16	Black Hills Corporation	g	Kenna Hagan	iou
17	Bonneville Power Administration	d	Richard Gillman	other
18	Bonneville Power Administration	g	Francis Halpin, Erika Doot	fed
19	Bonneville Power Administration	m	Brenda Anderson, Ann Shintani	fed
20	Bonneville Power Administration	t	Russ Mantifel, Chris Jones	fed
21	California Department of Water Resources	g	Glenn Solberg, Chi Doan	fed
22	California ISO	i	Brian Jacobsen	
23	Central Electric Power Cooperative	d	Arthur Fusco	muni
24	Clark Public Utilities	d	Brenna Moore	muni
25	Cleco Power, LLC	t	Cindy Guillot	iou
26	Consolidated Edison Company of New York, Inc.	t	Scott Butler	iou
27	Deseret Power Electric Co-op	g	Curt Winterfeld	muni
28	Dominion Energy Marketing, Inc.	g	Lou Oberski	iou
29	Duke Energy Corp.	d	Alan Pritchard	iou
30	Duke Energy Corp.	m	John Sturgeon	iou
31	Duke Energy Corp.	t	Jack Armstrong, Michael Anthony, Lee Schuster	iou
32	Dynegy Marketing and Trade, LLC	g	Contracts - Legal Department	merc
33	Edison Electric Institute	n	David Owens, Dave Dworzak, James P. Fama	n
34	Electric Reliability Council of Texas (ERCOT)	i	John Dumas, Paul Wattles, Joel Mickey	
35	Empire District Electric Company, The	t	Bary K. Warren	iou
36	Entergy Services, Inc.	t	Yarrow Etheredge, Narinder Saini	iou
37	Exelon Generation - Power Team	m	Jack Crowley	iou
38	Florida Municipal Power Agency	g	Frank Gaffney, Dan O'Hagan, Susan Schumann	muni
39	Florida Municipal Power Agency	d	Frank Gaffney, Dan O'Hagan, Susan Schumann	muni
40	Florida Power & Light Company	m	Jim Drake, Tom Hartman	iou
41	Florida Power & Light Company	t	Bob Birch	iou
42	Georgia Transmission Corporation	t	Patrick McGovern	muni
43	GMO GlobalSign, Inc.	e	Lila Kee	at large
44	Hydro – Quebec Transenergie	t	Michel Prevost	fed



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	Organization	Seg	Contact	Sub- Seg ²
45	Iberdrola USA Management Corporation	t	Mark Marini	iou
46	Idaho Power Company	t	Kathy Anderson	iou
47	Independent Electricity System Operator (IESO)	i	Scott Berry, Mike Yealland	
48	Indiana Municipal Power Agency	g	Scott Berry	muni
49	ISO New England, Inc.	i	Matthew F. Goldberg, Douglas Smith, Eric Winkler	
50	LG&E and KU Services Company	t	Derek A. Rahn, Larry Monday	iou
51	Los Angeles Department of Water and Power	t	Mohammed Johar Beshir	muni
52	Los Angeles Department of Water and Power	m	Bradford L. Packer, Joel F. Cordero	muni
53	Maine Public Utilities Commission	e	Denis Bergeron	reg
54	Manitoba Hydro	t	Robin Smyrski	fed
55	Manitoba Hydro	m	Audrey Penner	fed
56	Michigan Public Power Agency	d	Peter J. Schimpke	muni
57	MidAmerican Energy Company	m	Dennis Kimm	iou
58	Midwest Independent Transmission System Operator	i	William (Bill) Phillips, Ed Skiba	
59	Midwest Reliability Organization	t	Dan Schoenecker	at large
60	Missouri River Energy Services	d	Thomas J. Heller	muni
61	Nalcor Energy	m	Brad Coady	fed
62	National Association of Regulatory Utility Commissioners	e	Lou Ann Westerfield	reg
63	National Grid	t	Edward M. Kremzier	iou
64	National Institute of Standards and Technology	ts	David A. Wollman	
65	National Rural Electric Cooperative Assoc.	d	Paul McCurley	muni
66	Nebraska Public Power District	t	Don Schmit	muni
67	New Jersey Board of Public Utilities	g	Kristi Izzo	fed
68	New York Independent System Operator (NYISO)	i	Wesley Yeomans, Donna Pratt	
69	New York State Reliability Council	d	P. Donald Raymond	at large
70	North American Electric Reliability Corporation	d	David Taylor	at large
71	North Carolina Electric Membership Corporation	d	David Beam, Diane Huis, Richard McCall, James R. Manning	muni
72	Northeast Utilities Service Company	t	David Boguslawski, Calvin A. Bowie	iou
73	Northwestern Corporation	t	Mike Cashell	iou
74	NRG Energy, Inc.	g	Alan Johnson, Jennifer J. Vosburg, Elizabeth Killinger	merc
75	NV Energy	m	Sheryl Torrey	iou
76	NV Energy, Inc.	t	Patricia Englin	iou
77	Open Access Technology International, Inc.	e	Michehl Gent	at large



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	Organization	Seg	Contact	Sub- Seg ²
78	Open Access Technology International, Inc.	t	Paul R. Sorenson	at large
79	Organization for the Advancement of Structured Information Standards (OASIS)	ts	Laurent M. Liscia	
80	PacifiCorp	m	John Apperson	iou
81	PacifiCorp	t	Sarah E. Edmonds	iou
82	PJM Interconnection	i	Frank Koza, Cathy Wesley	
83	Portland General Electric	t	Frank Afranji, John Walker. Johnny Useldinger	iou
84	Power Costs, Inc. (PCI)	ts	TJ Ferreira	
85	Powerex Corp	m	Michael L McWilliams, Sharole Tylor	fed
86	PowerSouth Energy Cooperative	d	William Ronald Graham	muni
87	Public Service Company of New Mexico	m	Steven Maestas, Darren Wilkins, Roger Vaughn	iou
88	Public Utilities Commission of Ohio	e	Amanda Stallings	reg
89	Public Utility District No. 2 of Grant County, Washington	m	Casey Sprouse	muni
90	Puget Sound Energy, Inc.	t	George Marshall, Bob Harshbarger	iou
91	Sacramento Municipal Utility District	d	Steve Sorey	muni
92	Salt River Project Agricultural Improvement and Power District	t	Michael J. Pfeister	fed
93	Salt River Project Agricultural improvement and Power District	m	Richard Lehman	fed
94	San Diego Gas & Electric Company	t	Patricia vanMidde	iou
95	Santee Cooper	t	Tom Abrams	fed
96	Seattle City Light	d	Evelyn Hagar	muni
97	Seminole Electric Cooperative, Inc.	m	Steve Wallace	muni
98	Shell Energy America (US), L.P.	m	Robert Reilley, Paul Kerr	niou
99	Shift Systems	e	Jesse D. Hurley	at large
100	Snohomish County PUD No. 1	d	Kim Haugen	muni
101	South Carolina Electric & Gas Company	t	S. Porcher Stoney, James T. Starling, Jr. , Sonya Green-Sumpter, Matt Bullard, Kevin Spitzform	iou
102	Southern Company Services, Inc.	g	John Ciza	iou
103	Southern Company Services, Inc.	m	Joel Dison	iou
104	Southern Company Services, Inc.	t	Terry Coggins, JT Wood, James Y. Busbin, Corey Sellers, Antonio Grayson	iou
105	Southwest Power Pool	i	Carl Monroe, Michael Desselle, Charles Yeung	
106	Southwest Transmission Cooperative, Inc.	t	Shane Sanders, James Burson	muni
107	Stryve Advisors, LLC	ts	Bill Hunter	
108	SunGard	ts	Andrew Tritch	



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Appendix C – Current NAESB Membership Profile

Tenaska, Inc. Tenaska, Inc. g Scott Helyer, William Simpson merc fed Tennessee Valley Authority g Kathy York fed Tennessee Valley Authority m Luis A. (Tony) Suarez, Valerie Crockett fed Tennessee Valley Authority t Chuck Feagans fed Tennessee Valley Authority t Chuck Feagans fed Tri-State Generation and Transmission Association, Inc. Tri-State G&T Association, Inc. g Janelle Marriott muni Tucson Electric Power Company t Raquel Aguilar, Ed Beck, Amy Welander iou United Illuminating Company, The t Jim Clemente, Laurie Lombardi iou Vermont Public Power Supply Authority g William J. Gallagher muni Vermont Public Service Board e Mary Jo Krolewski reg We Energies (Wisconsin Electric) d Linda Horn iou We Energies (Wisconsin Electric) g James R. Keller iou We Energies (Wisconsin Electric) g Grant Wilkerson iou Western Area Power Administration t JB Hite fed Western Area Power Administration m Jeffrey Ackerman fed Western Bectricity Coordinating Council t Michelle Mizumori, Craig L. Williams at large Western Electricity Coordinating Council t Michelle Mizumori, Craig L. Williams at large Wisconsin Public Service Corporation g Christopher Plante, Charles W. Severance, Neal Balu WPPI Energy d Todd Komplin muni		Organization	Seg	Contact	Sub- Seg ²
Tennessee Valley Authority g Kathy York fed Tennessee Valley Authority m Luis A. (Tony) Suarez, Valerie Crockett fed Tennessee Valley Authority t Chuck Feagans fed Tri-State Generation and Transmission Association, Inc. Tri-State G&T Association, Inc. g Janelle Marriott muni Tri-State G&T Association, Inc. g William J. Gallagher muni Tri-State G&T Association, Inc. g William J. Gallagher muni Tri-State G&T Association Electric g William J. Gallagher muni Tri-State G&T Association Electric g Janes R. Keller iou Tri-State G&T Association Electric g Janes R. Keller iou Tri-State G&T Association Electric g Janes R. Keller iou Tri-State G&T Association Electric g Grant Wilkerson iou Tri-State G&T Association Gouncil t JB Hite fed Tri-State G&T Association Gouncil t Michelle Mizumori, Craig L. Williams at large Tri-State Electricity Coordinating Council t Michelle Mizumori, Craig L. Williams at large Tri-State Electricity Coordinating Council t Michelle Mizumori, Craig L. Williams at large Tri-State Electricity Coordinating Council to Michelle Mizumori, Craig L. Williams at large Tri-State Electricity Coordinating Council to Michelle Mizumori, Craig L. Williams at large Tri-State Electricity Coordinating Council to Michelle Mizumori, Craig L. Williams at large Tri-State Electricity Coordinating Council to Michelle Mizumori, Craig L. Williams at large Tri-State Electricity Coordination Gouncil to Michelle Mizumori	109	Tacoma Power	d	Rick Applegate	mui
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127 Wisconsin Public Service Corporation g Christopher Plante, Charles W. Severance, Neal iou Balu 128 WPPI Energy d Todd Komplin muni 129 Xcel Energy Inc. m David Lemmons iou Retail Gas Quadrant Members: 1 Allegro Development s Kimberly Page 2 American Public Gas Association (APGA) d Alonzo Weaver, Joe Stengel 3 Capacity Center s Greg Lander 4 Dominion Retail, Inc. s Richard A. Zollars 5 Duke Energy Corp d Dan Jones 6 Integrys Energy Group, Inc. d Tom Aridas, Ken Thiry 7 Latitude Technologies s Leigh Spangler 8 National Fuel Gas Distribution Corporation d Mike Novak 9 Pennsylvania Office of Consumer Advocate e Tanya J. McCloskey 10 SouthStar Energy Corp s Michael Braswell, Joseph C. Monroe	125	Western Electricity Coordinating Council	t	Michelle Mizumori, Craig L. Williams	at large
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5 Duke Energy Corp d Dan Jones 6 Integrys Energy Group, Inc. d Tom Aridas, Ken Thiry 7 Latitude Technologies s Leigh Spangler 8 National Fuel Gas Distribution Corporation d Mike Novak 9 Pennsylvania Office of Consumer Advocate e Tanya J. McCloskey 10 SouthStar Energy Corp s Michael Braswell, Joseph C. Monroe	3	Capacity Center	s	Greg Lander	
6 Integrys Energy Group, Inc. d Tom Aridas, Ken Thiry 7 Latitude Technologies s Leigh Spangler 8 National Fuel Gas Distribution Corporation d Mike Novak 9 Pennsylvania Office of Consumer Advocate e Tanya J. McCloskey 10 SouthStar Energy Corp s Michael Braswell, Joseph C. Monroe	4	Dominion Retail, Inc.	s	Richard A. Zollars	
7 Latitude Technologies s Leigh Spangler 8 National Fuel Gas Distribution Corporation d Mike Novak 9 Pennsylvania Office of Consumer Advocate e Tanya J. McCloskey 10 SouthStar Energy Corp s Michael Braswell, Joseph C. Monroe	5	Duke Energy Corp	d	Dan Jones	
8 National Fuel Gas Distribution Corporation d Mike Novak 9 Pennsylvania Office of Consumer Advocate e Tanya J. McCloskey 10 SouthStar Energy Corp s Michael Braswell, Joseph C. Monroe	6	Integrys Energy Group, Inc.	d	Tom Aridas, Ken Thiry	
9 Pennsylvania Office of Consumer Advocate e Tanya J. McCloskey 10 SouthStar Energy Corp s Michael Braswell, Joseph C. Monroe	7	Latitude Technologies	S	Leigh Spangler	
10 SouthStar Energy Corp s Michael Braswell, Joseph C. Monroe	8	National Fuel Gas Distribution Corporation	d	Mike Novak	
*	9	Pennsylvania Office of Consumer Advocate	e	Tanya J. McCloskey	
Sprague Operating Resources LLC s Paul Scoff	10	SouthStar Energy Corp	S	Michael Braswell, Joseph C. Monroe	
	11	Sprague Operating Resources LLC	S	Paul Scoff	



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Appendix C – Current NAESB Membership Profile

	Organization	Seg	Contact	Sub- Seg ²
12	Systrends USA	S	Dave Darnell	
13	UGI Utilities, Inc.	d	Paul Szykman	
14	World Alliance for Decentralized Energy	S	David Sweet	



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Appendix D - Proposed Structure - Membership, Board of Directors and Executive Committee

Proposal:

There are four segments and all members are accounted for, with one segment specific to retail gas market interests and three segments specific to retail electric market interests.

Proposal 3 Merged Quadrant	TOTAL 43	
Utilities	7	
Retail Electric S	ervice Providers/Suppliers 9	
Retail Electric E	nd Users/Public Agencies 13	
Retail Gas Mark	et Interests 14	

Members of the New Segments for Proposal 3:

Proposal 3 Merged Quadrant TO			TOTAL	43
Utilities				7
REQ	Utility	Alabama Power		
REQ	Utility	Ameren Services Company		
REQ	Utility	Baltimore Gas & Electric Co.		
REQ	Utility	CenterPoint Energy Houston Electric, LI	.C	
REQ	Utility	Dominion Virginia Power		
REQ	Utility	Oncor		
REQ	Utility	Wisconsin Public Service Corporation		
Retail Gas Market Interests			14	
RGQ	Services/Suppliers	Allegro Development		
RGQ	Distribution	American Public Gas Association (APG	A)	
RGQ	Services/Suppliers	Capacity Center		
RGQ	Services/Suppliers	Dominion Retail, Inc.		
RGQ	Distribution	Duke Energy Corp		
RGQ	Distribution	Integrys Energy Group, Inc.		
RGQ	Services/Suppliers	Latitude Technologies		
RGQ	Distribution	National Fuel Gas Distribution Corporati	on	
RGQ	End User/Public Agencies	Pennsylvania Office of Consumer Advoc	eate	
RGQ	Services/Suppliers	SouthStar Energy Corp		
RGQ	Services/Suppliers	Sprague Operating Resources LLC		
RGQ	Services/Suppliers	Systrends USA		
RGQ	Distribution	UGI Utilities, Inc.		
RGQ	Services/Suppliers	World Alliance for Decentralized Energy	7	
Retail Electric Service Providers/Suppliers				9
REQ	Services/Suppliers	ABB Ventyx		
REQ	Services/Suppliers	Big Data Energy Services		



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Appendix D - Proposed Structure - Membership, Board of Directors and Executive Committee

REQ	Services/Suppliers	Comverge, Inc.	
REQ	Services/Suppliers	Dominion Retail	
REQ	Services/Suppliers	Intelometry, Inc.	
REQ	Services/Suppliers	ista	
REQ	Services/Suppliers	PPL Solutions, LLC	
REQ	Services/Suppliers	Southern Company Services	
REQ	Services/Suppliers	SunGard Consulting Services, LLC	
Retail E	lectric End Users/Public Agen	cies	13
REQ	End Users/Public Agencies	City of Houston	
REQ	End Users/Public Agencies	Electric Reliability Council of Texas (ERCOT)	
REQ	End Users/Public Agencies	Energy Information Standards Alliance	
REQ	End Users/Public Agencies	ISO New England	
REQ	End Users/Public Agencies	Maryland Public Service Commission	
REQ	End Users/Public Agencies	National Association of Regulatory Utility Commissioners	
REQ	End Users/Public Agencies	New Jersey Board of Public Utilities	
REQ	End Users/Public Agencies	Pennsylvania Office Of Consumer Advocate	
REQ	End Users/Public Agencies	Pennsylvania Public Utility Commission	
REQ	End Users/Public Agencies	Public Utilities Commission of Ohio	
REQ	End Users/Public Agencies	Public Utility Commission of Texas	
REQ	End Users/Public Agencies	Vermont Public Service Board	
REQ	End Users/Public Agencies	ZigBee Alliance	



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Appendix D - Proposed Structure - Membership, Board of Directors and Executive Committee

Proposal 3 -- Merged Quadrant Board Seats Total of 24 seats, 19 filled

Utilities -	- 2 vacancies		6
REQ	Brandon Stites	Director – Energy Conservation & Advanced Metering, Dominion Virginia Power	
REQ	Dennis Derricks	Director Regulatory Policy and Analysis, Wisconsin Public Service Corporation	
REQ	Ruth Kiselewich	Director - Demand Side Management Programs, Baltimore Gas & Electric Company	
REQ	Debbie McKeever	Market Advocate, Oncor	
Retail Ga	s Market Interests - 2 vaca	ncies	3
RGQ	Leigh Spangler	President, Latitude Technologies Inc.	
RGQ	Joseph C. Monroe	Vice President - External Affairs, SouthStar Energy Services, LLC	
RGQ	Dave Darnell	President & CEO, Systrends USA	
RGQ	Alonzo Weaver	Vice President of Engineering and Operations, Memphis Light, Gas & Water Division (APGA)	
Retail Ele	ectric Service Providers/Su	ppliers – 3 vacancies	3
REQ	Wendell Miyaji	Vice President - Energy Sciences, Comverge, Inc.	
REQ	Jim Minneman	Controller, PPL Solutions, LLC	
REQ	J. Cade Burks	President, Big Data Energy Services	
Retail Ele	ectric End Users/Public Ag	encies – 2 vacancies	4
REQ	Tobin Richardson	Director - Smart Energy, ZigBee Alliance	
REQ	Chris Kotting	Executive Director, Energy Information Standards Alliance	
REQ	James P. Cargas	Senior Assistant City Attorney, City of Houston	
REQ	Susan Munson	Retail Market Liaison, Electric Reliability Council of Texas, Inc. (ERCOT)	



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Appendix D - Proposed Structure - Membership, Board of Directors and Executive Committee

Proposal 3 -- Merged Quadrant Executive Committee Seats Total of 24 seats, 13 filled

Utilities -	Utilities – 2 vacancies 4					
REQ	Phil Precht	Management Consultant - Pricing and Regulatory Services Department, Baltimore Gas & Electric Company				
REQ	Patrick Eynon	Supervisor – Retail Access, Ameren Services				
REQ	Judy Ray	Industrial Segment Manager - Contract Administrator, Alabama Power Company				
REQ	Debbie McKeever	Market Advocate, Oncor				
Retail Ga	as Market Interests - 4 vaca	uncies	2			
RGQ	Dan Jones	Senior Account Manager - Customer Choice, Duke Energy				
RGQ	Richard Zollars	Director - Data and Billing, Dominion Retail, Inc.				
Retail El	Retail Electric Service Providers/Suppliers – 3 vacancies					
REQ	Bill Barkas	Manager of Retail State Government Relations, Dominion Retail, Inc.				
REQ	Jim Minneman	Controller, PPL Solutions, LLC				
REQ	Wendell Miyaji	Vice President – Energy Sciences, Comverge, Inc.				
Retail El	ectric End Users/Public Ag	encies – 2 vacancies	4			
REQ	James Bradford Ramsay	General Counsel – Supervisor/Director – NARUC Policy Department, National Association of Regulatory Utility Commissioners (NARUC)				
REQ	Dennis Robinson	Director - Market & Resource Administration, ISO New England				
REQ	Christine Wright	Senior Policy Analyst, Public Utility Commission of Texas				
REQ	Susan Munson	Retail Market Liaison, Electric Reliability Council of Texas (ERCOT)				



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Appendix E – NAESB Governance Documents Excerpts

Certificate Excerpt Regarding Segment Structure:

Article 3: Organization and Management

Section 2: The Board of Directors and Executive Committee members shall be elected for such terms as provided in the By-Laws. The number of members of the Board of Directors and Executive Committee shall as provided in the By-Laws. There may be as many as four Quadrants and each Quadrant shall be composed of industry Segments. The members of each Segment shall vote separately for the election of Directors and Executive Committee members for such Segment pursuant to procedures set forth in the By-Laws.

Bylaws Excerpts Regarding Segment Structure:

Article 1: Definitions Section 1.1 Definitions

Q. "Segment" means one of the co-equal member groupings of a given Quadrant, as defined by that Quadrant and approved by the Board as an Exhibit to these Bylaws.

Article 2: Purposes, Scope, Activities and Policies

Section 2.3 Quadrants and Segments

In order to have representation on the Board or the EC, a Quadrant shall have at least forty Voting Members and at least four Segments. Each Segment shall have at least five Voting Members. This minimum representation requirement shall be reconsidered by the Board biannually. Without limitation, and in addition to the other options it may choose, the Board may combine Quadrants, either for operational purposes or administrative purposes (including voting at the Board or the EC), or both, and may add new Quadrants.

NAESB Operating Practices

III. Description of the Organization

Each quadrant determines the number and composition of its segments and how many representatives it will have on the Board of Directors and Executive Committee.



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Appendix F – Retail 2013 Annual Plan

NORTH AMERICAN ENERGY STANDARDS BOARD Proposed 2013 ANNUAL PLAN for the RETAIL GAS and ELECTRIC QUADRANTS As Adopted by the Retail EC on October 24, 2012

	Iter	n Number & Description ⁱ	Completionii	Assignmentiliiv
1.	Dev	relop Technical Electronic Implementation Standards and Data Dictionaries		
	a.	Book 10: Retail Customer Enrollment, Drop and Account Information Change	1 st Q, 2013	IR/TEIS
		Status: Underway		
	b.	Review and update the technical implementation of Book 3 – Billing and Payment.	1 st Q, 2013	IR/TEIS
		Status: Underway		
2.	Add	litional Registration Agent Processes		
	a.	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	2014, date dependent on completion of items 5(f)	IR/TEIS
		Status: Not Started		
	b.	Modify as needed the NAESB EDM Version 1.6 as the data transport mechanism for ERCOT TX SET EDI transactions.	2013	Retail Electric part of the BPS/Retail
		Status: Underway		Electric Texas Task Force
3	Dev	elop Smart Grid Wholesale and Retail Electric Standards		
	a.	Harmonize Smart Grid glossary with Retail Glossary	Ongoing	REQ/RGQ Glossary
		Status: Ongoing		Subcommittee
4.	enal to o	tomer Information - Develop Model Business Practices and Process Flows to ble a Retail Customer, or a third party acting on behalf of the Retail Customer, btain the Retail Customer's energy usage information on an on-going basis tide of a Smart Grid environment	2013, date may be dependent on item 5(a).	BPS
	Stat	us: Not Started, this development is tied to the development for item 5(a)		
5.	Bus	late Existing Model Business Practices – Review and update all existing Model iness Practices, filling in any gaps that may exist and making the language sistent throughout all Books.		
	a.	Book 3 – Billing and Payments	1 st Q, 2013	BPS
		Status: Underway		
	b.	Book 8 – Customer Information	2 nd Q, 2013	BPS
		Status: Not Started		
	c.	Book 9 – Customer Billing and Payment Notification via Uniform Electronic Transactions	4 th Q, 2013	BPS
		Status: Not Started		



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Iten	Number & Description ⁱ	Completion ⁱⁱ	Assignment iii iv
d.	Book 10 - Customer Enrollment, Drop, and Account Information Change	2014	BPS
	Status: Not Started		
e.	Book 11 - Customer Enrollment, Drop, and Account Information Change Using a Registration Agent	2014	BPS
	Status: Not Started		
f.	Book 13 – Measurement and Verification (M&V) of Demand Response Programs $^{\mathrm{vi}}$	2014	BPS
	Status: Not Started		
g.	Book 14 – Service Request, Disconnection and Reconnection in the Registration Agent Model Status: Not Started	2014	BPS
		2014	DDG
h.	Book 15 – Specifications for Common Electricity Product and Pricing Definition ⁸	2014	BPS
	Status: Not Started		
i.	Book 16 – Specifications for Common Schedule Communication Mechanism for Energy Transactions 8	2014	BPS
	Status: Not Started		
j.	Book 17 – Specifications for Retail Standard Demand Response Signals ⁸	2014	BPS
	Status: Not Started		
k.	Book 18 – Retail Customer Energy Usage Information Communication ⁸ Status: Not Started	2014	BPS
1.	Book 21 – Energy Services Provider Interface ⁸	2014	BPS
1.	Status: Not Started	2014	БГЗ
m.	Book 22 – Third Party Access to Retail Customer Information ⁸	2015	BPS
	Status: Not Started		
n.	Book 23 – Supplier Marketing Practices	2015	BPS
	Status: Not Started		
0.	Book 24 – Enrollment, Drop, Account Information Change in Demand Response Programs ⁸	2015	BPS
	Status: Not Started		



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		Assignmentiiiiv
Create common interfaces and data structures necessary for enrolling DR sites a DR program	s into	
a. Develop a new standardized form to obtain the Retail Customer's Authorization for the release of their information to a third party Status: Underway	1 st Q, 2013	REQ BPS, REQ DSM-EE Subcommittee, REQ Smart Grid PAP 10 Subcommittee Data Privacy Task Force
7. Session Encryption		
 Investigate and determine if changes to standards are needed to support adequate session encryption (SSL/TLS issues <u>US-Cert Vulnerability NVU#864643</u>) 		IR/TEIS
Status: Underway		
 Modify or develop standards as needed to apply the analysis of the abovitem (7(a)) Status: Not Started 	ve 1 st Q, 2013	IR/TEIS
8. Data Privacy		
 a. Review and consider changes to the existing Privacy and Cyber Security Requirements NAESB REQ.22 as requested by Smart Grid Interoperabi Panel Cyber Security Working Group (R12008) Status: Underway 		REQ Data Privacy Task Force
Program of Standards Maintenance & Fully Staffed Standards Work vii		
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
Ongoing Development and Maintenance of Model Business Practices	Ongoing	BPS

Provisional Activities

Joint Effort:

- 1 Review security standards as may be deemed necessary, such as Public Key Infrastructure (PKI).
- 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.



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Item Number & Descriptionⁱ

Completionⁱⁱ

Assignment iiiiv

- 3. Consider development of business practices to support use of mobile devices.
- 4. Review RXQ.6 pending results of 2013 WGQ Annual Plan Item 7a Review Final Rules published by the Commodity Futures Trading Commission (CFTC) to determine if new rules on various definitions will impact any of the NAESB contracts, specifically their General Terms and Conditions.
- 5. Consider development of business practices to support the use of software applications for customer authorizations.

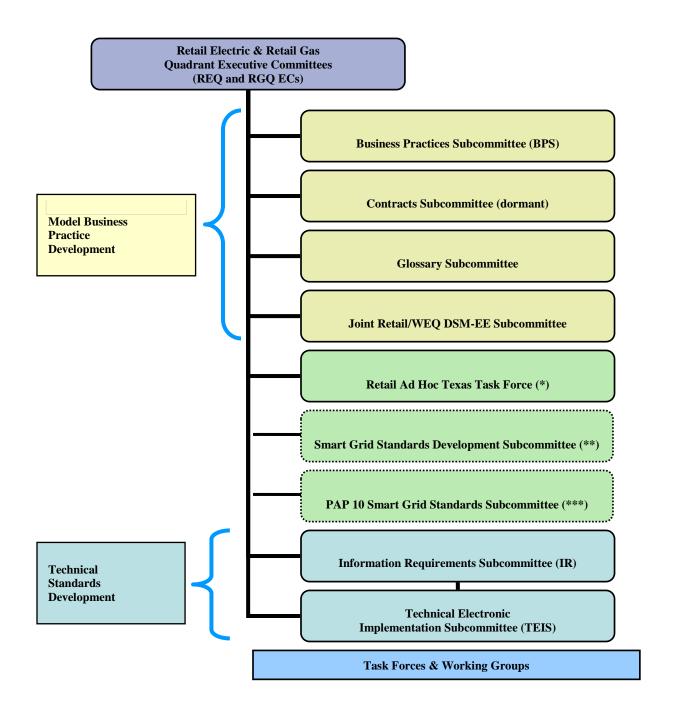
Retail Electric Quadrant Effort Only:

- 6. 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.
- 7. Review and develop model business practices to support renewable portfolio programs



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NAESB Retail Subcommittee Leadership: viii

Executive Committee: Dan Jones, Chair (RGQ), Phil Precht, Chair (REQ) Business Practices Subcommittee: Phil Precht (REQ), Dan Jones (RGQ)

Information Requirements Subcommittee/Technical Electronic Implementation Subcommittee: Judy Ray (REO)

Glossary Subcommittee: Patrick Eynon (REO)

DSM-EE Subcommittee: Ruth Kiselewich (Retail), 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 and submit them to the BPS. 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 and WEQ ECs. The group is chaired by 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 and WEQ ECs. The group is chaired by Phil Precht, Cathy Wesley, Sharon Dinges, David Kaufman, Brad Ramsay, Tobin Richardson and Ed Koch.

The PAP 10 Smart Grid Standards Subcommittee has created a Energy Services Providers Interface Task Force led by Dave Mollerstuen of Tendril, Steve Van Ausdall of Xtensible and Chad Maglaque of Xtreme Consulting Group to address the OpenADE request R10008.

Retail 2013 Annual Plan End Notes:

ⁱ 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.

ⁱⁱ Dates in the completion column are by end of the quarter for completion by the assigned committee and subcommittee. 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.

iii The assignments are abbreviated. The abbreviations and committee structure can be found at the end of the Annual Plan document.

iv The DSM-EE subcommittee has split into several separate groups to support concurrent development of separate standards sets.

^v Note: BPS will not review Book 5 (Quadrant Specific Electronic Delivery Mechanism), Book7 (Internet Electronic Transport), or Book 20 (Smart Grid Standards Data Element Table)

vi Note: This will be for language and format only, BPS will not edit for content.

vii 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.

viii 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.



RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE

For Quadrant: Joint Retail Electric and Retail Gas

Requesters: Joint REQ/RGQ IR/TEIS Subcommittee Request No.: 2013 Retail Annual Plan Item No. 1.a

Request Title: Develop Technical Electronic Implementation Standards for Data Dictionaries for Book 10: Retail Customer

Enrollment, Drop and Account Information Change

1.	RECON	IMENDED ACTION:		FOF EC VOTE TO ACCEPT IMENDED ACTION:
	X	Accept as requested Accept as modified below Decline	X	Change to Existing Practice Status Quo
2.	TYPE O	F DEVELOPMENT/MAINTENANCE		
	Per Rec	quest:	Per Rec	commendation:
	Χ	Initiation	Χ	Initiation
		Modification		Modification
		Interpretation		Interpretation
		Withdrawal		Withdrawal
		Principle		Principle
		Definition		Definition
		Business Practice Standard		Business Practice Standard
		Document		Document
		Data Element		Data Element
		Code Value		Code Value
	Χ	X12 Implementation Guide	Χ	X12 Implementation Guide
		Business Process Documentation		Business Process Documentation
				-

3. RECOMMENDATION

SUMMARY:

The Joint REQ/RGQ Information Requirements and Technical Electronic Implementation Subcommittee (IR/TEIS) submits this recommendation in accordance with 2013 Retail Annual Plan Item 1.a to develop technical electronic implementation standards and data dictionaries for Book 10 – Retail Customer Enrollment, Drop, and Account Information Change. These X12 Implementation Guides will support the business process documentation for Change Request and Change Response, Enrollment Request and Enrollment Response, and Drop Request and Drop Response.

RECOMMENDED STANDARDS:

NAESB 814 Change Request

NAESB 814 Change Response



RECOMMENDATION TO NAESB EXECUTIVE COMMITTEE

For Quadrant: Joint Retail Electric and Retail Gas

Requesters: Joint REQ/RGQ IR/TEIS Subcommittee Request No.: 2013 Retail Annual Plan Item No. 1.a

Request Title: Develop Technical Electronic Implementation Standards for Data Dictionaries for Book 10: Retail Customer

Enrollment, Drop and Account Information Change

NAESB 814 Enrollment Request

NAESB 814 Enrollment Response

NAESB 814 Drop Request

NAESB 814 Drop Response

4. SUPPORTING DOCUMENTATION

a. Description of Request:

b. Description of Recommendation:

The Joint REQ/RGQ Information Requirements and Technical Electronic Implementation Subcommittee (IR/TEIS) submits this recommendation in accordance with 2013 Retail Annual Plan Item 1.a to develop technical electronic implementation standards and data dictionaries for Book 10 – Retail Customer Enrollment, Drop, and Account Information Change. These X12 Implementation Guides will support the business process documentation for Change Request and Change Response, Enrollment Request and Enrollment Response, and Drop Request and Drop Response.

c. Business Purpose:

See above

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

RETAIL CUSTOMER AUTHORIZATION FOR RELEASE OF RETAIL CUSTOMER-SPECIFIC DATA

By signing this Authorization, or acknowledging acceptance electronically, the Retail Customer whose signature/electronic name appears below consents and agrees to permit the third party whose signature/electronic name also appears below to obtain from the Distribution Company named below the Retail Customer-specific data as described in this Authorization for the following Account No(s)., ESI ID, meter number(s) and/or other identifier(s) at the below service address(es):

Identifier(s) (Account No(s).,

ESI ID(s)*, etc.)	Meter Number(s)	Service Address(es)
* ESI ID = Electric Service Iden	tifier used in the Registration A	Agent Model
This Authorization applies to Re	tail Customer-specific data he	ld by or with the following Distribution Company:
Distribution Company a	applicable to Retail Customer's	s Account
The service(s) supplied by the check all that apply):	Distribution Company that thi	s Authorization applies to is/are (initial or electronicall
Retail Customer's Gas	Service	
Retail Customer's Elec	tric Service	
described below, if available(End Dashall be provided within thirty acknowledged Authorization,	or applicable, for the period ate) (Note: End Date cannot by y (30) days of Distribution	ide to the third-party identified below the type(s) of dat beginning(Start Date) and ending be later than the Expiration Date below). Existing dat Company's receipt of this signed or electronicall such date shall be provided on or about
The format that the data is to be	provided (Initial or electronica	ally check one format):
Summary Data		
Summary Data Monthly billing	ı data	
Northing Shining	data	
Interval data for the following int	erval:	
Daily		
Hourly		
30- minute 15-minute		
	ibe :)	
Specific data to be provided:		
kWh		
kW (if available) kVa (if applicable)		
kVa (ii applicable)		
Gas Usage (Therms or	Ccf as appropriate)	
	(Insert other data	a type as appropriate)
	(Insert other data	a type as appropriate)
		a type as appropriate)
	•	
Definitions and/or additional	descriptions of the abo	ove data terms are attached or available a
·		

(Note: Insert additional pages if needed)

RETAIL CUSTOMER'S AUTHORIZATION:

Retail Customer Name		Name of Record o	n Distribution Compa	nnv Account
Retail Customer Mailing	Address			
Retail Customer's or auth	orized Retail Custo	mer Representative	e's Signature	
			o orginatal o	
		(If not Ele	ctronically Acknowle	dged)
Printed Retail Customer's	s or Representative'	s Name		
Representative's Title				
Telephone No.		Fax No.	(If Available)	_
E-Mail Address	(Optional for Resi	idential Customers	– Required for nonre	sidential Retail Customers)
Date Signed or Electronic	cally Acknowledged		(mr	m/dd/yyyy).
Expiration Date: This A	uthorization expire	es on	(specific date r	mm/dd/yyyy).
THIRD-PARTY SEEKI To be signed or electroni				
Company Name:			•	
Mailing Address:				
Contact Information:	Telephone			
	E-Mail Address			
Representative's Signatu	re:	(If not Electronical	v Acknowledged)	
Printed Representative's	Name:	•	, , , , , , , , , , , , , , , , , , ,	
Representative's Title:				
Date Signed or Electronic	cally Acknowledged		(mm/d	d/yyyy).
				owing purposes in accordance andards Board REQ.22.

This Authorization should be signed or electronically acknowledged by the third-party and forwarded to the Retail Customer for signature or electronic acknowledgment. The Retail Customer, after completing and signing/acknowledging this Authorization, should return this Authorization to the third-party who should provide it to the Distribution Company who should maintain it consistent with the Distribution Company's document retention policy. The third-party should maintain a copy of this Authorization for potential auditing purposes as required by law but, at a minimum, until thirty (30) days after the Expiration Date of this Authorization. If required by the Applicable Regulatory Authority, the third-party should provide notice to the Applicable Regulatory Authority of its receipt of this Authorization from the Retail Customer.

814 General Request, Response or Confirmation

Functional Group ID=GE

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the General Request, Response or Confirmation Transaction Set (814) for use within the context of an Electronic Data Interchange (EDI) environment. This standard can be used to request actions to be performed, to respond to a request for actions to be performed or to confirm information related to actions performed.

Heading:

M	Pos. <u>No.</u> 010	Seg. <u>ID</u> ST	<u>Name</u> Transaction Set Header	Req. Des. M	Max.Use	Loop <u>Repeat</u>	Notes and Comments
M	020	BGN	Beginning Segment	M	1		
			LOOP ID - N1			>1	
	040	N1	Distribution Company (N1~8S)	О	1		n1
			LOOP ID - N1			>1	
	040	N1	Supplier (N1~SJ)	O	1		
			LOOP ID - N1			>1	
	040	N1	Name (Retail Customer)	О	1		

Detail:

	Pos. <u>No.</u>	Seg. <u>ID</u>	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments	
			LOOP ID - LIN			>1		
	010	LIN	Item Identification	О	1			
	020	ASI	Action or Status Indicator	О	1			
	030	REF	Reference Identification (Supplier Account Number)	О	>1			
	030	REF	Reference Identification (Distribution Company Account Number/SDID)	O	>1			
	030	REF	Reference Identification (Rejection Reason Code)	O	>1			
	030	REF	Reference Identification (Reason for Change)	O	>1			
	040	DTM	Date/Time Reference (Effective Date)	О	>1			
M	150	SE	Transaction Set Trailer	M	1			

Transaction Set Notes

1. The N1 loop is used to identify the transaction sender and receiver.

Segment: ST Transaction Set Header

Position: 010

Loop:

Level: Heading Usage: Mandatory

Max Use:

Purpose:

To indicate the start of a transaction set and to assign a control number

Syntax Notes:

Semantic Notes:

1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

Comments:

Notes:

Required

ST~814~000000001

Must Use	Ref. <u>Des.</u> ST01	Data Element 143	Name Transaction Set Identifier Code	Attr M	ributes ID 3/3
			Code uniquely identifying a Transaction Set 814 General Request, Response or Confirm	ation	
Must Use	ST02	329	Transaction Set Control Number Identifying control number that must be unique within the trafunctional group assigned by the originator for a transaction		AN 4/9 ion set

Segment: BGN Beginning Segment

Position: 020

Loop:

Level: Heading Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of a transaction set
 Syntax Notes: 1 If BGN05 is present, then BGN04 is required.
 Semantic Notes: 1 BGN02 is the transaction set reference number.

2 BGN03 is the transaction set date.

3 BGN04 is the transaction set time.

4 BGN05 is the transaction set time qualifier.

5 BGN06 is the transaction set reference number of a previously sent transaction

affected by the current transaction.

Comments:

Notes: Required

BGN~11~20121216ABC0000000000000123456~20121216~~~20121215123000001

	Ref.	Data	·				
	Des.	Element	<u>Name</u>		<u>ributes</u>		
Must Use	BGN01	353	Transaction Set Purpose Code	M	ID 2/2		
			Code identifying purpose of transaction set				
			11 Response				
Must Use	BGN02	127	Reference Identification	\mathbf{M}	AN 1/30		
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
			A unique transaction identification number assigned by the originator of this transaction. This number must be unique over time.				
			Transaction Reference Numbers will only contain uppercase ledigits (0 to 9), dashes (-) and periods (.). Note that all other of the containing of the contai				
N.	D.C.N.O.2	252	(spaces, underscores, etc.) must be excluded.	3.7	DT 0/0		
Must Use	BGN03	373	Date	M	DT 8/8		
			Date expressed as CCYYMMDD				
			The transaction creation date - the date that the data was processender's application system.	essed	by the		
Recom.	BGN06	127	Reference Identification	O	AN 1/30		
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Transaction Reference Number from the BGN02 of the Request Transaction				

Segment: N1 Distribution Company (N1~8S)

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional

Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments:

1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Required

N1~8S~DISTRIBUTE-IT INC.~1~007909411~~40

			Data Ele	ment Summary		
Must Use	Ref. <u>Des.</u> N101	Data <u>Element</u> Name 98 Entity Identifier Code			ributes ID 2/3	
			Code identifying individual	an organizational entity, a physical location	, proj	perty or an
			8S	Consumer Service Provider (CSP)		
				Distribution Company		
Must Use	N102	93	Name		X	AN 1/60
			Free-form name			
			Distribution Com	pany Name		
Must Use	N103	66	Identification Co	ode Qualifier	X	ID 1/2
			Code designating Code (67)	the system/method of code structure used f	or Ide	entification
			1	D-U-N-S Number, Dun & Bradstreet		
			9	D-U-N-S+4, D-U-N-S Number with Fo Suffix	ur Ch	aracter
Must Use	N104	67	Identification Co	ode	\mathbf{X}	AN 2/80
			Code identifying	a party or other code		
			Distribution Com	pany D-U-N-S or D-U-N-S+4 Number		
Recom.	N106	98	Entity Identifier	Code	О	ID 2/3
			Code identifying individual	an organizational entity, a physical location	, proj	perty or an
			40	Receiver		
			41	Submitter		

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

If either N103 or N104 is present, then the other is required.

Semantic Notes: Comments:

1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Required

N1~SJ~SUPPLY LTD~9~007909422CRN1~~41

			Data Elen	ient Summary		
Must Use	Ref. <u>Des.</u> N101	Data <u>Element</u> 98	<u>Name</u> Entity Identifier (Code	Attı M	ributes ID 2/3
			Code identifying an individual	n organizational entity, a physical location	, prop	perty or an
			SJ	Service Provider		
				Supplier		
Must Use	N102	93	Name		X	AN 1/60
			Free-form name			
			Supplier Name			
Must Use	N103	66	Identification Cod	le Qualifier	X	ID 1/2
			Code designating the Code (67)	he system/method of code structure used for	or Ide	entification
			1	D-U-N-S Number, Dun & Bradstreet		
			9	D-U-N-S+4, D-U-N-S Number with For Suffix	ır Ch	aracter
Must Use	N104	67	Identification Cod	le	X	AN 2/80
			Code identifying a	party or other code		
			Supplier D-U-N-S	or D-U-N-S+4 Number		
Recom.	N106	98	Entity Identifier (Code	O	ID 2/3
			Code identifying an individual	n organizational entity, a physical location	, prop	perty or an
			40	Receiver		
			41	Submitter		

Segment: N1 Name (Retail Customer)

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional

Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing

organizational identification. To obtain this efficiency the "ID Code" (N104) must

provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Accept Response: Required

Reject Response: Optional N1~8R~CUSTOMER NAME

Data Element Summary

Must Use	Ref. <u>Des.</u> N101	Data <u>Element</u> 98	<u>Name</u> Entity Identifier (Code	Attr M	ributes ID 2/3
			Code identifying an individual 8R	n organizational entity, a physical location Consumer Service Provider (CSP) Cust		·
				Retail Customer		
Must Use	N102	93	Name		X	AN 1/60
			Free-form name			
			~			

Retail Customer Name

Segment: LIN Item Identification

Position: 010

Loop: LIN Optional

Level: Detail Usage: Optional

Max Use: Purpose:

Syntax Notes:

To specify basic item identification data

1 If either LIN04 or LIN05 is present, then the other is required.

- 2 If either LIN06 or LIN07 is present, then the other is required.
- 3 If either LIN08 or LIN09 is present, then the other is required.
- 4 If either LIN10 or LIN11 is present, then the other is required.
- 5 If either LIN12 or LIN13 is present, then the other is required.
- 6 If either LIN14 or LIN15 is present, then the other is required.
- 7 If either LIN16 or LIN17 is present, then the other is required.
- 8 If either LIN18 or LIN19 is present, then the other is required.
- 9 If either LIN20 or LIN21 is present, then the other is required.
- 10 If either LIN22 or LIN23 is present, then the other is required.
- 11 If either LIN24 or LIN25 is present, then the other is required.
- 12 If either LIN26 or LIN27 is present, then the other is required.
- 13 If either LIN28 or LIN29 is present, then the other is required.
- 14 If either LIN30 or LIN31 is present, then the other is required.

Semantic Notes: Comments:

1 LIN01 is the line item identification

See the Data Dictionary for a complete list of IDs.

2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes:

Required - The LIN Loop on the Response will echo what was sent on the Request.

LIN~2012121500001~SH~EL~SH~CE

	Ref.	Data	Dutu	ziemene summur y		
	Des.	Element	<u>Name</u>		Attı	<u>ributes</u>
Must Use	LIN01	350	Assigned Idea	ntification	O	AN 1/20
			Alphanumeric	characters assigned for differentiation with	in a tran	saction set
			The identifier	provided in the LIN01 of the Request Trans	saction.	
Must Use	LIN02	235	Product/Serv	rice ID Qualifier	M	ID 2/2
			Code identifyi Product/Service SH	ing the type/source of the descriptive numbe ce ID (234) Service Requested	er used ir	1
Must Use	LIN03	234	Product/Serv	-	M	AN 1/48
Widst OSC Elivos		25-1			IVI	AIN 1/40
				imber for a product or service		
			EL	Electric		
			GAS	Gas		
Must Use	LIN04	235	Product/Serv	rice ID Qualifier	X	ID 2/2
			Product/Service		er used ir	1
			SH	Service Requested		
Must Use	LIN05	234	Product/Serv		X	AN 1/48
			Identifying nu	imber for a product or service		
			CE	Energy Services		
			SI	Interval Status		
				Use only when changing Interval State (REF~17)	atus Indio	cator

 ${f ASI}$ Action or Status Indicator **Segment:**

Position: 020

Loop: LIN Optional

Level: Detail Usage: Optional Max Use: 1

Purpose: To indicate the action to be taken with the information provided or the status of the entity

described

Syntax Notes: Semantic Notes: Comments:

> Required **Notes:**

> > ASI~WQ~001

Data Element Summary

Ref. Data Des. **Element** Name **Attributes Action Code Must Use** ASI01 306 M ID 1/2 Code indicating type of action U Reject WQ Accept **Must Use** ASI02 875 **Maintenance Type Code** M ID 3/3

Code identifying the specific type of item maintenance

001 Change $\textbf{Segment:} \quad \textbf{REF} \,\, \textbf{Reference Identification (Supplier Account Number)}$

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Required when previously provided by the Supplier.

REF~11~1234567890

	Ref.	Data		·				
	Des.	Element	Name		Attr	<u>ributes</u>		
Must Use	REF01	128	Reference Identific	ation Qualifier	M	ID 2/3		
			Code qualifying the	Reference Identification				
			11	Account Number				
				Supplier Account Number				
Must Use	REF02	127	Reference Identific	eation	X	AN 1/30		
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier					
			Supplier Account N	umber				

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Required - Only one of either REF~12 or REF~Q5 may be sent as required by the

Applicable Regulatory Authority governing documents.

REF~12~0000445648

REF~Q5~00040621002260654

Data Element Summary

	Ref.	Data				
	Des.	Element	<u>Name</u>		Attr	<u>ibutes</u>
Must Use	REF01	128	Reference Io	dentification Qualifier	M	ID 2/3
			Code qualify	ing the Reference Identification		
			12	Billing Account		
				Distribution Company Account Numbe	r	
			Q5	Property Control Number		
				Service Delivery ID		
Must Use	REF02	127	Reference Id	dentification	X	AN 1/30
			Reference in	formation as defined for a particular Transaction	Set o	or as

specified by the Reference Identification Qualifier

Distribution Company Account Number or Service Delivery ID

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

1 REF04 contains data relating to the value cited in REF02.

Notes: Accept Response: Not Used Reject Response: Required

REF~7G~A13~REJECTION REASON TEXT

Data Element Summary

	Ref.	Data	Dutu Eit	ment summary	
	Des.	Element	Name		Attributes
Must Use	REF01	128	Reference Identi	fication Qualifier	\overline{M} ID $2/3$
			Code qualifying t	he Reference Identification	
			7G	Data Quality Reject Reason	
Must Use	REF02	127	Reference Identi	fication	X AN 1/30
				ation as defined for a particular Transactio deference Identification Qualifier	n Set or as
				bution Company: Codes A13 and A76 may pany to Supplier: Codes 008, A13, A76, A	
			008	Account Exists But Is Not Active	
			A13	Other	
				Description Required in REF03	
			A76	Account Not Found	
			A84	Invalid Relationship	
				Not the Supplier of Record	
			ABN	Duplicate Request Received	
			API	Required Information Missing	
				Description Required in REF03	
Dep	REF03	352	Description		X AN 1/80
			A free-form descr	ription to clarify the related data elements a	and their content

Additional Text Description, required for codes A13 and API

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

1 REF04 contains data relating to the value cited in REF02.

Notes: Required

REF~TD~REFBLT

			Data Elem	ent Summary			
	Ref.	Data					
	Des.	Element	<u>Name</u>		<u>Attr</u>	<u>ibutes</u>	
Must Use	REF01	128	Reference Identific	Reference Identification Qualifier			
			Code qualifying the	Code qualifying the Reference Identification			
			TD	Reason for Change			
Must Use	REF02	127	Reference Identific	eation	X	AN 1/30	
				on as defined for a particular Transaction	Set o	or as	
				Ference Identification Qualifier			
			AMTDP	Change Tax Exemption Percentage			
			DTM150	Change Service Period Start Date			
			DTM151	DTM151 Change Service Period End Date			
			N18R	18R Change Customer Name, Service Address and/or Telephone Number			
			N1BT	Change Customer Billing Party Name and/or Billing Address			
			NM1MA	M1MA Meter Addition			
			NM1MQ	Change Meter Attributes (Meter Type, Meter Constant)	Numb	er of Dials,	
			NM1MR	Meter Removal			
			NM1MX	Meter Exchange			
			REF11	Change Supplier Account Number			
			REF12	Change Distribution Company Account	Num	lber	
			REF17	Change Interval Status (Requires LIN05	5=SI)		
			REFBF	Change Bill Cycle			
			REFBLT	Change Bill Presenter			
			REFLO	Change Load Profile			
			REFNH	Change Distribution Company Rate Cla	SS		
			REFPC	Change Bill Calculator			
			REFPR	Change Distribution Company Rate Sul	oclass		
			REFQ5	Change Distribution Company SDID			
			REFRB	Change Supplier Rate Code			

Segment: DTM Date/Time Reference (Effective Date)

Position: 040

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes: Comments:

Notes: Distribution Company to Supplier Accept Response: Required

All Other Responses: Not Used

DTM~007~20130110

Must Use	Ref. <u>Des.</u> DTM01	Data Element 374	Name Date/Time Qualific	er	Attı M	ributes ID 3/3	
			Code specifying typ	be of date or time, or both date and time			
			007	Effective			
				Effective Date of the Change			
Must Use	DTM02	373	Date		X	DT 8/8	
			Date expressed as CCYYMMDD				
			Effective Date of th	e Change			

Segment: SE Transaction Set Trailer

Position: 150

Loop:

Level: Detail Usage: Mandatory

Max Use: 1

Purpose: To indicate the end of the transaction set and provide the count of the transmitted

segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes: Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

Notes: Required

SE~13~000000001

	Ref.	Data			
	Des.	Element	<u>Name</u>	<u>Attr</u>	<u>ibutes</u>
Must Use	SE01	96	Number of Included Segments	M	N0 1/10
			Total number of segments included in a transaction set inclusegments	ding S	T and SE
Must Use	SE02	329	Transaction Set Control Number	M	AN 4/9
			Identifying control number that must be unique within the tr functional group assigned by the originator for a transaction		ion set

814 General Request, Response or Confirmation

Functional Group ID=GE

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the General Request, Response or Confirmation Transaction Set (814) for use within the context of an Electronic Data Interchange (EDI) environment. This standard can be used to request actions to be performed, to respond to a request for actions to be performed or to confirm information related to actions performed.

Heading:

M	Pos. No.	Seg. <u>ID</u> ST	Name Transaction Set Handar	Req. <u>Des.</u> M	Max.Use	Loop <u>Repeat</u>	Notes and Comments
M	010		Transaction Set Header		1		
M	020	BGN	Beginning Segment	M	1		
			LOOP ID - N1			>1	
	040	N1	Distribution Company (N1~8S)	0	1		
			LOOP ID - N1			>1	
	040	N1	Supplier (N1~SJ)	O	1		
			LOOP ID - N1			>1	
	040	N1	Name (Retail Customer)	О	1		
	060	N3	Address Information (Service Address)	O	2		
	070	N4	Geographic Location (Service Address)	O	1		
	080	PER	Administrative Communications Contact	O	>1		
			LOOP ID - N1			>1	
	040	N1	Name (Billing Address)	О	1		
	060	N3	Address Information (Billing Address)	O	2		
	070	N4	Geographic Location (Billing Address)	O	1		

Detail:

Pos. No.	Seg. <u>ID</u>	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
	_	LOOP ID - LIN			>1	
010	LIN	Item Identification	О	1		
020	ASI	Action or Status Indicator	O	1		
030	REF	Reference Identification (Supplier Account Number)	О	>1		
030	REF	Reference Identification (Distribution Company Account Number/SDID)	О	>1		
030	REF	Reference Identification (Interval Status)	O	>1		
030	REF	Reference Identification (Status Reason Code)	O	>1		
030	REF	Reference Identification (Rejection Reason Code)	О	>1		
030	REF	Reference Identification (Bill Presenter)	O	>1		
030	REF	Reference Identification (Bill Calculator)	O	>1		
030	REF	Reference Identification (Bill Cycle)	O	>1		
030	REF	Reference Identification (Distribution Company Budget Billing Status)	О	>1		
040	DTM	Date/Time Reference (Customer Authorization Date)	O	>1		
040	DTM	Date/Time Reference (Service Period Start Date)	O	>1		

060	AMT	Monetary Amount (Tax Exemption Percentage)	O	>1	
060	AMT	Monetary Amount (Peak Demand)	O	>1	
060	AMT	Monetary Amount (Total kWh)	O	>1	
060	AMT	Monetary Amount (Number of Months for Total kWh and Peak Demand)	О	>1	
		LOOP ID - NM1			>1
080	NM1	Individual or Organizational Name (Meter Information)	0	1	n1
130	REF	Reference Identification (Load Profile)	O	>1	
130	REF	Reference Identification (Distribution Company Rate Class)	O	>1	
130	REF	Reference Identification (Distribution Company Rate Subclass)	0	>1	
130	REF	Reference Identification (Supplier Rate Code)	O	>1	
130	REF	Reference Identification (Meter Type)	O	>1	
130	REF	Reference Identification (Number of Dials)	O	>1	
130	REF	Reference Identification (Meter Constant)	O	>1	
150	SE	Transaction Set Trailer	M	1	

Transaction Set Notes

M

1. The NM1 loop is used to identify the parties associated with the individual line item (LIN), such as an individual consumer in a consolidated third party Consumer Service Provider transaction.

Segment: ST Transaction Set Header

Position: 010

Loop:

Level: Heading Usage: Mandatory

Max Use:

Purpose:

To indicate the start of a transaction set and to assign a control number

Syntax Notes:

Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the

interchange partners to select the appropriate transaction set definition (e.g., 810

selects the Invoice Transaction Set).

Comments:

Notes: Required

ST~814~000000001

Must Use	Ref. <u>Des.</u> ST01	Data Element 143	Name Transaction Set Identifier Code	Attr M	ributes ID 3/3
			Code uniquely identifying a Transaction Set 814 General Request, Response or Confirma	ation	
Must Use	ST02	329	Transaction Set Control Number Identifying control number that must be unique within the trafunctional group assigned by the originator for a transaction set.		AN 4/9 ion set

Segment: BGN Beginning Segment

Position: 020

Loop:

Level: Heading Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of a transaction set
 Syntax Notes: 1 If BGN05 is present, then BGN04 is required.
 Semantic Notes: 1 BGN02 is the transaction set reference number.

BGN02 is the transaction set reference in

2 BGN03 is the transaction set date.

3 BGN04 is the transaction set time.

4 BGN05 is the transaction set time qualifier.

5 BGN06 is the transaction set reference number of a previously sent transaction

affected by the current transaction.

Comments:

Notes: Required

BGN~11~20121216-ABC.000001~20121216~~~20121215123000001

	Ref.	Data	•			
Must Use	<u>Des.</u> BGN01	Element 252	Name Transportion Set Durmose Code		ributes ID 2/2	
Must Use	BGNUI	353	Transaction Set Purpose Code	IVI	ID 2/2	
			Code identifying purpose of transaction set			
			11 Response			
Must Use	BGN02	127	Reference Identification	M	AN 1/30	
			Reference information as defined for a particular Transaction specified by the Reference Identification Qualifier			
			A unique transaction identification number assigned by the originator of this transaction. This number must be unique over time.			
			Transaction Reference Numbers will only contain uppercase digits (0 to 9), dashes (-) and periods (.). Note that all other of (spaces, underscores, etc.) must be excluded.			
Must Use	BGN03	373	Date	M	DT 8/8	
			Date expressed as CCYYMMDD			
			The transaction creation date - the date that the data was processender's application system.	essed	by the	
Recom.	BGN06	127	Reference Identification	O	AN 1/30	
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier			
			Transaction Reference Number from the BGN02 of the Request Transaction.			

Segment: N1 Distribution Company (N1~8S)

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing

organizational identification. To obtain this efficiency the "ID Code" (N104) must

provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Required

N1~8S~DISTRIBUTE-IT INC.~1~007909411~~41

			Data Elei	ment Summar y		
Must Use	Ref. <u>Des.</u> N101	Data <u>Element</u> 98	<u>Name</u> Entity Identifier	Code	Attı M	ributes ID 2/3
Widst Osc	11101	70	Code identifying an organizational entity, a physical location, individual			
			8S	Consumer Service Provider (CSP)		
				Distribution Company		
Must Use	N102	93	Name		X	AN 1/60
			Free-form name			
			Distribution Comp	pany Name		
Must Use	N103	66	Identification Co	de Qualifier	X	ID 1/2
			Code designating Code (67)	the system/method of code structure used for	or Ide	entification
			1	D-U-N-S Number, Dun & Bradstreet		
			9	D-U-N-S+4, D-U-N-S Number with For Suffix	ur Ch	aracter
Must Use	N104	67	Identification Co	de	X	AN 2/80
			Code identifying a	a party or other code		
			Distribution Comp	pany D-U-N-S or D-U-N-S+4 Number		
Recom.	N106	98	Entity Identifier	Code	O	ID 2/3
			Code identifying a individual	an organizational entity, a physical location	, prop	perty or an
			41	Submitter		

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

If either N103 or N104 is present, then the other is required.

Semantic Notes: Comments:

1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Required

N1~SJ~SUPPLY LTD~9~007909422CRN1~~40

			Data Licii	icht Summar y		
Must Use	Ref. <u>Des.</u> N101	Data <u>Element</u> 98	Name Entity Identifier (Code	Attı M	ributes ID 2/3
			Code identifying an organizational entity, a physical location individual			perty or an
			SJ	Service Provider		
				Supplier		
Must Use	N102	93	Name		X	AN 1/60
			Free-form name			
			Supplier Name			
Must Use	N103	66	Identification Cod	e Qualifier	X	ID 1/2
			Code designating the system/method of code structure used for Ide Code (67)			
			1	D-U-N-S Number, Dun & Bradstreet		
			9	D-U-N-S+4, D-U-N-S Number with For Suffix	ır Ch	aracter
Must Use	N104	67	Identification Cod	e	\mathbf{X}	AN 2/80
			Code identifying a	party or other code		
			Supplier D-U-N-S	or D-U-N-S+4 Number		
Recom.	N106	98	Entity Identifier C	Code	О	ID 2/3
			Code identifying ar individual	n organizational entity, a physical location,	, prop	perty or an
			40	Receiver		

Segment: N1 Name (Retail Customer)

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional

Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing

organizational identification. To obtain this efficiency the "ID Code" (N104) must

provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Accept Response: Required

Reject Response: Required if provided on the Request

N1~8R~CUSTOMER NAME

Data Element Summary

Must Use	Ref. <u>Des.</u> N101	Data <u>Element</u> 98	Name Entity Identifier Code Code identifying an organizational entity, a physical locat			butes ID 2/3
			individual 8R	Consumer Service Provider (CSP) Cus		ity of an
				Retail Customer		
Must Use	N102	93	Name Free-form name		X	AN 1/60

Retail Customer Name as stored in the Distribution Company's system.

N3 Address Information (Service Address) **Segment:**

Position: 060

> Loop: N1 Optional

Level: Heading Usage: Optional Max Use:

To specify the location of the named party **Purpose:**

Syntax Notes: Semantic Notes: Comments:

Energy Services Accept Response (LIN05 = CE): Required **Notes:**

All Other Responses: Not Used N3~3921 MAIN STREET

	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	N301	166	Address Information	\overline{M} AN $1/55$
			Address information	
Optional	N302	166	Address Information	O AN 1/55
			Address information	

Segment: N4 Geographic Location (Service Address)

Position: 070

Loop: N1 Optional

Level: Heading Usage: Optional

1

Max Use:

Purpose: To specify the geographic place of the named partySyntax Notes: 1 If N406 is present, then N405 is required.

Semantic Notes: Comments:

specify a location.

A combination of either N401 through N404, or N405 and N406 may be adequate to

2 N402 is required only if city name (N401) is in the U.S. or Canada.

Notes: Energy Services Accept Response (LIN05 = CE): Required

All Other Responses: Not Used N4~ANYTOWN~IL~30012

	Ref.	Data					
	Des.	Element	<u>Name</u>	Attr	<u>ributes</u>		
Dep	N401	19	City Name		AN 2/30		
			Free-form text for city name				
			Energy Services Accept Response: Required All Other Responses: Not Used				
Dep	N402	156	State or Province Code	O	ID 2/2		
			Code (Standard State/Province) as defined by appropriate government agency				
			Energy Services Accept Response: Required All Other Responses: Not Used				
Must Use	N403	116	Postal Code	O	ID 3/15		
			Code defining international postal zone code excluding punct (zip code for United States)	uatio	n and blanks		
			Energy Services Accept Response: Required				
			Energy Services Reject Response: Optional				
			All Other Responses: Not Used				

Segment: PER Administrative Communications Contact

Position: 080

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: >1

Purpose: To identify a person or office to whom administrative communications should be directed

Syntax Notes: 1 If either PER03 or PER04 is present, then the other is required.

If either PER05 or PER06 is present, then the other is required.

3 If either PER07 or PER08 is present, then the other is required.

Semantic Notes: Comments:

Notes: Energy Services Accept Response (LIN05 = CE): Optional

All Other Responses: Not Used

PER~IC~OPTIONAL NAME~TE~3125551212 x1234

	Ref.	Data Element	Name	A +++	ributes		
Must Use	<u>Des.</u> PER01	366	Contact Function Code	M	ID 2/2		
			Code identifying the major duty or responsibility of the personal control of t	on or	group named		
Optional	PER02	93	Name	o	AN 1/60		
			Free-form name				
Must Use	PER03	365	Communication Number Qualifier	X	ID 2/2		
			Code identifying the type of communication number				
			TE Telephone				
Must Use	PER04	364	Communication Number	X	AN 1/80		
			Complete communications number including country or area applicable	Complete communications number including country or area code when applicable			
			Customer Telephone Number				

Segment: N1 Name (Billing Address)

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional

Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments: 1 This segme

1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Energy Services Accept Response (LIN05 = CE): Required if there is a Billing Address

on the account that is different from the Service Address

All Other Responses: Not Used N1~BT~BILLING PARTY NAME

Must Use	Ref. <u>Des.</u> N101	Data Element 98	Name Entity Identifier Co	ode	Attr M	ributes ID 2/3
			Code identifying an individual BT	organizational entity, a physical location, Bill-to-Party	, prop	perty or an
Must Use	N102	93	Name Free-form name Billing Party Name		X	AN 1/60

 ${\bf Segment:} \qquad {\bf N3} \ {\bf Address} \ {\bf Information} \ ({\bf Billing} \ {\bf Address})$

Position: 060

Loop: N1 Optional

Level: Heading Usage: Optional

Max Use: 2

Purpose: To specify the location of the named party

Syntax Notes: Semantic Notes: Comments:

Notes: Energy Services Accept Response (LIN05 = CE): Required if there is a Billing Address

on the account that is different from the Service Address

All Other Responses: Not Used

N3~PO BOX 4881

	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	N301	166	Address Information	M AN 1/55
			Address information	
Optional	N302	166	Address Information	O AN 1/55
			Address information	

Segment: N4 Geographic Location (Billing Address)

Position: 070

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 1

Purpose: Syntax Notes: To specify the geographic place of the named party 1 If N406 is present, then N405 is required.

Semantic Notes:

antic Notes:

Comments: 1 A combi

1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.

N402 is required only if city name (N401) is in the U.S. or Canada.

Notes: Energy Services Accept Response (LIN05 = CE): Required if there is a Billing Address

on the account that is different from the Service Address. The zip code in the billing

address is required if available. All Other Responses: Not Used N4~ANYTOWN~IL~30012 N4~A-1010 VIENNA AUSTRIA N4~A-100 VIENNA~AT

Must Use	Ref. <u>Des.</u> N401	Data Element 19	Name City Name	Attr O	ributes AN 2/30
			Free-form text for city name		
Must Use	N402	156	State or Province Code	O	ID 2/2
			Code (Standard State/Province) as defined by appropriate government	ernn	nent agency
Dep	N403	116	Postal Code	O	ID 3/15
			Code defining international postal zone code excluding punct (zip code for United States) Required if available	uatio	n and blanks
Optional	N404	26	Country Code Code identifying the country	0	ID 2/3

Segment: LIN Item Identification

Position: 010

Loop: LIN Optional

Level: Detail Usage: Optional

Max Use: 1 Purpose: T

To specify basic item identification data

Syntax Notes:

- 1 If either LIN04 or LIN05 is present, then the other is required.
- 2 If either LIN06 or LIN07 is present, then the other is required.
- 3 If either LIN08 or LIN09 is present, then the other is required.
- 4 If either LIN10 or LIN11 is present, then the other is required.
- 5 If either LIN12 or LIN13 is present, then the other is required.
- 6 If either LIN14 or LIN15 is present, then the other is required.
- 7 If either LIN16 or LIN17 is present, then the other is required.
- 8 If either LIN18 or LIN19 is present, then the other is required.
- 9 If either LIN20 or LIN21 is present, then the other is required.
- 10 If either LIN22 or LIN23 is present, then the other is required.
- 11 If either LIN24 or LIN25 is present, then the other is required.
- 12 If either LIN26 or LIN27 is present, then the other is required.
- 13 If either LIN28 or LIN29 is present, then the other is required.
- 14 If either LIN30 or LIN31 is present, then the other is required.

Semantic Notes: Comments:

- 1 LIN01 is the line item identification
- See the Data Dictionary for a complete list of IDs.
- 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes:

Required - The LIN Loop on the Response will echo what was sent on the Request. There may be one response with multiple LIN loops, or each LIN response may be sent in a separate transaction.

LIN~2012121500001~SH~EL~SH~CE LIN~2012121500001H~SH~EL~SH~HU LIN~HI2012121500001~SH~EL~SH~HI LIN~20121215SI-00001~SH~EL~SH~SI

Ref. <u>Des.</u> LIN01	Data Element 350	Name Assigned Ide	ntification	Attr O	ributes AN 1/20
		Alphanumeric	characters assigned for differentiatio	n within a tran	saction set
		The identifier	provided in the LIN01 of the Request	t Transaction.	
LIN02	235	Product/Serv	ice ID Qualifier	M	ID 2/2
		•		number used ir	1
LIN03	234	Product/Serv	ice ID	M	AN 1/48
		Identifying nu	mber for a product or service		
		EL	Electric		
		GAS	Gas		
LIN04	235	Product/Serv	ice ID Qualifier	X	ID 2/2
		•	ce ID (234)	number used ir	1
LIN05	234	Product/Serv	•	X	AN 1/48
		Identifying nu	mber for a product or service		
		CE	Energy Services		
		CL	Lifetgy Bet vices		
		HI	Historical Interval Usage		
	Des. LIN01 LIN02 LIN03	Des. LIN01 Element 350 LIN02 235 LIN03 234 LIN04 235	Des. Element LIN01 350 Assigned Idea Alphanumeric The identifier Code identify: Product/Service SH LIN03 234 Product/Service Identifying nu EL GAS LIN04 235 Product/Service Code identify: Product/Service SH LIN05 234 Product/Service SH LIN05 234 Product/Service SH LIN05 234 Product/Service SH	Des. Element LIN01 350 Assigned Identification Alphanumeric characters assigned for differentiation The identifier provided in the LIN01 of the Reques LIN02 235 Product/Service ID Qualifier Code identifying the type/source of the descriptive Product/Service ID (234) SH Service Requested LIN03 234 Product/Service ID Identifying number for a product or service EL Electric GAS Gas LIN04 235 Product/Service ID Qualifier Code identifying the type/source of the descriptive Product/Service ID Qualifier Service Requested SH Service Requested	Des. LIN01 Element 350 Name Assigned Identification Attraction Alphanumeric characters assigned for differentiation within a transmitter in the identifier provided in the LIN01 of the Request Transaction. LIN02 235 Product/Service ID Qualifier M Code identifying the type/source of the descriptive number used in Product/Service ID (234)

SI Interval Status

Segment: ASI Action or Status Indicator

Position: 020

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To indicate the action to be taken with the information provided or the status of the entity

described

Syntax Notes: Semantic Notes: Comments:

Notes: Required

ASI~WQ~021

Data Element Summary

Ref. Data
Des. Element Name

Must Use ASI01 306 Action Code

Code indicating type of action

U Reject

Ref. Data
Attributes
M ID 1/2

U Reject WQ Accept

Must Use ASI02 875 Maintenance Type Code M ID 3/3

Code identifying the specific type of item maintenance

021 Addition

Used for Enrollment (CE) and Interval Status (SI)

Responses

029 Inquiry

Used for Historical Usage (HU) and Historical Interval

Usage (HI) Responses.

 $\textbf{Segment:} \quad \textbf{REF} \,\, \textbf{Reference Identification (Supplier Account Number)}$

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Required if provided on the Request transaction.

REF~11~1234567890

	Ref.	Data		·				
	Des.	Element	Name		Attr	<u>ributes</u>		
Must Use	REF01	128	Reference Identific	ation Qualifier	M	ID 2/3		
			Code qualifying the	Reference Identification				
			11	Account Number				
				Supplier Account Number				
Must Use	REF02	127	Reference Identific	eation	X	AN 1/30		
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier					
			Supplier Account N	umber				

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Required - Only one of either REF~12 or REF~Q5 may be sent as required by the

Applicable Regulatory Authority governing documents.

REF~12~0000445648

REF~Q5~00040621002260654

Data Element Summary

Must Use	Ref. <u>Des.</u> REF01	Data Element 128		dentification Qualifier	Attı M	ributes ID 2/3
			Code quanty	ying the Reference Identification		
			12	Billing Account		
				Distribution Company Account Number	r	
			Q5	Property Control Number		
				Service Delivery ID		
Must Use	REF02	127	Reference I	dentification	X	AN 1/30
				nformation as defined for a particular Transaction	Set	or as

specified by the Reference Identification Qualifier

Distribution Company Account Number or Service Delivery ID

Segment: ${\bf REF}$ Reference Identification (Interval Status)

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Interval Status Accept Response (LIN05 = SI): Required

All Other Responses: Not Used

REF~17~SUMMARY

Data Element Summary

Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128	Name Reference Identification Qualifier	Attributes M ID 2/3
			Code qualifying the Reference Identificat 17 Client Reporting Ca	
			Supplier would like Usage (REF02 = SU	lest - Used to differentiate whether a to receive Monthly Summarized UMMARY) or Monthly Interval
Must Use	REF02	127	Usage (REF02 = DE	ETAIL) X AN 1/30

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

DETAIL Required when previously provided by the Supplier.

SUMMARY Supplier would like to receive Monthly Summary Usage

for this Customer

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

1 REF04 contains data relating to the value cited in REF02.

Notes: Accept Response: Required if applicable

Reject Response: Not Used

REF~1P~HUU

	Ref. Des.	Data Element	Name	ment Summary	A tti	ributes
Must Use	REF01	128		ification Qualifier	M	
			Code qualifying t	the Reference Identification		
			1P	Accessorial Status Code		
				Status Reason Code		
Must Use	REF02	127	Reference Ident	ification	X	AN 1/30
				nation as defined for a particular Transaction Reference Identification Qualifier Historical Interval Usage Available	n Set (or as
			HIU	Historical Interval Usage Unavailable		
			HUR	Historical Usage Not Released		
			HUU	Historical Usage Unavailable		
Optional	REF03	352	Description		X	AN 1/80
			A free-form desc	ription to clarify the related data elements a	nd the	eir content
			Additional Text I	Description		

Segment: \mathbf{REF} Reference Identification (Rejection Reason Code)

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

1 REF04 contains data relating to the value cited in REF02.

Notes: Accept Response: Not Used Reject Response: Required

REF~7G~A76~ACCOUNT NOT VALID

Data Element Summary

			Data Ele	ment Summary
	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identi	fication Qualifier M ID 2/3
			Code qualifying to	he Reference Identification
			7G	Data Quality Reject Reason
Must Use	REF02	127	Reference Identi	fication X AN 1/30
			Reference inform	ation as defined for a particular Transaction Set or as
			specified by the R	Reference Identification Qualifier
			800	Account Exists but is Not Active
			A13	Other
				Description Required in REF03
			A76	Account Not Found
			ABN	Duplicate Request Received
			ANE	Account Not Eligible
			ANL	Service Provider Not Licensed to Provide the Requested Service
			API	Required Information Missing
				Description Required in REF03
			DIV	Date Invalid
			NCB	Supplier Not Certified to Provide Requested Bill Option
			NEB	Customer Not Eligible for Requested Bill Option
			NFI	Not First In
			NLI	Not Last In
			W05	Requested Supplier Rate Code Not Found or in Effect (Rate Ready Only)
			W06	Requested Supplier Rate Code Invalid for Distribution Company Rate Class (Rate Ready Only).
Dep	REF03	352	Description	X AN 1/80
			A frag form dosor	intion to clarify the related data elements and their content

A free-form description to clarify the related data elements and their content

Additional Text Description, required for codes A13 and API

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Energy Services Accept Response (LIN05 = CE): Required Energy Services Reject Response (LIN05 = CE): Optional

All Other Responses: Not Used

REF~BLT~LDC

Data Element Summary

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	Name Reference Identifi	cation Qualifier	Attr M	ributes ID 2/3	
Widst Osc	REI VI	120		e Reference Identification	171	10 2/0	
			BLT	Billing Type			
				Bill Presenter			
Must Use	REF02	127	Reference Identifi	cation	X	AN 1/30	
			specified by the Re DUAL	erence information as defined for a particular Transaction Set or as ified by the Reference Identification Qualifier			
			ESP	The Supplier Presents the Consolidated Bill to the Customer Used for Supplier Consolidated Billing			
			LDC	The Distribution Company Presents the to the Customer Used for Rate Ready and Bill Ready Dis			

Company Consolidated Billing

 ${f REF}$ Reference Identification (Bill Calculator) **Segment:**

Position: 030

> Loop: LIN Optional

Level: Detail Usage: Optional Max Use: >1

Purpose: To specify identifying information

At least one of REF02 or REF03 is required. **Syntax Notes:**

> If either C04003 or C04004 is present, then the other is required. If either C04005 or C04006 is present, then the other is required. 3

Semantic Notes: Comments:

Notes:

REF04 contains data relating to the value cited in REF02. 1

Energy Services Accept Response (LIN05 = CE): Required Energy Services Reject Response (LIN05 = CE): Optional

All Other Responses: Not Used

REF~PC~LDC

Data Element Summary

Must Use	Ref. <u>Des.</u> REF01	Element 128	<u>Name</u> Reference I	dentification Qualifier	Attı M	ributes ID 2/3
			Code qualify	ying the Reference Identification		
			PC	Production Code		
				Bill Calculator		
Must Use	REF02	127	Reference I	dentification	X	AN 1/30
			Reference in	nformation as defined for a particular Transactio	n Set o	or as

specified by the Reference Identification Qualifier

DUAL Each party calculates its own charges

Used for Dual Billing, Bill Ready Consolidated Billing

(Supplier or Distribution Company)

The Distribution Company calculates the Supplier charges LDC

Used for Rate Ready Distribution Company

Consolidated Billing

Segment: $\ensuremath{\text{REF}}$ Reference Identification (Bill Cycle)

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Energy Services Accept Response (LIN05 = CE): Required

All Other Responses: Not Used

REF~BF~07

	Ref.	Data						
	Des.	Element	<u>Name</u>		<u>Attr</u>	<u>ibutes</u>		
Must Use	REF01	128	Reference Identifie	Reference Identification Qualifier				
			Code qualifying the Reference Identification					
			BF	Billing Center Identification				
				Bill Cycle				
Must Use	REF02	127	Reference Identifie	cation	X	AN 1/30		
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier					
			Bill Cycle					

 $\textbf{Segment:} \quad \textbf{REF} \,\, \textbf{Reference Identification (Distribution Company Budget Billing Status)}$

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Energy Services Accept Response (LIN05 = CE): Required

All Other Responses: Not Used

REF~NR~N

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	Name Reference Identif Code qualifying the	ication Qualifier Be Reference Identification	Attr M	ributes ID 2/3
			NR	Progress Payment Number		
				Distribution Company Budget Billing Senrollment	Status	at time of
Must Use	REF02	127	Reference Identif	ïcation	X	AN 1/30
				ation as defined for a particular Transaction eference Identification Qualifier Customer Does Not Participate in Budg Distribution Company Charges Customer Participates in Budget Billing Company Charges	get Bil	ling for

 $\textbf{Segment:} \quad \textbf{DTM} \; \; \textbf{Date/Time Reference} \; (\textbf{Customer Authorization Date})$

Position: 040

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes: Comments:

Notes: Energy Services Accept Response (LIN05 = CE): Required

Energy Services Reject Response (LIN05 = CE): Optional

All Other Responses: Not Used DTM~129~20121214~1500~ET

	Ref. Des.	Data <u>Element</u>	<u>Name</u>	•		<u>ibutes</u>
Must Use	DTM01	374	Date/Time Qualifie		M	ID 3/3
				e of date or time, or both date and time		
			129	Customer Contract Effective		
				Date and time of Retail Customer author	rizatio	on
Must Use	DTM02	373	Date		X	DT 8/8
			Date expressed as C	CYYMMDD		
			Date of Retail Custo	mer authorization		
Must Use	DTM03	337	Time		X	TM 4/8
			HHMMSSD, or HH (00-59), S = integer seconds are expresse (00-99)	4-hour clock time as follows: HHMM, or MMSSDD, where H = hours (00-23), M seconds (00-59) and DD = decimal seconded as follows: D = tenths (0-9) and DD =	= mir ıds; d hundı	nutes ecimal redths
			Time of Retail Custo this will contain 000	omer authorization (HHMM Format), if to 00.	racke	d; otherwise,
Optional	DTM04	623	Time Code		O	ID 2/2
			Organization standarin hours in relation t	e time. In accordance with International S rd 8601, time can be specified by a + or - to Universal Time Coordinate (UTC) time + and - are substituted by P and M in the Central Time	and a	an indication ce + is a
			ET	Eastern Time		
			MT	Mountain Time		
			PT	Pacific Time		

Segment: DTM Date/Time Reference (Service Period Start Date)

Position: 040

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes: Comments:

Notes: Energy Services Accept Response (LIN05 = CE): Required

All Other Responses: Not Used

DTM~150~20130106

Must Use	Ref. <u>Des.</u> DTM01	Data Element 374	<u>Name</u> Date/Time Qualifi	er	Attı M	ributes ID 3/3
			Code specifying typ 150	pe of date or time, or both date and time Service Period Start		
Must Use	DTM02	373	Date Date expressed as C Service Period Star		X	DT 8/8

AMT Monetary Amount (Tax Exemption Percentage) **Segment:**

Position: 060

> LIN Loop: Optional

Level: Detail Usage: Optional Max Use: >1

Purpose: To indicate the total monetary amount

Syntax Notes: Semantic Notes: Comments:

Notes:

Energy Services Accept Response (LIN05 = CE): Required for Rate Ready Consolidated

Billing, otherwise Not Used

Energy Services Reject Response (LIN05 = CE): Optional for Rate Ready Consolidated

Billing, otherwise Not Used All Other Responses: Not Used

AMT~DP~.75 AMT~DP~0

Data Element Summary

Must Use	Ref. <u>Des.</u> AMT01	Element 522	Name Amount Qualifier (Code to qualify amo		Attr M	ributes ID 1/3
			DP	Exemption		
				Tax Exemption Percentage		
Must Use	AMT02	782	Monetary Amount Monetary amount		M	R 1/18

Monetary amount

For percentage values, the whole number "1" represents 100 percent; decimal numbers less than "1" represent percentages from 1 percent to 99.9999 percent. Segment: AMT Monetary Amount (Peak Demand)

Position: 060

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To indicate the total monetary amount

Syntax Notes: Semantic Notes: Comments:

Notes: Energy Services Accept Response (LIN05 = CE): Required if the meter measures

demand and there is history on the account

All Other Responses: Not Used

AMT~MA~84.999

Must Use	Ref. <u>Des.</u> AMT01	Data Element 522	Name Amount Qualifier (Code	Attr M	ibutes ID 1/3
			Code to qualify amo	unt		
			MA	Maximum Amount		
				Peak Demand		
Must Use	AMT02	782	Monetary Amount		M	R 1/18
			Monetary amount			
			Peak Demand			

Segment: AMT Monetary Amount (Total kWh)

Position: 060

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To indicate the total monetary amount

Syntax Notes: Semantic Notes: Comments:

Notes: Energy Services Accept Response (LIN05 = CE): Required if the meter measures

demand and there is history on the account

All Other Responses: Not Used

AMT~TA~293411

Must Use	Ref. <u>Des.</u> AMT01	Data Element 522	<u>Name</u> Amount Qualifier	Code	Attı M	ributes ID 1/3
			Code to qualify amo	ount		
			TA	Total Annual Sales		
				Total kWh		
Must Use	AMT02	782	Monetary Amount		M	R 1/18
			Monetary amount			
			Total kWh			

Segment: AMT Monetary Amount (Number of Months for Total kWh and Peak

Demand)

Position: 060

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To indicate the total monetary amount

Syntax Notes: Semantic Notes:

Comments:Notes: Energy Services Accept Response (LIN05 = CE): Required if the meter measures

demand and there is history on the account

All Other Responses: Not Used

AMT~LD~12

Data Element Summary

Code to qualify amount

LD Incremental

Number of Months over which the Total kWh (AMT~TA) and/or Peak Demand (AMT~MA) are

calculated.

Must Use AMT02 782 Monetary Amount M R 1/18

Monetary amount
Number of Months

 ${\bf NM1}$ Individual or Organizational Name (Meter Information) **Segment:**

Position: 080

> Loop: NM1 Optional

Level: Detail Usage: Optional Max Use:

Purpose: To supply the full name of an individual or organizational entity **Syntax Notes:** If either NM108 or NM109 is present, then the other is required.

If NM111 is present, then NM110 is required.

Semantic Notes: NM102 qualifies NM103. 1

NM110 and NM111 further define the type of entity in NM101. **Comments:**

Notes: Energy Services Accept Response (LIN05 = CE): Required - One NM1 will be provided

for each Meter and one will be provided for Unmetered Services if applicable.

Energy Services Reject Response (LIN05 = CE): Optional for Rate Ready Consolidated

Billing, otherwise Not Used All Other Responses: Not Used NM1~MQ~3~~~~32~MG000001 NM1~MQ~3~~~~32~UNMETERED

	Ref.	Data				
	Des.	Element	<u>Name</u>		Attr	<u>ributes</u>
Must Use	NM101	98	Entity Identifier Co	ode	M	ID 2/3
			individual	organizational entity, a physical location,	prop	perty or an
			MQ	Metering Location		
Must Use	NM102	1065	Entity Type Qualifi	er	M	ID 1/1
			Code qualifying the	type of entity		
			3	Unknown		
Must Use	NM108	66	Identification Code	Qualifier	X	ID 1/2
			Code designating the Code (67)	e system/method of code structure used for	or Ide	entification
			32	Assigned by Property Operator		
				Meter Number		
Must Use	NM109	67	Identification Code		X	AN 2/80
			Code identifying a party or other code			
			Meter Number or the	e literal "UNMETERED"		

 $Segment: \quad REF \ \ Reference \ Identification \ (Load \ Profile)$

Position: 130

Loop: NM1 Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Energy Services Accept Response (LIN05 = CE): Required

All Other Responses: Not Used

REF~LO~33

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	Name Reference Identification Qualifier Code qualifying the Reference Identification	Attı M	ributes ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction specified by the Reference Identification Qualifier	X Set o	AN 1/30 or as
			Load Profile		

Position: 130

Loop: NM1 Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Energy Services Accept Response (LIN05 = CE): Required

All Other Responses: Not Used

REF~NH~DS1

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	Name Reference Ider	ntification Qualifier		ributes ID 2/3	
			Code qualifying	ode qualifying the Reference Identification			
			NH	Rate Card Number			
				Distribution Company Rate Class			
Must Use	REF02	127	Reference Iden	ntification	X	AN 1/30	
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
			Distribution Co	mpany Rate Class			
Optional	REF03	352	Description		X	AN 1/80	
			A free-form des	scription to clarify the related data elements ar	nd the	ir content	
			Text Description	on of Rate Class			

Position: 130

Loop: NM1 Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Energy Services Accept Response (LIN05 = CE): Optional

All Other Responses: Not Used

REF~PR~123456

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	<u>Name</u> Reference Ider	ntification Qualifier	Attı M	ributes ID 2/3
			Code qualifying	g the Reference Identification		
			PR	Price Quote Number		
				Distribution Company Rate Subclass		
Optional	REF02	2 127	Reference Iden	ntification	X	AN 1/30
			specified by the	mation as defined for a particular Transaction Reference Identification Qualifier	Set o	or as

Segment: ${f REF}$ Reference Identification (Supplier Rate Code)

Position: 130

Loop: NM1 Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Energy Services Accept Response (LIN05 = CE): Required for Rate Ready Consolidated

Billing, otherwise Not Used

Energy Services Reject Response (LIN05 = CE): Optional for Rate Ready Consolidated

Billing, otherwise Not Used All Other Responses: Not Used

REF~RB~123ABC

Data Element Summary

Ref. Data **Element Attributes** Des. **Name Must Use** REF01 128 **Reference Identification Qualifier** M ID 2/3 Code qualifying the Reference Identification RB Rate code number Supplier Rate Code Must Use REF02 127 **Reference Identification** X AN 1/30

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

Supplier Rate Code

Segment: ${f REF}$ Reference Identification (Meter Type)

Position: 130

Loop: NM1 Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

2 If either C04003 or C04004 is present, then the other is required.

3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Energy Services Accept Response (LIN05 = CE): Required for each meter that is used for billing purposes. This segment will not be provided in the NM1 loop for

UNMETERED services.

All Other Responses: Not Used

There will only be one REF*MT segment for each NM1 loop. If there are multiple meter types on this meter, only one REF*MT will be sent. It will contain the code COMBO. The specific meter type will be identified in the REF03 field in subsequent REF segments for this meter (i.e. REF*4P, REF*IX, REF*TU).

Examples:

HHBIM CCF Bi-monthly
TDMON Therms per Month
KH060 Kilowatt Hours Hourly

K1015 Kilowatt Demand per 15 minute interval COMBO Meter measures more than one type

REF~MT~KHMON

	Ref.	Data						
	Des.	<u>Element</u>	<u>Name</u>		Att	<u>ributes</u>		
Must Use	REF01	128	Reference Identifi	cation Qualifier	M	ID 2/3		
			Code qualifying the	e Reference Identification				
			MT	Meter Ticket Number				
				Meter Type				
Optional	REF02	127	Reference Identifi	cation	X	AN 1/30		
				Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
			Meter Type					

Segment: ${f REF}$ Reference Identification (Number of Dials)

Position: 130

Loop: NM1 Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

2 If either C04003 or C04004 is present, then the other is required.

3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Number of Dials on the meter expressed as X.Y where X is the number of dials to the left of the decimal and Y is the number of dials to the right.

Energy Services Accept Response (LIN05 = CE): Required for each meter that has dials.

This segment will not be provided for unmetered services.

All Other Responses: Not Used

REF~IX~6.0~KHMON Kilowatt Hour Monthly Read Meter has 6 digits to the left of

the decimal and none to the right.

REF~IX~5.1~K1MON Demand Monthly Read Meter has 5 digits to the left of the

decimal and one to the right.

	Ref.	Data						
	Des.	Element	<u>Name</u>		<u>Attr</u>	<u>ributes</u>		
Must Use	REF01	128	Reference Identific	ation Qualifier	M	ID 2/3		
			Code qualifying the	Reference Identification				
			IX	Item Number				
				Number of Dials on the meter displayed of dials to the left of the decimal, a decimal of the dec				
				the number of dials to the right of the de	cima	1.		
Must Use	REF02	127	Reference Identific	ation	X	AN 1/30		
				on as defined for a particular Transaction erence Identification Qualifier	Set o	or as		
			Number of Dials					
Optional	REF03	352	Description		X	AN 1/80		
			A free-form descript	A free-form description to clarify the related data elements and their content				
			Meter Type (e.g., KHMON, K1060)					

 $\textbf{Segment:} \quad \textbf{REF} \,\, \textbf{Reference Identification (Meter Constant)}$

Position: 130

Loop: NM1 Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Energy Services Accept Response (LIN05 = CE): Required for each meter. This

segment will not be provided for unmetered services.

All Other Responses: Not Used

Note some Distribution Companies require specific formatting.

REF~4P~000001.0000~TDMON

REF~4P~80~KH060

	Ref.	Data					
	Des.	Element	<u>Name</u>		Attı	<u>ributes</u>	
Must Use	REF01	128	Reference Identifie	cation Qualifier	M	$\overline{ID} 2/3$	
			Code qualifying the	Reference Identification			
			4P	Affiliation Number			
				Meter Constant (Meter Multiplier)			
				(Ending Reading - Beginning Reading)	* Me	ter	
				Constant = Consumption			
Must Use	REF02	127	Reference Identifi	cation	\mathbf{X}	AN 1/30	
				ion as defined for a particular Transaction ference Identification Qualifier	Set o	or as	
Optional	REF03	352	Description		X	AN 1/80	
•			A free-form description to clarify the related data elements and their				
			Meter Type (e.g., KHMON, K1060)				

Segment: SE Transaction Set Trailer

Position: 150

Loop:

Level: Detail Usage: Mandatory

Max Use:

Purpose: To indicate the end of the transaction set and provide the count of the transmitted

segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes: Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

Notes: Required

SE~75~000000001

	Ref.	Data			
	Des.	Element	<u>Name</u>	<u>Attr</u>	<u>ibutes</u>
Must Use	SE01	96	Number of Included Segments	M	N0 1/10
			Total number of segments included in a transaction set inclusegments	ding S	T and SE
Must Use	SE02	329	Transaction Set Control Number	M	AN 4/9
			Identifying control number that must be unique within the tr functional group assigned by the originator for a transaction		ion set

814 General Request, Response or Confirmation

Functional Group ID= \mathbf{GE}

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the General Request, Response or Confirmation Transaction Set (814) for use within the context of an Electronic Data Interchange (EDI) environment. This standard can be used to request actions to be performed, to respond to a request for actions to be performed or to confirm information related to actions performed.

Heading:

	Pos. No.	Seg. <u>ID</u>	Name	Req. <u>Des.</u>	Max.Use	Loop <u>Repeat</u>	Notes and Comments
M	010	ST	Transaction Set Header	M	1		
M	020	BGN	Beginning Segment	M	1		
			LOOP ID - N1			>1	
	040	N1	Distribution Company (N1~8S)	O	1		
			LOOP ID - N1			>1	
	040	N1	Supplier (N1~SJ)	O	1		
			LOOP ID - N1			>1	
	040	N1	Name (Retail Customer)	O	1		
	070	N4	Geographic Location	O	1		

Detail:

Pos. No.	Seg. <u>ID</u>	Name	Req. Des.	Max.Use	Loop <u>Repeat</u>	Notes and Comments
		LOOP ID - LIN			>1	
010	LIN	Item Identification	О	1		
020	ASI	Action or Status Indicator	O	1		
030	REF	Reference Identification (Supplier Account Number)	O	>1		
030	REF	Reference Identification (Distribution Company Account Number/SDID)	O	>1		
030	REF	Reference Identification (Bill Presenter)	O	>1		
030	REF	Reference Identification (Bill Calculator)	O	>1		
030	REF	Reference Identification (Interval Status)	O	>1		
040	DTM	Date/Time Reference (Customer Authorization Date)	O	>1		
060	AMT	Monetary Amount (Tax Exemption Percentage)	O	>1		
		LOOP ID - NM1			>1	
080	NM1	Individual or Organizational Name (Meter Information)	О	1		n1
130	REF	Reference Identification (Supplier Rate Code)	O	>1		
130	REF	Reference Identification (Utility Rate Class)	O	>1		
150	SE	Transaction Set Trailer	M	1		1

Transaction Set Notes

1. The NM1 loop is used to identify the parties associated with the individual line item (LIN), such as an individual consumer in a consolidated third party Consumer Service Provider transaction.

Segment: ST Transaction Set Header

Position: 010

Loop:

Level: Heading Usage: Mandatory

Max Use:

Purpose:

To indicate the start of a transaction set and to assign a control number

Syntax Notes:

Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the

interchange partners to select the appropriate transaction set definition (e.g., 810

selects the Invoice Transaction Set).

Comments:

Notes:

Required ST~814~000000001

Must Use	Ref. <u>Des.</u> ST01	Data <u>Element</u> 143	<u>Name</u>	t Identifier Code	<u>Attı</u> M	ributes ID 3/3
			Code uniquely i 814	dentifying a Transaction Set General Request, Response or Confirm	nation	
Must Use	ST02	329	Identifying cont	t Control Number rol number that must be unique within the treassigned by the originator for a transaction		AN 4/9 ion set

Segment: BGN Beginning Segment

Position: 020

Loop:

Level: Heading Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of a transaction set
 Syntax Notes: 1 If BGN05 is present, then BGN04 is required.
 Semantic Notes: 1 BGN02 is the transaction set reference number.

2 BGN03 is the transaction set date.

3 BGN04 is the transaction set time.

4 BGN05 is the transaction set time qualifier.

5 BGN06 is the transaction set reference number of a previously sent transaction

affected by the current transaction.

Comments:

Notes: Required

BGN~13~20121215123000001~20121215

Must Use	Ref. <u>Des.</u> BGN01	Data Element 353	Name Transaction Set Purpose Code	Attributes M ID 2/2
			Code identifying purpose of transaction set	
			Request	
Must Use	BGN02	127	Reference Identification	M AN 1/30
			Reference information as defined for a particular Transaction specified by the Reference Identification Qualifier	n Set or as
			A unique transaction identification number assigned by the cartansaction. This number must be unique over time.	originator of this
			Transaction Reference Numbers will only contain uppercase digits (0 to 9), dashes (-) and periods (.). Note that all other (spaces, underscores, etc.) must be excluded.	
Must Use	BGN03	373	Date	M DT 8/8
			Date expressed as CCYYMMDD	
			The transaction creation date - the date that the data was pro sender's application system.	cessed by the

N1 Distribution Company (N1~8S) **Segment:**

Position: 040

> Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: At least one of N102 or N103 is required.

If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments:

1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Required

N1~8S~DISTRIBUTE-IT INC.~1~007909411~~41

			Data Elem	cht Summar y			
Must Use	Ref. <u>Des.</u> N101	Data Element 98	Name Entity Identifier C	Sada.	Attı M	ributes ID 2/3	
Must Use	NIUI	90	Entity Identifier C				
			Code identifying an individual	organizational entity, a physical location,	, proj	perty or an	
			8S	Consumer Service Provider (CSP)			
				Distribution Company			
Must Use	N102	93	Name		X	AN 1/60	
	Free-form name						
			Distribution Compa	nny Name			
Must Use	N103	66	Identification Cod	e Qualifier	X	ID 1/2	
			Code designating the Code (67)	Code designating the system/method of code structure used for Code (67)			
			1	D-U-N-S Number, Dun & Bradstreet			
			9	D-U-N-S+4, D-U-N-S Number with For Suffix	ır Ch	aracter	
Must Use	N104	67	Identification Cod	e	\mathbf{X}	AN 2/80	
			Code identifying a p	party or other code			
			Distribution Compa	any D-U-N-S or D-U-N-S+4 Number			
Recom.	N106	98	Entity Identifier C	Code	0	ID 2/3	
	Code identifying an organizational entity, a physical location, property individual					perty or an	
			40	Receiver			

Segment: N1 Supplier (N1~SJ)

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

If either N103 or N104 is present, then the other is required.

Semantic Notes: Comments:

This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must

provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Required

N1~SJ~SUPPLY LTD~9~007909422CRN1~~40

		Data Licii	icht Summar y						
Ref. <u>Des.</u> N101	Data <u>Element</u> 98	Name Entity Identifier (Code	Attı M	ributes ID 2/3				
		Code identifying an individual	n organizational entity, a physical location	, prop	perty or an				
		SJ	Service Provider						
			Supplier						
N102	93	Name		X	AN 1/60				
		Free-form name							
		Supplier Name							
N103	66	Identification Cod	le Qualifier	X	ID 1/2				
			he system/method of code structure used for	or Ide	entification				
		1	D-U-N-S Number, Dun & Bradstreet						
		9	D-U-N-S+4, D-U-N-S Number with For Suffix	ur Ch	aracter				
N104	67	Identification Cod	le	X	AN 2/80				
		Code identifying a party or other code							
		Supplier D-U-N-S	or D-U-N-S+4 Number		dentification Character AN 2/80 ID 2/3				
N106	98	Entity Identifier C	Code	0	ID 2/3				
		Code identifying an individual	n organizational entity, a physical location	, proj	perty or an				
		41	Submitter						
	Des. N101 N102 N103	Des. N101 Element 98 N102 93 N103 66 N104 67	Ref. Data Des. Element N101 98 Entity Identifier C Code identifying an individual SJ N102 93 Name Free-form name Supplier Name Identification Code Code designating to Code (67) 1 9 N104 67 Identification Code Code identifying a Supplier D-U-N-S N106 98 Entity Identifier C Code identifying an individual	Ref. Des. Plement N101 P8 Entity Identifier Code Code identifying an organizational entity, a physical location individual SJ Service Provider Supplier N102 P3 Name Free-form name Supplier Name N103 Free-form name Supplier Name N104 Free-form code Qualifier Code designating the system/method of code structure used for Code (67) 1 D-U-N-S Number, Dun & Bradstreet 9 D-U-N-S+4, D-U-N-S Number with For Suffix N104 F7 Identification Code Code identifying a party or other code Supplier D-U-N-S or D-U-N-S+4 Number N106 P8 Entity Identifier Code Code identifying an organizational entity, a physical location individual	Nioi Ps. Element Name Entity Identifier Code M				

Segment: N1 Name (Retail Customer)

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional

Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments:

1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Required

N1~8R~CUSTOMER NAME

	Ref. Des.	Data Element	Name	one summer y	Attr	ributes
Must Use	N101	98	Entity Identifier C	ode	M	ID 2/3
			Code identifying an individual 8R	organizational entity, a physical location Consumer Service Provider (CSP) Custo		erty or an
				Retail Customer		
Must Use	N102	93	Name Free-form name		X	AN 1/60
			Retail Customer Na	me		

Segment: N4 Geographic Location

Position: 070

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 1

Purpose: To specify the geographic place of the named partySyntax Notes: 1 If N406 is present, then N405 is required.

Semantic Notes: Comments:

 ${\bf 1} \quad \text{A combination of either N401 through N404, or N405 and N406 may be adequate to} \\$

specify a location.

N402 is required only if city name (N401) is in the U.S. or Canada.

Notes: Optional - May be required by Applicable Regulatory Authority.

N4~~~78111

Data Element Summary

	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	N403	116	Postal Code	O ID 3/15

Code defining international postal zone code excluding punctuation and blanks (zip code for United States)

Segment: LIN Item Identification

Position: 010

Loop: LIN Optional

Level: Detail
Usage: Optional
ax Use: 1

Max Use: 1
Purpose: 7

To specify basic item identification data

Syntax Notes:

- 1 If either LIN04 or LIN05 is present, then the other is required.
- 2 If either LIN06 or LIN07 is present, then the other is required.
- 3 If either LIN08 or LIN09 is present, then the other is required.
- 4 If either LIN10 or LIN11 is present, then the other is required.
- 5 If either LIN12 or LIN13 is present, then the other is required.
- 6 If either LIN14 or LIN15 is present, then the other is required.
- 7 If either LIN16 or LIN17 is present, then the other is required.
- 8 If either LIN18 or LIN19 is present, then the other is required.
- 9 If either LIN20 or LIN21 is present, then the other is required.
- 10 If either LIN22 or LIN23 is present, then the other is required.
- 11 If either LIN24 or LIN25 is present, then the other is required.
- 12 If either LIN26 or LIN27 is present, then the other is required.
- 13 If either LIN28 or LIN29 is present, then the other is required.
- 14 If either LIN30 or LIN31 is present, then the other is required.

Semantic Notes: Comments:

- LIN01 is the line item identification
- See the Data Dictionary for a complete list of IDs.
- 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes:

Required - Only one service may be requested per LIN loop and it is important that the sender order the LIN loops in the order that they would like them processed for all primary services. It is required that the LIN for Energy Services (CE) be sent prior to all secondary services (HU, HI) if the secondary services are dependent upon the successful enrollment.

LIN~2012121500001~SH~EL~SH~CE LIN~2012121500001H~SH~EL~SH~HU LIN~HI2012121500001~SH~EL~SH~HI LIN~20121215SI-00001~SH~EL~SH~SI

	Ref.	Data				
	Des.	Element	<u>Name</u>		Attı	<u>ributes</u>
Must Use	LIN01	350	Assigned Ide	entification	O	AN 1/20
			Alphanumeri	c characters assigned for differentiation within	n a tran	saction set
			On the Reque	est, identifier supplied in this element must un	iquely i	dentify each
			LIN request of	over time. This number will be returned on the	ne Resp	onse
			transaction in	the same element.		
Must Use	LIN02	235	Product/Ser	vice ID Qualifier	\mathbf{M}	ID 2/2
			Code identify Product/Serv	ying the type/source of the descriptive number ice ID (234)	used ir	1
			SH	Service Requested		
Must Use	LIN03	234	Product/Ser	vice ID	\mathbf{M}	AN 1/48
			Identifying number for a product or service			
			EL	Electric		
			GAS	Gas		
Must Use	LIN04	235	Product/Ser	vice ID Qualifier	X	ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)			
			SH	Service Requested		
Must Use	LIN05	234	Product/Ser	vice ID	X	AN 1/48
			Identifying n	umber for a product or service		
			CE	Energy Services		

HI Historical Interval Usage HU Historical Usage

SI Interval Status

Segment: ASI Action or Status Indicator

Position: 020

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To indicate the action to be taken with the information provided or the status of the entity

described

Syntax Notes: Semantic Notes: Comments:

Notes: Required

ASI~7~021

Data Element Summary

Ref. Data Des. **Element** Name **Attributes Must Use** ASI01 **Action Code** 306 M ID 1/2 Code indicating type of action Request 875 **Must Use** ASI02 Maintenance Type Code M ID 3/3 Code identifying the specific type of item maintenance 021 Addition Used for Enrollment (CE) and Interval Status (SI) Requests 029 Inquiry Used for Historical Usage (HU) and Historical Interval

Usage (HI) Requests

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

1 REF04 contains data relating to the value cited in REF02.

Notes: Optional

REF~11~1234567890

Data Element Summary

Ref. Data Des. **Element Attributes** Name **Must Use** REF01 128 **Reference Identification Qualifier** M ID 2/3 Code qualifying the Reference Identification 11 Account Number Supplier Account Number **Must Use** REF02 127 **Reference Identification** X AN 1/30

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

Supplier Account Number

 ${f REF}$ Reference Identification (Distribution Company Account Number/SDID) **Segment:**

Position: 030

> Loop: LIN Optional

Level: Detail Usage: Optional Max Use: >1

Purpose: To specify identifying information

At least one of REF02 or REF03 is required. **Syntax Notes:**

> If either C04003 or C04004 is present, then the other is required. If either C04005 or C04006 is present, then the other is required. 3

Semantic Notes: Comments:

Notes:

REF04 contains data relating to the value cited in REF02. 1

Required - Only one of either REF~12 or REF~Q5 may be sent as required by the

Applicable Regulatory Authority governing documents.

REF~12~0000445648

REF~Q5~00040621002260654

Data Element Summary

Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128	<u>Name</u> Reference Identifi	•	Attr M	ributes ID 2/3
			Code qualifying the	e Reference Identification		
			12	Billing Account		
				Distribution Company Account Number	•	
			Q5	Property Control Number		
				Service Delivery ID		
Must Use	REF02	127	Reference Identifi	ication	X	AN 1/30
				tion as defined for a particular Transaction eference Identification Qualifier	Set o	or as

specified by the Reference Identification Qualifier

Distribution Company Account Number or Service Delivery ID

 $\textbf{Segment:} \quad \textbf{REF} \ \ \textbf{Reference Identification (Bill Presenter)}$

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

1 REF04 contains data relating to the value cited in REF02.

Notes: Energy Services Request (LIN05 = CE): Required Historical Usage Request (LIN05 = HU): Not Used

Historical Interval Usage Request (LIN05 = HI): Not Used

Interval Status Request (LIN05 = SI): Not Used

REF~BLT~LDC

Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128	Name Reference Identi	fication Qualifier	Attı M	ributes ID 2/3
			Code qualifying the	he Reference Identification		
			BLT	Billing Type		
				Bill Presenter		
Must Use	REF02	127	Reference Identi	fication	X	AN 1/30
				ation as defined for a particular Transaction deference Identification Qualifier The Distribution Company and Supplier Bills to the Customer Used for Dual Billing		
			ESP	The Supplier Presents the Consolidated Customer Used for Supplier Consolidated Billing		to the
			LDC	The Distribution Company Presents the to the Customer Used for Rate Ready and Bill Ready D Company Consolidated Billing		

Segment: REF Reference Identification (Bill Calculator)

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Energy Services Request (LIN05 = CE): Required Historical Usage Request (LIN05 = HU): Not Used

Historical Interval Usage Request (LIN05 = HI): Not Used

Interval Status Request (LIN05 = SI): Not Used REF~PC~LDC

Data Element Summary

Ref. **Data** Des. **Element** Name **Attributes Must Use** REF01 **Reference Identification Qualifier** 128 M ID 2/3 Code qualifying the Reference Identification PC **Production Code** Bill Calculator **Must Use** REF02 127 **Reference Identification** X AN 1/30

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

DUAL Each party calculates its own charges

Used for Dual Billing, Bill Ready Consolidated Billing

(Supplier or Distribution Company)

LDC The Distribution Company calculates the Supplier charges

Used for Rate Ready Distribution Company

Consolidated Billing

 $Segment: \quad REF \ \ Reference \ Identification \ (Interval \ Status)$

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

1 REF04 contains data relating to the value cited in REF02.

Notes: Energy Services Request (LIN05 = CE): Not Used

Historical Usage Request (LIN05 = HU): Not Used Historical Interval Usage Request (LIN05 = HI): Not Used

Interval Status Request (LIN05 = SI): Required

REF~17~SUMMARY

Data Element Summary

Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128	Name Reference Identificat Code qualifying the Re	tion Qualifier eference Identification	Attributes M ID 2/3
			17 C	Client Reporting Category	
			S	nterval Status Request - Used to differe Supplier would like to receive Monthly Jsage (REF02 = SUMMARY) or Mont Jsage (REF02 = DETAIL)	Summarized
Must Use	REF02	127	Reference Identificat	ion	X AN 1/30

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

DETAIL Supplier would like to receive Monthly Interval Usage for

this Customer

SUMMARY Supplier would like to receive Monthly Summary Usage

for this Customer

 $\textbf{Segment:} \quad \textbf{DTM} \ \ \textbf{Date/Time} \ \ \textbf{Reference} \ (\textbf{Customer Authorization Date})$

Position: 040

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes: Comments:

Notes: Energy Services Request (LIN05 = CE): Required

Historical Usage Request (LIN05 = HU): Not Used

Historical Interval Usage Request (LIN05 = HI): Not Used

Interval Status Request (LIN05 = SI): Not Used

DTM~129~20121214~1500~ET

	Ref.	Data				
	Des.	Element	<u>Name</u>			<u>ributes</u>
Must Use	DTM01	374	Date/Time Qualifie	er	M	ID 3/3
			Code specifying type	e of date or time, or both date and time		
			129	Customer Contract Effective		
				Date and time of Retail Customer author	rizatio	on
Must Use	DTM02	373	Date		X	DT 8/8
			Date expressed as C	CYYMMDD		
			Date of Retail Custo	mer authorization		
Must Use	DTM03	337	Time		X	TM 4/8
		Time expressed in 24-hour clock time as follows: HHMM, or HE HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = m (00-59), S = integer seconds (00-59) and DD = decimal seconds; seconds are expressed as follows: D = tenths (0-9) and DD = hun (00-99) Time of Retail Customer authorization (HHMM Format), if track this will contain 0000.				nutes ecimal redths
Optional	DTM04	623	Time Code		O	ID 2/2
			Organization standarin hours in relation t	e time. In accordance with International Strd 8601, time can be specified by a + or o Universal Time Coordinate (UTC) time + and - are substituted by P and M in the Central Time Eastern Time Mountain Time Pacific Time	and a	an indication ce + is a

Segment: AMT Monetary Amount (Tax Exemption Percentage)

Position: 060

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To indicate the total monetary amount

Syntax Notes: Semantic Notes: Comments:

Notes: Energy Services Request (LIN05 = CE): Required for Rate Ready Consolidated Billing,

otherwise Not Used.

Historical Usage Request (LIN05 = HU): Not Used Historical Interval Usage Request (LIN05 = HI): Not Used

Interval Status Request (LIN05 = SI): Not Used

AMT~DP~.75 AMT~DP~0

Data Element Summary

Must Use	Des. AMT01	Element 522	Name Amount Qualifier Code to qualify amo		Attı M	ributes ID 1/3
			DP	Exemption		
				Tax Exemption Percentage		
Must Use	AMT02	782	Monetary Amount		M	R 1/18

Monetary amount

For percentage values, the whole number "1" represents 100 percent; decimal numbers less than "1" represent percentages from 1 percent to 99.9999 percent.

 ${\bf Segment:} \qquad {\bf NM1} \ \ {\bf Individual \ or \ Organizational \ Name \ (Meter \ Information)}$

Position: 080

Loop: NM1 Optional

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To supply the full name of an individual or organizational entity
Syntax Notes: 1 If either NM108 or NM109 is present, then the other is required.

If NM111 is present, then NM110 is required.

Semantic Notes: 1 NM102 qualifies NM103.

Comments: 1 NM110 and NM111 further define the type of entity in NM101.

Notes: Energy Services Request (LIN05 = CE): Required for Rate Ready Consolidated Billing,

otherwise Not Used.

Historical Usage Request (LIN05 = HU): Not Used Historical Interval Usage Request (LIN05 = HI): Not Used

Interval Status Request (LIN05 = SI): Not Used

NM1~MQ~3~~~~32~ALL

	Ref.	Data				
	Des.	Element	<u>Name</u>		<u>Attr</u>	<u>ributes</u>
Must Use	NM101	98	Entity Identifier Co	ode	M	ID 2/3
			Code identifying an individual	organizational entity, a physical location,	prop	erty or an
			MQ	Metering Location		
Must Use	NM102	1065	Entity Type Qualifi	ier	M	ID 1/1
			Code qualifying the	type of entity		
			3	Unknown		
Must Use	NM108	66	Identification Code	Qualifier	X	ID 1/2
			Code designating the system/method of code structure used Code (67)		or Ide	entification
			32	Assigned by Property Operator		
				Meter Number		
Must Use	NM109	67	Identification Code		X	AN 2/80
			Code identifying a p	arty or other code		
			"ALL" - for ALL me	eters		
			Meter Number			
			"UNMETERED" - f	or Unmetered Services		

Segment: REF Reference Identification (Supplier Rate Code)

Position: 130

Loop: NM1 Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Energy Services Request (LIN05 = CE): Required for Rate Ready Consolidated Billing,

otherwise Not Used.

Historical Usage Request (LIN05 = HU): Not Used Historical Interval Usage Request (LIN05 = HI): Not Used

Interval Status Request (LIN05 = \hat{SI}): Not Used

REF~RB~RATE39

Data Element Summary

Must Use	Ref. <u>Des.</u> REF01	Data Element 128		lentification Qualifier ing the Reference Identification	<u>Attı</u> M	ributes ID 2/3
			RB	Rate code number		
				Supplier Rate Code		
Must Use	REF02	127	Reference Id	lentification	X	AN 1/30
				formation as defined for a particular Transactibe Reference Identification Qualifier	tion Set o	or as

Supplier Rate Code

REF Reference Identification (Utility Rate Class) **Segment:**

Position: 130

> Loop: NM1 Optional

Level: Detail Usage: Optional Max Use: >1

Purpose: To specify identifying information

At least one of REF02 or REF03 is required. **Syntax Notes:**

> If either C04003 or C04004 is present, then the other is required. If either C04005 or C04006 is present, then the other is required. 3

Semantic Notes: Comments:

Notes:

REF04 contains data relating to the value cited in REF02. 1

Energy Services Request (LIN05 = CE): Optional - May be required by Applicable

Regulatory Authority

Historical Usage Request (LIN05 = HU): Not Used Historical Interval Usage Request (LIN05 = HI): Not Used

Interval Status Request (LIN05 = SI): Not Used

REF~NH~RES01

Data Element Summary

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	Name Reference Identification Qualifier Code qualifying the Reference Identification		Attı M	ributes ID 2/3
			NH	Rate Card Number		
				Distribution Company Rate Code		
Must Use	REF02	127	Reference Identi	fication	X	AN 1/30
				ation as defined for a particular Transactio	n Set	or as

Distribution Company Rate Code

Segment: SE Transaction Set Trailer

Position: 150

Loop:

Level: Detail Usage: Mandatory

Max Use: 1

Purpose: To indicate the end of the transaction set and provide the count of the transmitted

segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes: Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

Notes: Required

SE~13~000000001

Must Use	Ref. Des. SE01	Data Element 96	Name Number of Included Segments	Attr M	ributes NO 1/10
Must Use	SE02	329	Total number of segments included in a transaction set inclusegments Transaction Set Control Number	ding S M	T and SE AN 4/9
			Identifying control number that must be unique within the tr functional group assigned by the originator for a transaction		ion set

814 General Request, Response or Confirmation

Functional Group ID=GE

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the General Request, Response or Confirmation Transaction Set (814) for use within the context of an Electronic Data Interchange (EDI) environment. This standard can be used to request actions to be performed, to respond to a request for actions to be performed or to confirm information related to actions performed.

Heading:

М	Pos. <u>No.</u> 010	Seg. <u>ID</u> ST	Name Transaction Set Header	Req. <u>Des.</u> M	Max.Use	Loop <u>Repeat</u>	Notes and Comments
M	020	BGN	Beginning Segment	M	1		
			LOOP ID - N1			>1	
	040	N1	Distribution Company (N1~8S)	О	1		n1
			LOOP ID - N1			>1	
	040	N1	Supplier (N1~SJ)	О	1		
			LOOP ID - N1			>1	
	040	N1	Name (Retail Customer)	О	1		
	070	N4	Geographic Location	O	1		
	080	PER	Administrative Communications Contact	О	>1		
			LOOP ID - N1			>1	
	040	N1	Name (Customer Forwarding Address)	О	1		
	060	N3	Address Information	O	2		
	070	N4	Geographic Location	O	1		
	080	PER	Administrative Communications Contact	О	>1		

Detail:

M

Pos. No.	Seg. <u>ID</u>	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
		LOOP ID - LIN			>1	
010	LIN	Item Identification	O	1		
020	ASI	Action or Status Indicator	О	1		
030	REF	Reference Identification (Supplier Account Number)	O	>1		
030	REF	Reference Identification (Distribution Company Account Number/SDID)	O	>1		
030	REF	Reference Identification (Distribution Company Previous Account Number)	0	>1		
030	REF	Reference Identification (Status Reason Code)	O	>1		
040	DTM	Date/Time Reference (Service Period End Date)	О	>1		
150	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. The N1 loop is used to identify the transaction sender and receiver.

Segment: ST Transaction Set Header

Position: 010

Loop:

Level: Heading Usage: Mandatory

Max Use: 1

Purpose:

To indicate the start of a transaction set and to assign a control number

Syntax Notes:

Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the

interchange partners to select the appropriate transaction set definition (e.g., 810

selects the Invoice Transaction Set).

Comments:

Notes:

Required ST~814~000000001

			Data Eleli	ient Summar y		
	Ref. <u>Des.</u>	Data Element	Name		Attr	ibutes
Must Use	ST01	143	Transaction Set Id	lentifier Code	\mathbf{M}	ID 3/3
			Code uniquely iden	tifying a Transaction Set		
			814	General Request, Response or Confirm	ation	
Must Use	ST02	329	Transaction Set C	ontrol Number	M	AN 4/9
				number that must be unique within the tra signed by the originator for a transaction		ion set

Segment: BGN Beginning Segment

Position: 020

Loop:

Level: Heading Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of a transaction set
 Syntax Notes: 1 If BGN05 is present, then BGN04 is required.
 Semantic Notes: 1 BGN02 is the transaction set reference number.

2 BGN03 is the transaction set date.

3 BGN04 is the transaction set time.

4 BGN05 is the transaction set time qualifier.

5 BGN06 is the transaction set reference number of a previously sent transaction

affected by the current transaction.

Comments:

Notes: Required

BGN~13~20121215123000001~20121215

	Ref. Des.	Data Element	Name	Attributes
Must Use	BGN01	353	Transaction Set Purpose Code	M ID 2/2
			Code identifying purpose of transaction set	
			13 Request	
Must Use	BGN02	127	Reference Identification	M AN 1/30
			Reference information as defined for a particular Transaction specified by the Reference Identification Qualifier	n Set or as
			A unique transaction identification number assigned by the catronic transaction. This number must be unique over time.	originator of this
			Transaction Reference Numbers will only contain uppercase digits (0 to 9), dashes (-) and periods (.). Note that all other (spaces, underscores, etc.) must be excluded.	
Must Use	BGN03	373	Date	M DT 8/8
			Date expressed as CCYYMMDD	
			The transaction creation date - the date that the data was prosender's application system.	cessed by the

Segment: N1 Distribution Company (N1~8S)

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

If either N103 or N104 is present, then the other is required.

Semantic Notes: Comments:

1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must

provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Required

N1~8S~DISTRIBUTE-IT INC.~1~007909411~~41

	Ref. Des.	Data <u>Element</u>	Name	y	Attı	ributes
Must Use	N101	98	Entity Identifier C	Code	M	ID 2/3
			Code identifying ar individual	n organizational entity, a physical location	, prop	erty or an
			8S	Consumer Service Provider (CSP)		
				Distribution Company		
Must Use	N102	93	Name		X	AN 1/60
			Free-form name			
			Distribution Compa	any Name		
Must Use	N103	66	Identification Cod	e Qualifier	X	ID 1/2
			Code designating the Code (67)	ne system/method of code structure used for	or Ide	entification
			1	D-U-N-S Number, Dun & Bradstreet		
			9	D-U-N-S+4, D-U-N-S Number with For Suffix	ur Ch	aracter
Must Use	N104	67	Identification Cod	e	\mathbf{X}	AN 2/80
			Code identifying a	party or other code		
			Distribution Compa	any D-U-N-S or D-U-N-S+4 Number		
Recom.	N106	98	Entity Identifier C	Code	O	ID 2/3
			Code identifying ar individual	n organizational entity, a physical location	, prop	perty or an
			40	Receiver		
			41	Submitter		

Segment: N1 Supplier (N1~SJ)

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional ax Use: 1

Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing

organizational identification. To obtain this efficiency the "ID Code" (N104) must

provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Required

N1~SJ~SUPPLY LTD~9~007909422CRN1~~40

			Data Ele	ement Summary		
Must Use	Ref. <u>Des.</u> N101	Data <u>Element</u> 98	<u>Name</u> Entity Identifier	· Code		ributes ID 2/3
			Code identifying individual	an organizational entity, a physical location	, proj	perty or an
			SJ	Service Provider		
				Supplier		
Must Use	N102	93	Name		X	AN 1/60
			Free-form name			
			Supplier Name			
Must Use	N103	66	Identification Co	ode Qualifier	X	ID 1/2
			Code designating Code (67)	the system/method of code structure used f	or Ide	entification
			1	D-U-N-S Number, Dun & Bradstreet		
			9	D-U-N-S+4, D-U-N-S Number with Fo Suffix	ur Ch	aracter
Must Use	N104	67	Identification Co	ode	X	AN 2/80
			Code identifying	a party or other code		
			Supplier D-U-N-S	S or D-U-N-S+4 Number		
Recom.	N106	98	Entity Identifier	· Code	O	ID 2/3
			Code identifying individual	an organizational entity, a physical location	, proj	perty or an
			40	Receiver		
			41	Submitter		

Segment: N1 Name (Retail Customer)

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional

Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments:

1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Required

N1~8R~CUSTOMER NAME

			Data Licii	ient Summar y		
Must Use	Ref. <u>Des.</u> N101	Data Element 98	<u>Name</u> Entity Identifier (Code	Attı M	ributes ID 2/3
			Code identifying ar individual 8R	n organizational entity, a physical location Consumer Service Provider (CSP) Cust		. •
				Retail Customer		
Must Use	N102	93	Name		X	AN 1/60
			Free-form name			
			Retail Customer Na	ame		

Segment: N4 Geographic Location

Position: 070

Loop: N1 Optional

Level: Heading Usage: Optional

Max Use: 1

Purpose: To specify the geographic place of the named party
Syntax Notes: 1 If N406 is present, then N405 is required.

Semantic Notes: Comments:

1 A combination of either N401 through N404, or N405 and N406 may be adequate to

specify a location.

N402 is required only if city name (N401) is in the U.S. or Canada.

Notes: Optional - May be required by Applicable Regulatory Authority.

N4~~~78111

Data Element Summary

	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	N403	116	Postal Code	O ID 3/15

Code defining international postal zone code excluding punctuation and blanks (zip code for United States)

Segment: PER Administrative Communications Contact

Position: 080

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: >1

Purpose: To identify a person or office to whom administrative communications should be directed

Syntax Notes: 1 If either PER03 or PER04 is present, then the other is required.

2 If either PER05 or PER06 is present, then the other is required.

3 If either PER07 or PER08 is present, then the other is required.

Semantic Notes: Comments:

Notes: Supplier to Distribution Company: Not Used

Distribution Company to Supplier: Optional PER~IC~CUSTOMER NAME~TE~6305551212

	Ref.	Data			
	Des.	Element	<u>Name</u>		<u>ributes</u>
Must Use	PER01	366	Contact Function Code	\mathbf{M}	ID 2/2
			Code identifying the major duty or responsibility of the perso	n or g	group named
			IC Information Contact		
Recom.	PER02	93	Name	O	AN 1/60
			Free-form name		
			Customer Name		
Must Use	PER03	365	Communication Number Qualifier	X	ID 2/2
			Code identifying the type of communication number		
			TE Telephone		
Must Use	PER04	364	Communication Number	X	AN 1/80
			Complete communications number including country or area applicable	code	when
			Customer Telephone Number		

 ${\bf Segment:} \qquad {\bf N1} \ \ {\bf Name} \ ({\bf Customer} \ {\bf Forwarding} \ {\bf Address})$

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing

organizational identification. To obtain this efficiency the "ID Code" (N104) must

provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Supplier to Distribution Company: Not Used

Distribution Company to Supplier: Optional

N1~FE~CUSTOMER NAME

Must Use	Ref. <u>Des.</u> N101	Data <u>Element</u> 98	Name Entity Identifier (Code	Attı M	ributes ID 2/3
			Code identifying a individual FE	n organizational entity, a physical location, Mail Address	prop	oerty or an
Must Use	N102	93	Name Free-form name Customer Name		X	AN 1/60

N3 Address Information **Segment:**

Position: 060

> Loop: N1 Optional

Level: Heading Usage: Optional Max Use:

To specify the location of the named party **Purpose:**

Syntax Notes: Semantic Notes: Comments:

Supplier to Distribution Company: Not Used **Notes:**

Distribution Company to Supplier: Optional N3~1234 STREET ADDRESS~PO BOX 1234

	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	N301	166	Address Information	M AN 1/55
			Address information	
Optional	N302	166	Address Information	O AN 1/55
			Address information	

Segment: N4 Geographic Location

Position: 070

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 1

Purpose: Syntax Notes: To specify the geographic place of the named party 1 If N406 is present, then N405 is required.

Semantic Notes: Comments:

1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.

N402 is required only if city name (N401) is in the U.S. or Canada.

Notes: Supplier to Distribution Company: Not Used

Distribution Company to Supplier: Optional

N4~CITY~FL~44190

	Ref.	Data			
	Des.	Element	<u>Name</u>	Attı	<u>ributes</u>
Must Use	N401	19	City Name	O	AN 2/30
			Free-form text for city name		
Must Use	N402	156	State or Province Code	0	ID 2/2
			Code (Standard State/Province) as defined by appropriate government	ernn	nent agency
Must Use	N403	116	Postal Code	O	ID 3/15
			Code defining international postal zone code excluding punct (zip code for United States)	uatio	on and blanks
Optional	N404	26	Country Code	O	ID 2/3
			Code identifying the country		

Segment: PER Administrative Communications Contact

Position: 080

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: >1

Purpose: To identify a person or office to whom administrative communications should be directed

Syntax Notes: 1 If either PER03 or PER04 is present, then the other is required.

2 If either PER05 or PER06 is present, then the other is required.

3 If either PER07 or PER08 is present, then the other is required.

Semantic Notes: Comments:

Notes: Supplier to Distribution Company: Not Used

Distribution Company to Supplier: Optional PER~IC~CUSTOMER NAME~TE~6305551212

	Ref. Des.	Data Element	Name	Attı	ributes
Must Use	PER01	366	Contact Function Code		ID 2/2
			Code identifying the major duty or responsibility of the perso	n or g	group named
			IC Information Contact		
Recom.	PER02	93	Name	O	AN 1/60
			Free-form name		
			Customer Name		
Must Use	PER03	365	Communication Number Qualifier	X	ID 2/2
			Code identifying the type of communication number		
			TE Telephone		
Must Use	PER04	364	Communication Number	X	AN 1/80
			Complete communications number including country or area applicable	code	when
			Customer's New Telephone Number		

Segment: LIN Item Identification

Position: 010

Loop: LIN Optional

Level: Detail Usage: Optional

Max Use: 1 Purpose: To

To specify basic item identification data

Syntax Notes:

- 1 If either LIN04 or LIN05 is present, then the other is required.
- 2 If either LIN06 or LIN07 is present, then the other is required.
- 3 If either LIN08 or LIN09 is present, then the other is required.
- 4 If either LIN10 or LIN11 is present, then the other is required.
- 5 If either LIN12 or LIN13 is present, then the other is required.
- 6 If either LIN14 or LIN15 is present, then the other is required.
- 7 If either LIN16 or LIN17 is present, then the other is required.
- 8 If either LIN18 or LIN19 is present, then the other is required.
- 9 If either LIN20 or LIN21 is present, then the other is required.
- 10 If either LIN22 or LIN23 is present, then the other is required.
- 11 If either LIN24 or LIN25 is present, then the other is required.
- 12 If either LIN26 or LIN27 is present, then the other is required.
- 13 If either LIN28 or LIN29 is present, then the other is required.
- **14** If either LIN30 or LIN31 is present, then the other is required.

Semantic Notes: Comments:

- 1 LIN01 is the line item identification
- See the Data Dictionary for a complete list of IDs.
- 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: Required - All 814 transactions will contain only one LIN Loop.

LIN~2012121500001~SH~EL~SH~CE

	Ref.	Data		•		
	Des.	Element	<u>Name</u>		Attr	<u>ibutes</u>
Must Use	LIN01	350	Assigned Ide	ntification	O	AN 1/20
			Alphanumeric	characters assigned for differentiation with	in a trans	saction set
			LIN request o	st, identifier supplied in this element must up ver time. This number will be returned on the the same element.		
Must Use	LIN02	235	Product/Serv	rice ID Qualifier	M	ID 2/2
			Code identify: Product/Service SH	ing the type/source of the descriptive numbe ce ID (234) Service Requested	r used in	ı
Must Use	LIN03	234	Product/Serv	rice ID	M	AN 1/48
			Identifying nu	imber for a product or service		
			EL	Electric		
			GAS	Gas		
Must Use	LIN04	235	Product/Serv	rice ID Qualifier	\mathbf{X}	ID 2/2
			Code identify: Product/Service SH	ing the type/source of the descriptive numbe ce ID (234) Service Requested	r used in	ı
Must Use	LIN05	234	Product/Serv	rice ID	X	AN 1/48
			Identifying number for a product or service			
			CE	Energy Services		

Segment: ASI Action or Status Indicator

Position: 020

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To indicate the action to be taken with the information provided or the status of the entity

described

Syntax Notes: Semantic Notes: Comments:

Notes: Required

ASI~F~024

Data Element Summary

Ref. Data Des. Name **Element Attributes Action Code Must Use** ASI01 306 M ID 1/2 Code indicating type of action Final **Must Use** ASI02 875 **Maintenance Type Code** M ID 3/3 Code identifying the specific type of item maintenance 024 Cancellation or Termination Drop

 $\textbf{Segment:} \quad \textbf{REF} \ \ \textbf{Reference Identification} \ (\textbf{Supplier Account Number})$

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Required when previously provided by the Supplier

REF~11~1234567890

Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128	Name Reference Identific	ation Qualifier	Attı M	ributes ID 2/3
			Code qualifying the	Reference Identification		
			11	Account Number		
				Supplier Account Number		
Must Use	REF02	127	Reference Identific	ation	X	AN 1/30
				on as defined for a particular Transaction erence Identification Qualifier	Set	or as
			Supplier Account N			

 ${f REF}$ Reference Identification (Distribution Company Account Number/SDID) **Segment:**

Position: 030

> Loop: LIN Optional

Level: Detail Usage: Optional Max Use: >1

Purpose: To specify identifying information

Syntax Notes: At least one of REF02 or REF03 is required.

> If either C04003 or C04004 is present, then the other is required. 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

REF04 contains data relating to the value cited in REF02. 1

Required - Only one of either REF~12 or REF~Q5 may be sent as required by the

Applicable Regulatory Authority governing documents.

REF~12~0000445648

REF~Q5~00040621002260654

Data Element Summary

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	<u>Name</u> Reference Identific	cation Qualifier	Attr M	ributes ID 2/3
			Code qualifying the	Reference Identification		
			12	Billing Account		
				Distribution Company Account Number	ſ	
			Q5	Property Control Number		
				Service Delivery ID		
Must Use	REF02	127	Reference Identific	eation	X	AN 1/30
				on as defined for a particular Transaction erence Identification Qualifier	Set o	or as

Distribution Company Account Number or Service Delivery ID

Segment: ${f REF}$ Reference Identification (Distribution Company Previous Account

Number)

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

2 If either C04003 or C04004 is present, then the other is required.

3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

1 REF04 contains data relating to the value cited in REF02.

Notes: Supplier to Distribution Company - Not Used

Distribution Company to Supplier - Optional - Used if the Distribution Company Account Number has changed in the 45 days or as defined by the Applicable Regulatory

Authority.

REF~45~10111111234567890

Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128	Name Reference Identification Qualifier	Attı M	ributes ID 2/3
			Code qualifying the Reference Identification 45 Old Account Number		
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction specified by the Reference Identification Qualifier Distribution Company Previous Account Number	X n Set (AN 1/30 or as

Segment: ${f REF}$ Reference Identification (Status Reason Code)

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Recommended - May be required by Applicable Regulatory Authority.

REF~1P~CHA

REF~1P~020~ACCOUNT FINALLED

Data Element Summary

			Data Ele	ement Summary			
	Ref.	Data					
N T.	Des.	Element	Name			ributes	
Must Use	REF01	128		ification Qualifier	M	ID 2/3	
				the Reference Identification			
			1P	Accessorial Status Code			
				Drop Reason Code			
Must Use	REF02	127	Reference Ident	ification	\mathbf{X}	AN 1/30	
			specified by the I Supplier to Distri	nation as defined for a particular Transaction Reference Identification Qualifier bution Company: Codes A13, B38, CCE, E	EB3 m	ay be used.	
				pany to Supplier: Codes 007, 020, A13, BN	VK, C	HA, EB3	
			may be used.				
			007	Service terminated or customer dropped non-payment	a aue	το	
			020	Customer Moved or Account Closed			
			A13	Other (Explanation Required in REF03)		
			B38	Dropped	,		
			BNK	Bankruptcy			
			CCE	Contract Expired			
			CHA	Customer Switched			
			EB3	Rescind Enrollment			
				Supplier to Distribution Company: Use enrollment. The distribution company i revert the customer back to the previous	s expe	ected to	
				Distribution Company to Supplier: The contacted the Utility to Rescind the Enr			
Dep	REF03	352	Description		X	AN 1/80	
			A free-form desc	rintion to clarify the related data elements a	nd the	ir content	

A free-form description to clarify the related data elements and their content

Drop Reason Text - Required if code A13 is used.

Segment: DTM Date/Time Reference (Service Period End Date)

Position: 040

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes: Comments:

Notes: Supplier to Distribution Company: Not Used

Distribution Company to Supplier: Required

DTM~151~20130106

	Ref. Des.	Data <u>Element</u>	Name	Attı	ributes
Must Use	DTM01	374	Date/Time Qualifier	M	ID 3/3
			Code specifying type of date or time, or both date and time 151 Service Period End		
Must Use	DTM02	373	Date Date expressed as CCYYMMDD Service Period End Date	X	DT 8/8

Segment: SE Transaction Set Trailer

Position: 150

Loop:

Level: Detail Usage: Mandatory

Max Use:

Purpose: To indicate the end of the transaction set and provide the count of the transmitted

segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes: Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

Notes: Required

SE~13~000000001

Must Use	Ref. <u>Des.</u> SE01	Data <u>Element</u> 96	Name Number of Included Segments	Attr M	ributes NO 1/10
Must Use	SE02	329	Total number of segments included in a transaction set include segments Transaction Set Control Number	ding S M	T and SE
Widst Osc	SE02	32)	Identifying control number that must be unique within the tra functional group assigned by the originator for a transaction	ınsact	

Examples Associated with Model Business Practices RXQ.10.3.4 Retail Customer Drop Process – Submitted by Distribution Company

Distribution Company Drop Request

ST~814~000000001	ST segment required on all EDI transactions
BGN~13~20121215123000001~20121215	BGN segment indicating this is a Request transaction
N1~8S~DISTRIBUTE-IT INC.~1~007909411~~41	Distribution Company Name and DUNS information
N1~SJ~SUPPLY LTD~9~007909422CRN1~~40	Supplier Name and DUNS information
N1~8R~CUSTOMER NAME	Customer Name
PER~IC~CUSTOMER NAME~TE~6305551212	Current telephone number for customer who moved
N1~FE~CUSTOMER NAME	Forwarding address for customer who moved
N3~1234 STREET ADDRESS~PO BOX 1234	Forwarding address for customer who moved
N4~CITY~FL~44190	Forwarding address for customer who moved
PER~IC~CUSTOMER NAME~TE~6305551212	Forwarding telephone number for customer who moved
LIN~2012121500001~SH~EL~SH~CE	Transaction reference number, indication that the
	transaction is for Electric Generation Services
ASI~F~024	Request for Final Drop
REF~11~1234567890	Supplier Account Number
REF~12~0000445648	Distribution Company Account Number
REF~1P~CHA	Reason for drop is that the customer switched
DTM~151~20130106	Estimated drop date is 1/6/2013
SE~17~000000001	SE segment required on all EDI transactions

Examples Associated with Model Business Practices RXQ.10.3.3 Retail Customer Drop Process – Submitted by Supplier

Supplier Drop Request

ST~814~000000001	ST segment required on all EDI transactions
BGN~13~20121215123000001~20121215	BGN segment indicating this is a Request transaction
N1~8S~DISTRIBUTE-IT INC.~1~007909411~~40	Distribution Company Name and DUNS information
N1~SJ~SUPPLY LTD~9~007909422CRN1~~41	Supplier Name and DUNS information
N1~8R~CUSTOMER NAME	Customer Name
LIN~2012121500001~SH~EL~SH~CE	Transaction reference number, indication that the
	transaction is for Electric Generation Services
ASI~F~024	Request for Final Drop
REF~11~1234567890	Supplier Account Number
REF~12~0000445648	Distribution Company Account Number
REF~1P~B38	Reason for drop is that the supplier is dropping the
	customer
SE~11~000000001	SE segment required on all EDI transactions

814 General Request, Response or Confirmation

Functional Group ID=GE

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the General Request, Response or Confirmation Transaction Set (814) for use within the context of an Electronic Data Interchange (EDI) environment. This standard can be used to request actions to be performed, to respond to a request for actions to be performed or to confirm information related to actions performed.

Heading:

M	Pos. <u>No.</u> 010	Seg. ID ST	Name Transaction Set Header	Req. Des. M	Max.Use	Loop <u>Repeat</u>	Notes and Comments
M	020	BGN	Beginning Segment	M	1		
			LOOP ID - N1			>1	
	040	N1	Distribution Company (N1~8S)	О	1		n1
			LOOP ID - N1			>1	
	040	N1	Supplier (N1~SJ)	O	1		
			LOOP ID - N1			>1	
	040	N1	Name (Retail Customer)	O	1		

Detail:

	Pos.	Seg.		Req.		Loop	Notes and
	<u>No.</u>	<u>ID</u>	<u>Name</u>	Des.	<u>Max.Use</u>	<u>Repeat</u>	<u>Comments</u>
			LOOP ID - LIN			>1	
	010	LIN	Item Identification	O	1		
	020	ASI	Action or Status Indicator	O	1		
	030	REF	Reference Identification (Supplier Account Number)	O	>1		
	030	REF	Reference Identification (Distribution Company Account Number/SDID)	O	>1		
	030	REF	Reference Identification (Rejection Reason Code)	O	>1		
	040	DTM	Date/Time Reference (Service Period End Date)	О	>1		
M	150	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. The N1 loop is used to identify the transaction sender and receiver.

Segment: ST Transaction Set Header

Position: 010

Loop:

Level: Heading Usage: Mandatory

Max Use:

Purpose:

To indicate the start of a transaction set and to assign a control number

Syntax Notes:

Semantic Notes:

1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

Comments:

Notes:

Required

ST~814~000000001

	Ref.	Data		zenent Summar y	A 44.	.:h.u4.oa
Must Use	<u>Des.</u> ST01	Element 143	Name Transaction S	et Identifier Code	Attr M	ributes ID 3/3
Wast Csc	5101	140	Code uniquely	identifying a Transaction Set		10 5/5
Must Use	ST02	329	814 Transaction S	General Request, Response or Confirm et Control Number	auon M	AN 4/9
Wust Ose	3102	329	Identifying cor	atrol number that must be unique within the traps assigned by the originator for a transaction	ansact	

Segment: BGN Beginning Segment

Position: 020

Loop:

Level: Heading Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of a transaction set
 Syntax Notes: 1 If BGN05 is present, then BGN04 is required.
 Semantic Notes: 1 BGN02 is the transaction set reference number.

2 BGN03 is the transaction set date.

3 BGN04 is the transaction set time.

4 BGN05 is the transaction set time qualifier.

5 BGN06 is the transaction set reference number of a previously sent transaction

affected by the current transaction.

Comments:

Notes: Required

BGN~11~20121216ABC000000000000123456~20121216~~~20121215123000001

Must Use	Ref. <u>Des.</u> BGN01	Data Element 353	Name Transaction Set Purpose Code		ributes ID 2/2
			Code identifying purpose of transaction set		
			11 Response		
Must Use	BGN02	127	Reference Identification	M	AN 1/30
			Reference information as defined for a particular Transaction specified by the Reference Identification Qualifier		
			A unique transaction identification number assigned by the o transaction. This number must be unique over time.	rigina	tor of this
			Transaction Reference Numbers will only contain uppercase digits (0 to 9), dashes (-) and periods (.). Note that all other (spaces, underscores, etc.) must be excluded.		
Must Use	BGN03	373	Date	M	DT 8/8
			Date expressed as CCYYMMDD		
			The transaction creation date - the date that the data was processender's application system.	essed	by the
Recom.	BGN06	127	Reference Identification	O	AN 1/30
			Reference information as defined for a particular Transaction specified by the Reference Identification Qualifier		
			Transaction Reference Number from the BGN02 of the Requ	est Ti	ransaction.

Segment: N1 Distribution Company (N1~8S)

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing

organizational identification. To obtain this efficiency the "ID Code" (N104) must

provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Required

N1~8S~DISTRIBUTE-IT INC.~1~007909411~~40

	Ref. <u>Des.</u>	Data <u>Element</u>	<u>Name</u>		<u>Attı</u>	ributes
Must Use	N101	98	Entity Identifier C	Code	M	ID $2/3$
			Code identifying ar individual	n organizational entity, a physical location	, prop	perty or an
			8S	Consumer Service Provider (CSP)		
				Distribution Company		
Must Use N10	N102	93	Name		X	AN 1/60
			Free-form name			
			Distribution Compa	any Name		
Must Use	N103	66	Identification Cod	e Qualifier	X	ID 1/2
			Code designating the Code (67)	ne system/method of code structure used for	or Ide	entification
			1	D-U-N-S Number, Dun & Bradstreet		
			9	D-U-N-S+4, D-U-N-S Number with For Suffix	ur Ch	aracter
Must Use	N104	67	Identification Cod	e	\mathbf{X}	AN 2/80
			Code identifying a	party or other code		
			Distribution Compa	any D-U-N-S or D-U-N-S+4 Number		
Recom.	N106	98	Entity Identifier C	Code	O	ID 2/3
			Code identifying ar individual	n organizational entity, a physical location	, prop	perty or an
			40	Receiver		
			41	Submitter		

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

If either N103 or N104 is present, then the other is required.

Semantic Notes: Comments:

1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must

provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Required

N1~SJ~SUPPLY LTD~9~007909422CRN1~~41

	Ref.	Data		cit summary				
	Des.	Element	Name		Attr	ibutes		
Must Use	N101	98	Entity Identifier C	Code	M	ID 2/3		
			Code identifying an individual	n organizational entity, a physical location,	, prop	erty or an		
			SJ	Service Provider				
				Supplier				
Must Use	N102	93	Name		X	AN 1/60		
			Free-form name					
			Supplier Name					
Must Use	N103	66	Identification Cod	e Qualifier	X	ID 1/2		
					Code designating the Code (67)	ne system/method of code structure used for	or Ide	entification
				1	D-U-N-S Number, Dun & Bradstreet			
			9	D-U-N-S+4, D-U-N-S Number with For Suffix	ır Ch	aracter		
Must Use	N104	67	Identification Cod	e	\mathbf{X}	AN 2/80		
			Code identifying a	party or other code				
			Supplier D-U-N-S	or D-U-N-S+4 Number				
Recom.	N106	98	Entity Identifier C	Code	O	ID 2/3		
			Code identifying an individual	n organizational entity, a physical location,	, prop	erty or an		
			40	Receiver				
			41	Submitter				

Segment: N1 Name (Retail Customer)

Position: 040

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax Notes: 1 At least one of N102 or N103 is required.

If either N103 or N104 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing

organizational identification. To obtain this efficiency the "ID Code" (N104) must

provide a key to the table maintained by the transaction processing party.

N105 and N106 further define the type of entity in N101.

Notes: Accept Response: Required

Reject Response: Optional N1~8R~CUSTOMER NAME

Data Element Summary

Must Use	Ref. <u>Des.</u> N101	Data <u>Element</u> 98	<u>Name</u> Entity Identifier C	Code	Attı M	ributes ID 2/3
			Code identifying ar individual 8R	organizational entity, a physical location Consumer Service Provider (CSP) Cust		. •
				Retail Customer		
Must Use	N102	93	Name Free-form name		X	AN 1/60

Retail Customer Name

LIN Item Identification **Segment:**

Position: 010

> LIN Loop: Optional

Level: Detail Usage: Optional

Max Use: 1

Purpose: To specify basic item identification data

Syntax Notes: If either LIN04 or LIN05 is present, then the other is required.

- If either LIN06 or LIN07 is present, then the other is required.
- 3 If either LIN08 or LIN09 is present, then the other is required.
- 4 If either LIN10 or LIN11 is present, then the other is required.
- 5 If either LIN12 or LIN13 is present, then the other is required.
- If either LIN14 or LIN15 is present, then the other is required. 7 If either LIN16 or LIN17 is present, then the other is required.
- If either LIN18 or LIN19 is present, then the other is required.
- If either LIN20 or LIN21 is present, then the other is required.
- If either LIN22 or LIN23 is present, then the other is required.
- 11 If either LIN24 or LIN25 is present, then the other is required.
- 12 If either LIN26 or LIN27 is present, then the other is required.
- 13 If either LIN28 or LIN29 is present, then the other is required.

14 If either LIN30 or LIN31 is present, then the other is required.

Semantic Notes: Comments:

- LIN01 is the line item identification
- See the Data Dictionary for a complete list of IDs.
- LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: Required - The LIN Loop on the Response will echo what was sent on the Request.

LIN~2012121500001~SH~EL~SH~CE

	Ref.	Data		•		
	Des.	Element	<u>Name</u>		<u>Attr</u>	<u>ibutes</u>
Must Use	LIN01	350	Assigned Ide	ntification	O	AN 1/20
			Alphanumeric	c characters assigned for differentiation w	ithin a trans	saction set
			The identifier	provided in the LIN01 of the Request Tr	ansaction.	
Must Use	LIN02	235	Product/Serv	vice ID Qualifier	M	ID 2/2
			Code identify: Product/Servi	ing the type/source of the descriptive number (234)	nber used in	
			SH	Service Requested		
Must Use	LIN03	234	Product/Serv	vice ID	M	AN 1/48
			Identifying nu	imber for a product or service		
			EL	Electric		
			GAS	Gas		
Must Use	LIN04	235	Product/Serv	vice ID Qualifier	X	ID 2/2
			Code identify: Product/Servi	ing the type/source of the descriptive number (234)	nber used in	
			SH	Service Requested		
Must Use	LIN05	234	Product/Serv	vice ID	X	AN 1/48
			Identifying nu	imber for a product or service		
			CE	Energy Services		

Segment: ASI Action or Status Indicator

Position: 020

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To indicate the action to be taken with the information provided or the status of the entity

described

Syntax Notes: Semantic Notes: Comments:

Notes: Required

ASI~WQ~024

Data Element Summary

Ref. Data
Des. Element
Must Use ASI01 306 Action Code
Code indicating type of action
U Reject
WO Accept

WQ Accept
Maintenance Type Code

Must Use ASI02 875 Maintenance Type Code M ID 3/3

Code identifying the specific type of item maintenance 024 Cancellation or Termination

Drop

 $\textbf{Segment:} \quad \textbf{REF} \,\, \textbf{Reference Identification (Supplier Account Number)}$

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

Notes:

1 REF04 contains data relating to the value cited in REF02.

Required when previously provided by the Supplier.

REF~11~1234567890

			Duta 1	denient Stimmary		
	Ref. <u>Des.</u>	Data <u>Element</u>	<u>Name</u>		<u>Attı</u>	<u>ributes</u>
Must Use	REF01	128	Reference Iden	ntification Qualifier	\mathbf{M}	ID 2/3
			Code qualifying	g the Reference Identification		
			11	Account Number		
				Supplier Account Number		
Must Use	REF02	127	Reference Iden	ntification	X	AN 1/30
				emation as defined for a particular Transaction e Reference Identification Qualifier ont Number	n Set	or as

 ${f REF}$ Reference Identification (Distribution Company Account Number/SDID) **Segment:**

Position: 030

> Loop: LIN Optional

Level: Detail Usage: Optional Max Use: >1

Purpose: To specify identifying information

At least one of REF02 or REF03 is required. **Syntax Notes:**

> If either C04003 or C04004 is present, then the other is required. If either C04005 or C04006 is present, then the other is required. 3

Semantic Notes: Comments:

Notes:

REF04 contains data relating to the value cited in REF02. 1

Required - Only one of either REF~12 or REF~Q5 may be sent as required by the

Applicable Regulatory Authority governing documents.

REF~12~0000445648

REF~Q5~00040621002260654

Data Element Summary

Must Use	Ref. <u>Des.</u> REF01	Data Element 128		entification Qualifier ng the Reference Identification	Attı M	ributes ID 2/3
			12	Billing Account		
				Distribution Company Account Number	r	
			Q5	Property Control Number		
				Service Delivery ID		
Must Use	REF02	127	Reference Ide	entification	X	AN 1/30
				ormation as defined for a particular Transaction he Reference Identification Qualifier	Set o	or as

specified by the Reference Identification Qualifier

Distribution Company Account Number or Service Delivery ID

Position: 030

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: Comments:

1 REF04 contains data relating to the value cited in REF02.

Notes: Accept Response: Not Used Reject Response: Required

REF~7G~A13~REJECTION REASON TEXT

		Data Element Summary				
	Ref.	Data				
	Des.	Element	<u>Name</u>		<u>Attr</u>	<u>ibutes</u>
Must Use	REF01	128	Reference Identif	ication Qualifier	\mathbf{M}	ID 2/3
			Code qualifying th	e Reference Identification		
			7G	Data Quality Reject Reason		
Must Use	REF02	127	Reference Identif	ication	X	AN 1/30
				tion as defined for a particular Transaction eference Identification Qualifier	n Set o	or as
			Supplier to Distrib	ution Company: Codes A13 and A76 may	be use	ed.
			Distribution Comp	oany to Supplier: Codes 008, A13, A76, A	84, AE	BN, API may
			be used.			
			008	Account Exists But Is Not Active		
			A13	Other		
				Description Required in REF03		
			A76	Account Not Found		
			A84	Invalid Relationship		
				Not the Supplier of Record		
			ABN	Duplicate Request Received		
			API	Required Information Missing		
				Description Required in REF03		
Dep	REF03	352	Description		X	AN 1/80
			A free-form descri	ption to clarify the related data elements a	nd the	ir content
			Additional Text Description, required for codes A13 and API			

Segment: DTM Date/Time Reference (Service Period End Date)

Position: 040

Loop: LIN Optional

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes: Comments:

Notes: Distribution Company to Supplier Accept Response: Required

All Other Responses: Not Used

DTM~151~20130110

Must Use	Ref. <u>Des.</u> DTM01	Data Element 374	Name Date/Time Qualifier		Attı M	ributes ID 3/3
			1 , 0 , 1	f date or time, or both date and time ervice Period End		
Must Use	DTM02	373	Date Date expressed as CCY Service Period End Da		X	DT 8/8

Segment: SE Transaction Set Trailer

Position: 150

Loop:

Level: Detail Usage: Mandatory

Max Use:

Purpose: To indicate the end of the transaction set and provide the count of the transmitted

segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes: Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

Notes: Required

SE~13~000000001

	Ref. Des.	Data Element	Name	Attr	ibutes
Must Use	SE01	96	Number of Included Segments	M	N0 1/10
			Total number of segments included in a transaction set include segments	ding S	T and SE
Must Use	SE02	329	Transaction Set Control Number	\mathbf{M}	AN 4/9
			Identifying control number that must be unique within the tra functional group assigned by the originator for a transaction		ion set

Examples Associated with Model Business Practices RXQ.10.3.3 Retail Customer Drop Process – Submitted by Supplier

Distribution Company Drop Accept Response

ST~814~000000001	ST segment required on all EDI transactions
BGN~11~20121216ABC000000000000123456~20121	BGN segment indicating this is a Response transaction
216~~~20121215123000001	
N1~8S~DISTRIBUTE-IT INC.~1~007909411~~41	Distribution Company Name and DUNS information
N1~SJ~SUPPLY LTD~9~007909422CRN1~~40	Supplier Name and DUNS information
N1~8R~CUSTOMER NAME	Customer Name
LIN~2012121500001~SH~EL~SH~CE	Transaction reference number, indication that the
	transaction is for Electric Generation Services
ASI~WQ~024	Indicating a drop accept
REF~11~1234567890	Supplier Account Number
REF~12~0000445648	Distribution Company Account Number
DTM~151~20130106	Estimated drop date is 1/6/2013
SE~11~000000001	SE segment required on all EDI transactions

Distribution Company Drop Reject Response

ST~814~000000001	ST segment required on all EDI transactions
BGN~11~20121216ABC0000000000000123456~20121	BGN segment indicating this is a Response transaction
216~~~20121215123000001	
N1~8S~DISTRIBUTE-IT INC.~1~007909411~~41	Distribution Company Name and DUNS information
N1~SJ~SUPPLY LTD~9~007909422CRN1~~40	Supplier Name and DUNS information
N1~8R~CUSTOMER NAME	Customer Name
LIN~2012121500001~SH~EL~SH~CE	Transaction reference number, indication that the
	transaction is for Electric Generation Services
ASI~U~024	Indicating a drop reject
REF~11~1234567890	Supplier Account Number
REF~12~0000445648	Distribution Company Account Number
REF~7G~A76	Reason for rejection is Account Not Found
SE~11~000000001	SE segment required on all EDI transactions



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via email and posting

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

FROM: Caroline Trum, NAESB Staff Attorney

RE: NAESB Retail Request for Formal Comments – Due January 4, 2013

DATE: December 4, 2012

An industry comment period begins today, December 4, 2012 and ends at the close of business on January 4, 2013 for the following Retail recommendation that is posted on the NAESB web site:

Recommendation:

2012 Retail Annual Plan Item No. 10.b – Retail Customer Authorization Form Recommendation: http://www.naesb.org/pdf4/retail_2012_api_10b_rec.doc

Attachment – Retail Customer Authorization Form:

http://www.naesb.org/pdf4/retail_2012_api_10b_rec_attach.doc

All interested parties, regardless of membership status within NAESB, are eligible to submit comments for consideration. The Retail Executive Committees will review the recommendation and comments during the next scheduled meeting following the end of the comment period and consider the recommendation for vote. This meeting is open and we encourage those who submit comments to attend.

All comments received by the NAESB office by end of business on January 4, 2013 will be posted on the Request and Standards Activity Applicable to Retail page: http://naesb.org/retail_request.asp and forwarded to the Retail Executive Committee members for their consideration. If you have difficulty downloading the recommendation, please call the NAESB office at (713) 356-0060.

Best Regards,

Caroline Trum

cc: Rae McQuade, President



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> April 22, 2013 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 Requests Nos. R13004, R13005, R13006

Dear Triage Subcommittee and EC members,

We have three requests to triage – R13004, R13005 and R13006-- provided below as hyperlinks. The NAESB office recommends the following dispositions for your consideration:

For <u>R13004</u>, submitted by <u>Rodereck Kelley</u> on behalf of Bonneville Power Administration:

This request is (1) found within scope; (2) to be assigned to the Wholesale Electric Quadrant (WEQ); and (3) because it is a request to enhance NAESB Standard No. WEQ 004 Coordinate Interchange Business Practice Standards and the e-Tag Specification to allow registered Market Operators to be specified in e-Tag roles that better reflect their participation in Tagged Transactions and to remove any ambiguity between the use of registered NERC compliance entities (i.e., LSE, GPE, etc.) and the various roles within a Tagged Transaction reflected in e-Tags, it should be assigned to the WEQ JESS Subcommittee. While 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 group.

For <u>R13005</u>, submitted by <u>Debbie McKeever</u> on behalf of Oncor:

This request is (1) found within scope; (2) to be jointly assigned to the Wholesale Gas Quadrant (WGQ); and Retail Energy Quadrant (RXQ), and (3) because it is a request to modify WGQ/REQ/RGQ Internet Electronic Transport Examples, Version 2.0 to address confusion with examples provided PGP signature responses, it should be assigned the WGQ Electronic Delivery Mechanism Subcommittee and the RXQ Information Requirements/Technical Electronic Implementation Subcommittee. While 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 subcommittees.

For <u>R13006</u>, submitted by <u>Susan Brodeur</u> on behalf of Skipping Stone:

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 modify WGQ Standard No. 5.4.14 – Upload of Request for Download of Posted Data Sets and WGQ Standard No. 0.4.2 – Operational Capacity, to add a cycle indicator data element, it should be assigned the WGQ Business Practices Subcommittee. While 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 subcommittee.

If you have any questions on a specific request, please contact the requestor directly -- the email address is provided as a link with the request. 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 Monday, May 6, the dispositions as noted above will be considered approved.



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April 22, 2013

TO: Rae McQuade, NAESB PresidentFROM: Jonathan Booe, NAESB Vice President

RE: Smart Grid Update

Update on the Smart Grid Efforts -

With the completion of our update to the Energy Usage Information Model, all of the NAESB smart grid related activities are currently taking place within the Retail Electric Quadrant

NAESB Energy Service Providers Interface (ESPI) Standard – In January, NAESB received a request from the UCAiug (Utility Communications Architecture International User Group) to update the ESPI standard and make corrections that have been identified in the standards implementation by utilities providing a Green Button application. As you know, the ESPI standard serves as the foundation for the Green Button initiative created by the Office of Science and Technology Policy (OSTP) to encourage utilities to make their customers energy usage information easily available through a downloadable format on their websites.

• The request to update the standard developed by the UCAiug was facilitated by the Smart Grid Interoperability Panel (SGIP) through Priority Action Plan 20. The Priority Action Plan calls for the evolution of the ESPI standard and Green Button applications and has informally proposed that NAESB consider making the schema contained in the ESPI standard freely available without restriction and to internationalize the standard by publication through an international standards body. It is the SGIP's belief that these actions are necessary for the proliferation of the Green Button and they have dedicated a Priority Action Plan working group to address these and other issues. Currently, the working group is in the process of developing a value proposition to present to NAESB describing why these requirements/requests are necessary for the success of the Green Button initiative.

NAESB Data Privacy Standard - The Smart Grid Interoperability Panel (SGIP) Cyber Security Working Group submitted a request to NAESB at the end of August 2012 that proposes some enhancements to the NAESB Retail Data Privacy Standard. The SGIP Cyber Security Working Group identified the enhancements during the vetting of the standard for consideration in the SGIP Catalog of Standards. In response, the Smart Grid Data Privacy Task Force has been reactivated at the request of the REQ Executive Committee and Christine Wright of the Texas PUC has agreed to chair the effort. The Task Force met in Austin at the end of February to discuss the request and the proposed enhancements provided by the CSWG. During the meeting it was determined that a majority of the proposed enhancements were deemed out of scope from the initial standards development effort. A follow-up meeting will be held to determine next steps.

• The Department of Energy through the Federal Smart Grid Task Force has initiated efforts to develop a voluntary code of conduct focusing on data privacy for utilities, third parties and consumers. As the NAESB data privacy model business practices are applicable to both distribution companies and third parties that maintain and distribute smart meter based information, there is opportunity for significant overlap between the two standards. The Task Force held its first stakeholder meeting at the Federal Energy Regulatory Commission offices on February 25, 2013 to introduce the effort and discussed a proposed outline, which was modeled after the NAESB standard. NAESB staff will continue to monitor and participate in the activities of the Task Force moving forward.

<u>SGIP</u> - Throughout 2012 NAESB continued involvement in the activities of the Smart Grid Interoperability Panel (SGIP) and both the ESPI and Data Privacy Standard have been included in the SGIP Catalog of Standards as of February 1, 2013. In 2013 NAESB plans to join the SGIP 2.0 as the organization transition from a publicly funded organization, to a privately funded membership driven entity.



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NAESB UPDATE: VERSION 2.1 – WHOLESALE GAS QUADRANT (WGQ) APRIL 24, 2013

ACTIONS TO BE APPLIED TO WGQ VERSION 2.0 TO CREATE WGQ VERSION 2.1:

Version 2.0 was published on November 30, 2010.

2011-12:

Final Actions:

R11004 (MC11001-04) - For NAESB WGQ Version 2.1, add the code values 'Non-Renewal Charge' and 'AOS' for the data element "Rate Identification Code" in data sets: Transactional Reporting – Capacity Release (NAESB WGQ Standard No. 5.4.20), Transactional Reporting – Firm Transportation (NAESB WGQ Standard No. 5.4.21), Offer (NAESB WGQ Standard No. 5.4.24), Bid (NAESB WGQ Standard No. 5.4.25) and Award Download (NAESB WGQ Standard No. 5.4.26) approved by the WGQ Executive Committee on August 18, 2011. Final Action: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_r11004_mc11001-04.doc – Ratified September 19, 2011

R10005- Modify 5.3.26 to eliminate possible disputes over consequences associated with Bid Basis' not selected by Releasing Shipper approved by the WGQ Executive Committee on August 18, 2011.

Final Action: http://www.naesb.org/member login form.asp?doc=fa-wgq-r10005.doc – Ratified September 19, 2011

R09008 - Add two business conditional data elements to the Offer Upload, NAESB WGQ Standard 5.4.7 for (1) Responsibility for Out of Path Overrun and (2) Out of Path Location Changes. These data elements should be conditional in standards 5.4.1 and 5.4.3 approved by the WGQ Executive Committee on August 18, 2011. Final Action: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_r09008.doc - Ratified September 19, 2011

R09009 - Add four business conditional data elements to the imbalance trading NAESB WGQ data sets 2.4.11—2.4.16 approved by the WGQ Executive Committee on August 18, 2011.

Final Action: http://www.naesb.org/member-login-form.asp?doc=fa-wgq-r09009.doc – Ratified September 19, 2011

2011 WGQ Annual Plan Item 6 – <u>Decline</u> to implement any revisions or modification to 2006 NAESB Base Contract after industry input and discussion under Annual Plan Item 6. "Review typical industry Special Provisions to the NAESB Base Contract for consideration to be integrated into the NAESB Base Contract. Review is to include corresponding updates to other related documents (e.g. Canadian Addendum, ISDA Amendment and Model Credit Support Addendum and Frequently Asked Questions)" approved by the WGQ Executive Committee on August 18, 2011.

Final Action (no action to be taken): http://www.naesb.org/pdf4/wgq_2011_ap_6_ec081811_fa.doc - (No further action needed)

C10001 - Clarification of the word Tariff under Informational Posting. NAESB WGQ Standard No. 4.3.23 does not specify if the category Tariff under Informational Posting includes negotiated rates, non-conforming agreements, Volume 2s, and X-rate schedules within the definition approved by the WGQ EC via Notational Ballot on May 19, 2011.

Final Action: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_c10001.doc - (Ratified August 1, 2011)



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NAESB UPDATE: VERSION 2.1 – WHOLESALE GAS QUADRANT (WGQ) APRIL 24, 2013

R10009 - Add sender's option data element "Open Season ID" to Transactional Reporting – Firm Transportation – NAESB WGQ Standard No. 5.4.21 approved by the WGQ Executive Committee May 19, 2011.

Final Action: http://www.naesb.org/member login form.asp?doc=fa wgq r10009.doc - Ratified July 1, 2011

R10003 – This request proposes the addition of two new data elements "Discount Begin Date" and "Discount End Date" in the following Transaction Datasets: Transactional Reporting – Capacity Release, NAESB WGQ Standard No. 5.4.20 and Transactional Reporting – Firm Transportation, NAESB WGQ Standard No. 5.4.21. – approved by the WGQ EC via Notational Ballot on December 20, 2010.

Final Action: http://www.naesb.org/member-login-form.asp?doc=fa-wgq-r10003.doc – Ratified April 18, 2011

R09016 – Add Rate Schedule data element to the Bid Upload and Bid Download datasets and change conditionality of Location data for Offer Upload/Download datasets or add code values to allow a dummy agenda – approved by the WGQ EC via Notational Ballot on December 20, 2010.

Final Action: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_r09016.doc - Ratified April 18, 2011

R09018 - Add MA data element Path Rank in the Nominations data set and corresponding error message in the Nom QR as approved by the WGQ Executive Committee on February 3, 2011.

Final Action: http://www.naesb.org/member login check.asp?doc=fa wgq r09018.doc - Ratified March 17, 2011

R10007 - Change the Offer, Bid and Award downloads to have the ability to communicate multiple indexed rates for a given offer approved by the WGQ EC on February 3, 2011.

Final Action: (no changes necessary) http://www.naesb.org/pdf4/wgq_r10007_rec_123010.doc - (No further action needed)

C11002: Clarification or interpretation request: Clarify the effects of Bidder Lesser Quantity Indicator on the disclosure of minimum condition elements for EBB / EDI Download portion of NAESB Standard Number 5.4.25. Does the Offer's Disclose Indicator or Releasing Shipper Lesser Quantity Indicator have any effect on the disclosure of the minimum condition elements for Bids 24 as approved by the WGQ Executive Committee on October 19. 2011. (NOTE: The portion of clarification request C11002 determined to be a request for minor correction and transferred to the Information Requirements Subcommittee has been assigned minor correction number MC11022: http://www.naesb.org/pdf4/wgg_mc11022.doc.)

Final Action: http://www.naesb.org/member login form.asp?doc=fa-wgq-c11002.doc - Ratified November 28, 2011

C11003: Clarification or interpretation request: Clarify the effects of Disclosure Indicator, Minimum Rate Disclosure Indicator, Releasing Shipper Lesser Quantity Indicator, and Shorter Term Indicator on the disclosure of minimum condition elements for EBB / EDI Download portion of NAESB Standard Number 5.4.24 as approved by the WGQ Executive Committee on October 19. 2011. (NOTE: The portion of clarification request C11003 determined to be a request for minor correction and transferred to the Information Requirements Subcommittee has been assigned minor correction number MC11022: http://www.naesb.org/pdf4/wgq_mc11022.doc.) Final Action: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_c11003.doc - Ratified November 28, 2011



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NAESB UPDATE: VERSION 2.1 – WHOLESALE GAS QUADRANT (WGQ) APRIL 24, 2013

R97064-H: Correct the NAESB implementation guides to use approved ASC X12 code values through requests to X12 to adopt the NAESB codes, or through changes to the code values to use the X12 specified codes as approved by the WGQ Executive Committee on October 27, 2011.

Final Action - H: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_r97064_h.doc

Attachment 1: http://www.naesb.org/member-login-form.asp?doc=fa-wgq-r97064-h-attach2.doc
Attachment 2: http://www.naesb.org/member-login-form.asp?doc=fa-wgq-r97064-h-attach3.doc
Attachment 4: http://www.naesb.org/member-login-form.asp?doc=fa-wgq-r97064-h-attach4.doc

Attachment 5: http://www.naesb.org/member-login-form.asp?doc=fa-wgq-r97064-h-attach5.doc – Ratified December 2, 2011

2011 WGQ Annual Plan Item 8.a - Changes to the NAESB WGQ Standard Nos. 10.2.8 and 10.2.30 to support consistency with Retail and WEQ Activities as approved by the WGQ Executive Committee via notational ballot on November 23, 2011.

Final Action: http://www.naesb.org/member-login-form.asp?doc=fa-wgq-2011-api-8a.doc – Ratified December 28, 2011

R11007: Modify the Discount Indicator Code Value Description for Code Value 1 and 2 as approved by the WGQ Executive Committee on February 23, 2012.

Final Action: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_r11007.doc - Ratified March 30, 2012

R05027: Add two new data elements to the Nomination and Scheduled Quantity data sets that 1) permit the service requestor to identify a specified path for the nominated transaction, and 2) provide shippers the ability to identify the specific month of an imbalance they may want to clear as approved by the WGQ Executive Committee on February 23, 2012.

Final Action: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_r05027.doc - Ratified March 30, 2012

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 as approved by the WGQ Executive Committee on February 23, 2012.

Final Action: http://www.naesb.org/member login form.asp?doc=fa wgq r10004.doc – Ratified March 30, 2012

C11005: Clarification or interpretation request: In WGQ Standard No. 5.3.2, clarify the meaning of the phrase, "open season ends no later than 1:00 pm on a Business Day" as approved by the WGQ Executive Committee on February 23, 2012.

Final Action: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_c11005.doc - Ratified March 30, 2012

R11008: Add one new data element "Life of Reserves Indicator" in the Transaction Dataset NAESB WGQ Standard No. 5.4.21 (Transactional Reporting – Firm Transportation) as approved by the WGQ Executive Committee on May 3, 2012.

Final Action: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_r11008.doc - Ratified June 11, 2012



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NAESB UPDATE: VERSION 2.1 – WHOLESALE GAS QUADRANT (WGQ)
APRIL 24, 2013

2012 WGQ Annual Plan Item No.6 - NAESB Base Contract Addendum for Federal Acquisition Regulations (FAR) and Government Contract Compliance (GCP) clauses as approved by the WGQ Executive Committee on May 3, 2012.

Final Action: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_2012_api_6.doc – Ratified June 11, 2012

Attachment - Government Acquisition Provisions Addendum (GAPA) to the Base Contract for Sale and Purchase of

Natural Gas: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_2012_api_6_attach_gapa.doc

Attachment - FAQs Related to Government Acquisition Provisions Addendum (GAPA):

http://www.naesb.org/member login form.asp?doc=fa wgq 2012 api 6 attach gapa faqs.doc

R11016 - Add a new data set, Swing Service Overtakes as approved by the WGQ Executive Committee on August 23, 2012.

Final Action (no standardization is necessary): http://www.naesb.org/pdf4/wgq_r11016_ec082312_fa.doc - (No further action needed)

2012 WGQ Annual Plan Item 9 – Investigate and determine if changes to standards are needed to support adequate session encryption (SSL/TLS issues <u>US-Cert Vulnerability Note VU#864643</u>) as approved by the WGQ Executive Committee on August 23, 2012.

Final Action: http://www.naesb.org/pdf4/wgq_2012ap9_ec082312_fa.doc - (No further action needed)

2011 WGQ Annual Plan Item 7 - Determine if location common codes as formulated are needed. If location common codes are needed, then determine if existing specifications are sufficient, or conversely, if not needed, develop plan for modifications to support removal of location common code from NAESB WGQ standards. Recommendation: http://www.naesb.org/pdf4/wgq_2011_api_7_rec.doc (approved by the WGQ EC on October 27, 2011 submitted to WGQ IR/Technical for processing)

2011 WGQ Annual Plan Item 7 / 2012 WGQ Annual Plan Item 8 (C12003) – Modify standards to remove location common code from NAESB WGQ standards as approved by the WGQ Executive Committee on August 23, 2012. Final Action – Part A:

http://www.naesb.org/member login check.asp?doc=fa wgq 2011ap7 2012ap8 partA.doc – Ratified September 28, 2012

Attachment 1 – Additional Standards:

http://www.naesb.org/member login check.asp?doc=fa wgq 2011ap7 2012ap8 attach1.doc

Attachment 2 – Nomination Standards:

 $\underline{http://www.naesb.org/member_login_check.asp?doc=fa_wgq_2011ap7_2012ap8_attach2.doc}$

Attachment 3 – Flowing Gas Related Standards:

http://www.naesb.org/member_login_check.asp?doc=fa_wgq_2011ap7_2012ap8_attach3.doc

Attachment 4 – Invoicing Related Standards:

http://www.naesb.org/member login check.asp?doc=fa wgq 2011ap7 2012ap8 attach4.doc

Attachment 5 – Capacity Release Related Standards:

http://www.naesb.org/member_login_check.asp?doc=fa_wgq_2011ap7_2012ap8_attach5.doc

Attachment 6 – Location Data Download:

 $\underline{http://www.naesb.org/member_login_check.asp?doc=fa_wgq_2011ap7_2012ap8_attach6.doc}$

Final Action – Part B (C12003): Interpretation:

http://www.naesb.org/member login check.asp?doc=fa wgq 2011ap7 2012ap8 partB.doc – Ratified September 28, 2012



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NAESB UPDATE: VERSION 2.1 – WHOLESALE GAS QUADRANT (WGQ) APRIL 24, 2013

R11011 – Revised: NAESB WGQ Standard Nos. 5.4.24: Offer – add a code value to the Business Conditional data element "Capacity Type Location Indicator" for capacity that is "Primary thru Storage", NAESB WGQ Standard Nos. 5.4.20, 5.4.25 and 5.4.26 Transactional Reporting – Capacity Release, Bid and Award – add a date element that is Business Conditional "Capacity Type Location Indicator" as approved by the WGQ Executive Committee on August 23, 2012.

Final Action: http://www.naesb.org/member_login_check.asp?doc=fa_wgq_2011ap7_2012ap8_partB.doc - Ratified September 28, 2012

R11017: Modify NAESB WGQ Standard No. 4.3.52 as approved by the WGQ Executive Committee on August 23, 2012.

Final Action: http://www.naesb.org/member-login-check.asp?doc=fa-wgq-r11017.doc - Ratified September 28, 2012

R11018 – Revised: Delete data ordering standards and create a new data grouping standard as approved by the WGQ Executive Committee on August 23, 2012:

http://www.naesb.org/member_login_check.asp?doc=fa_wgq_r11018.doc - Ratified September 28, 2012

R04031 – Amend WGQ Standard No. 4.3.59 to change the timing of the technical review process as approved by the WGQ Executive Committee on August 23, 2012.

Final Action: http://www.naesb.org/member login check.asp?doc=fa-wgq-r04031.doc - Ratified September 28, 2012

C12004 – Clarification to WGQ Version 2.0, NAESB WGQ Standard No. 2.3.14 (Measurement Data Corrections) as approved by the WGQ Executive Committee on August 23, 2012:

http://www.naesb.org/member login check.asp?doc=fa wgq c12004.docx - Ratified September 28, 2012

2012 WGQ Annual Plan Item 4 – Execute the plan for the development of meaningful error code values in all data sets to make them easier to understand on the TSPs' EBB web sites as compared to the X12 DISA error codes as approved by the WGQ Executive Committee on August 23, 2012.

Final Action: http://www.naesb.org/member_login_check.asp?doc=fa_wgq_2012ap4.doc - Ratified September 28, 2012

2012 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. (Reference NAESB Standard No. 4.3.59) as approved by the WGO Executive Committee on August 23, 2012.

Final Action: http://www.naesb.org/member_login_check.asp?doc=fa_wgq_2012ap5.doc - Ratified September 28, 2012

Attachment 1: http://www.naesb.org/member-login-check.asp?doc=fa-wgq-2012ap5-attach1.doc Attachment 2 (Redline):

http://www.naesb.org/member_login_check.asp?doc=fa_wgq_2012ap5_attach2_redline.docx

Attachment 2 (Clean): http://www.naesb.org/member login check.asp?doc=fa wgq 2012ap5 attach2 clean.docx



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NAESB UPDATE: VERSION 2.1 – WHOLESALE GAS QUADRANT (WGQ)
APRIL 24, 2013

R11021 - Modify language of WGQ Standard No. 5.3.2 such that it meets the original intent and is consistent with Interpretations 7.3.15 and 7.3.46 as approved by the WGQ Executive Committee on August 23, 2012.

Final Action: http://www.naesb.org/member login_check.asp?doc=fa_wgq_r11021.doc - Ratified September 28, 2012

Attachment 1 (Redline and Clean):

http://www.naesb.org/member_login_check.asp?doc=fa_wgq_r11021_attach1.doc

Attachment 2: http://www.naesb.org/member_login_check.asp?doc=fa_wgq_r11021_attach2.doc
Attachment 3: http://www.naesb.org/member_login_check.asp?doc=fa_wgq_r11021_attach3.doc

Final Action Part A: 2011 WGQ Annual Plan Item 7 / 2012 WGQ Annual Plan Item 8:

http://www.naesb.org/member login form.asp?doc=wgq rat100412 wgq 2011ap7 2012ap8 rec partA 102411.d oc This recommendation incorporates standards which were adopted by the WGQ Executive Committee on October 19, 2011 and notational ballot October 24, 2011. These standards were inadvertently not included in the ratified September 28, 2012 recommendation Part A: 2011 WGQ Annual Plan Item 7 / 2012 WGQ Annual Plan Item 8 (C12003) approved by the WGQ Executive Committee on August 23, 2012.

Final Action: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_2011ap7_2012ap8_partA_110512.doc - Ratified November 5, 2012

2012 WGQ Annual Plan Item 7.b: Develop the NAESB Natural Gas Liquids Master Agreement according to the analysis completed in annual plan item 7.a as revised and approved by the WGQ Executive Committee on October 25, 2012.

Final Action: http://www.naesb.org/member_login_check.asp?doc=fa_wgq_2012_ap_7b.docx
Attachment – Master Agreement for Purchase, Sale or Exchange of Liquid Hydrocarbons:
http://www.naesb.org/member_login_check.asp?doc=fa_wgq_2012_ap_7b_attach.docx - Ratified December 6, 2012

2012 WGQ Annual Plan Item 1 – Investigate how to make standards referencing, which may include reorganization, more user friend for implementation (Reorganize Standards Requests) as approved by the WGQ Executive Committee on February 21, 2013.

Final Action: http://www.naesb.org/pdf4/wgq 2012 ap 1 rec 022113.doc - (No further action needed)

R11012 - Add the data elements - Up Activity Code, Down Activity Code, Up Transaction Type, Down Transaction Type to the Nominations (WGQ Standard No. 1.4.1) and Scheduled Quantity (WGQ Standard No. 1.4.5 Data Sets as revised and approved by the WGQ Executive Committee on February 21, 2013.

Final Action: http://www.naesb.org/member_login_check.asp?doc=fa_wgq_r11012.doc - Ratified March 28, 2013

R12003/R12004 – Add contact detail data elements to Imbalance Trade datasets/Add contact data elements to Withdrawal of Request for Imbalance as revised and approved by the WGQ Executive Committee on February 21, 2013

Final Action: http://www.naesb.org/member_login_check.asp?doc=fa_wgq_r12003_r12004.doc - Ratified March 28, 2013



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R12005 - Add data element to Service Requester Level Charge/Allowance Invoice to NAESB WGQ Standard 3.4.4 as approved by the WGO Executive Committee on February 21, 2013.

Final Action: http://www.naesb.org/member login check.asp?doc=fa-wgq-r12005.doc - Ratified March 28, 2013

R12007 – Modify NAESB WGQ Standard No. 5.3.70 to allow the use of Notice Type as an alternative to the Notice Type Abbreviation as revised and approved by the WGQ Executive Committee on February 21, 2013.

Final Action: http://www.naesb.org/member_login_check.asp?doc=fa_wgq_r12007.doc - Ratified March 28, 2013

R12009 - Add two Sender's Option Data Elements to NAESB WGQ 5.4.22— Transactional Reporting – Interruptible Transportation as approved by the WGQ Executive Committee on February 21, 2013. Final Action: http://www.naesb.org/member-login-check.asp?doc=fa-wgq-r12009.doc - Ratified March 28, 2013

2012 WGQ Annual Plan Item 14.b – Address design capacity issues present in paragraph 30 of FERC Order No. 587-V³ as revised and approved by the WGQ Executive Committee on February 21, 2013. Final Action: http://www.naesb.org/member-login-check.asp?doc=fa-wgq-2012-ap-14b.doc - Ratified March 28, 2013

Recommendations:

Minor Corrections:

MC10038 - For NAESB WGQ Version 2.1, additional code values for the data elements Transaction Type and Reduction Reason Code in the following data sets as appropriate: Nomination (1.4.1), Confirmation Response (1.4.4), Scheduled Quantity (1.4.5), Scheduled Quantity for Operators (1.4.6), and Confirmation Response data sets as needed to support these requirements. – approved by the WGQ EC via Notational Ballot on January 18, 2011. Recommendation: http://www.naesb.org/pdf4/wgg_mc10038_rec_011811.doc (Effective date April 25, 2011)

MC10040 - For NAESB WGQ Version 2.1, NAESB WGQ Standard No. 0.4.2 - Operational Capacity, NAESB WGQ Standard No. 1.4.1 - Nomination, NAESB WGQ Standard No. 1.4.3 - Request for Confirmation, NAESB WGQ Standard No. 1.4.5 - Scheduled Quantity, NAESB WGQ Standard No. 1.4.5 - Scheduled Quantity, NAESB WGQ Standard No. 1.4.6 - Scheduled Quantity for Operator, NAESB WGQ Standard No. 5.4.20 - Transactional Reporting - Capacity Release, NAESB WGQ Standard No. 5.4.21 - Transactional Reporting - Firm Transportation, NAESB WGQ Standard No. 5.4.24 - Offer, NAESB WGQ Standard No. 5.4.25 - Bid, and NAESB WGQ Standard No. 5.4.26 - Award Download. - approved by the WGQ EC via Notational Ballot on January 18, 2011.

Recommendation: http://www.naesb.org/pdf4/wgq mc10040 rec 011811.doc (Effective date April 25, 2011)

MC11005 – For NAESB WGQ Version 2.1, This request proposes the addition of 4 code values for the data element "Rate Identification Code" in the following datasets for the NAESB WGQ Version 2.0 release: NAESB WGQ Standard 5.4.20 – Transactional Reporting – Capacity Release and NAESB WGQ Standard 5.4.21 – Transactional Reporting – Firm Transportation. – approved by the WGQ EC via Notational Ballot on April 8, 2011. Recommendation: http://www.naesb.org/pdf4/wgq_mc11005_rec_040811.doc (Effective date May 13, 2011)



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MC10004/MC10013 – For NAESB WGQ Version 2.1, Add additional Charge Type and Service Requestor Level Charge/Allowance Amount Descriptor code values to NAESB WGQ Standard No. 3.4.1 as approved by the WGQ Executive Committee via Notational Ballot on April 29, 2011.

Recommendation: http://www.naesb.org/pdf4/wgq_mc10004_mc10013_rec_042911.doc (Effective date June 16, 2011)

MC11013 – For NAESB WGQ Versions 1.9 and 2.0, Minor Correction of usage for data element Special Terms and Miscellaneous Notes in the NAESB WGQ Standard No. 5.4.25 – Bid approved by the WGQ EC on May 5, 2011. Recommendation: http://www.naesb.org/pdf4/wgq_mc11013_mc11014_rec_050511.doc (Effective date June 3, 2011)

MC11014 – Errata for miscellaneous corrections to NAESB WGQ Standards Versions 1.9 and 2.0 approved by the WGQ EC on May 5, 2011.

Recommendation: http://www.naesb.org/pdf4/wgq mc11013 mc11014 rec 050511.doc (Effective date June 3, 2011)

MC11016 – For NAESB WGQ Version 2.0 and WEQ Version 002.1, Joint WEQ/WGQ Minor Correction to the NAESB WEQ/WGQ Implementation Guide for Electronic Tariff Filing to correspond to modifications made by FERC to its Implementation Guide for Electronic Filing of Parts 25, 154, 284, 300, and 241 Tariff Filings as noted in the FERC eTariff RSS Feed(s), dated April 18, 2011 approved by the WGQ EC on May 5, 2011 and WEQ EC via Notational Ballot on May 20, 2011.

Recommendation: http://www.naesb.org/pdf4/weq_wgq_mc11016.doc (Effective date June 3, 2011)

MC11017 – For NAESB WGQ Version 2.0, minor correction to correct the code values for the data element in 'Allowable Re-Release Indicator' in data set, Offer (NAESB WGQ Standard No. 5.4.24) approved by the WGQ Executive Committee on August 18, 2011.

Recommendation: http://www.naesb.org/pdf4/wgq_mc11017_rec_081811.doc (Effective date September 19, 2011)

MC11018 – For NAESB WGQ Version 2.1, minor correction to add one code value for the data element Reduction Reason the data sets, Confirmation Response (NAESB WGQ Standard No. 1.4.4), Scheduled Quantity (NAESB WGQ Standard No. 1.4.5) and Scheduled Quantity for Operator (NAESB WGQ Standard No. 1.4.6) approved by the WGO Executive Committee on August 18, 2011.

Recommendation: http://www.naesb.org/pdf4/wgq_mc11018_rec_081811.doc (Effective date September 19, 2011)

MC11001-11004 (R11004) – For NAESB WGQ Version 2.1, add the code values 'Non-Renewal Charge' and 'AOS' for the data element "Rate Identification Code" in data sets: Transactional Reporting – Capacity Release (NAESB WGQ Standard No. 5.4.20), Transactional Reporting – Firm Transportation (NAESB WGQ Standard No. 5.4.21), Offer (NAESB WGQ Standard No. 5.4.24), Bid (NAESB WGQ Standard No. 5.4.25) and Award Download (NAESB WGQ Standard No. 5.4.26) approved by the WGQ Executive Committee on August 18, 2011. Recommendation: http://www.naesb.org/member_login_form.asp?doc=wgq_rat081911_r11004_mc11001-04_rec.doc – (Ratification forR11004 portion ended September 19, 2011(Effective date))

MC11019 – For WGQ Version 2.1, Add the code values 'Swing Service Overtake' and 'Unauthorized Take' for the data element "Transaction Type" in the following data sets: NAESB WGQ Standard No. 2.4.3 – Allocation, NAESB WGQ Standard No. 2.4.4 – Shipper Imbalance and NAESB WGQ Standard No. 3.4.1 – Transportation/Sales Invoice as approved by the WGQ EC on October 27, 2011.

Recommendation: http://www.naesb.org/pdf4/wgq mc11019 rec 102711.doc (Effective date December 2, 2011)



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MC11020 – For NAESB WGQ Version 2.0, Minor correction of inadvertent typographical error in published NAESB Standard 6.3.1 - NAESB Base Contract for Sale and Purchase of Natural Gas dated September 5, 2006 approved by the WGQ Executive Committee on August 18, 2011.

Recommendation: http://www.naesb.org/pdf4/wgq_mc11020_rec_081811.doc (Effective date September 19, 2011)

MC11021 – For NAESB WGQ Version 2.1, add the code value "Reservation/Enhanced Nomination Service" for data element "Transaction Type" in data set, Transportation/Sales Invoice (NAESB WGQ Standard No. 3.4.1) as approved by the WGQ Executive Committee on October 27, 2011.

Recommendation: http://www.naesb.org/pdf4/wgq mc11021 rec 102711.doc (Effective date December 2, 2011)

MC11022 – For NAESB WGQ Version 2.0, minor correction to the conditions associated with the download of the Bid (NAESB WGQ Standard No. 5.4.25) for the following data elements: Bid Minimum Quantity – Contract and Bid Minimum Quantity – Location. Such review should consider the Bidder's selection in the Bidder Lesser Quantity Indicator data element. Minor correction to the conditions associated with the download of the Offer (NAESB WGQ Standard No. 5.4.24) for the following data elements: Minimum Offer Quantity – Contract, Minimum Offer Quantity – Location, Minimum Term, Minimum Acceptable Percentage of Maximum Tariff Rate, and Minimum Acceptable Rate. Such review should consider the Releaser's selection in the Disclose Indicator, Releasing Shipper Lesser Quantity Indicator, Shorter Term Indicator, and Minimum Rate Disclosure Indicator approved by the WGQ Executive Committee on August 18, 2011.

Recommendation: http://www.naesb.org/pdf4/wgq mc11022 rec 081811.doc (Effective date September 19, 2011)

MC11023 – Errata for NAESB WGQ Version 2.0 - Correct the Data Element Cross Reference to ASCX12 for the N1 sub-detail usages for the data elements Upstream Identifier Code/Upstream Identifier Proprietary Code and Downstream Identifier Code/Downstream Identifier Proprietary Code in the column 'Usage with Nominator's Tracking ID P N T U' from 'nu nu nu nu' to 'M C nu C' approved by the WGQ Executive Committee on August 18, 2011.

Recommendation: http://www.naesb.org/pdf4/wgq mc11023 rec 081811.doc (Effective date September 19, 2011)

MC11024 – For NAESB WGQ Version 2.0, minor correction to add the code value "Kansas Ad Valorum Tax Refund" for data element "Charge Type" in data set, Transportation/Sales Invoice (NAESB WGQ Standard No. 3.4.1) - NO ACTION TO BE TAKEN approved by the WGQ Executive Committee on August 18, 2011.

Minor Correction Request: http://www.naesb.org/pdf4/wgq_mc11024_rec_081811.doc - NO ACTION TO BE TAKEN



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MC11007 – For NAESB WGQ Version 2.1, minor correction to NAESB WGQ Standard No. 5.4.21: Transactional Reporting - Firm, add a code value to the Sender's Option data element "Capacity Type Indicator" for capacity that is "Primary thru Storage."

Minor Correction Request: http://www.naesb.org/pdf4/wgq_mc11007.doc (Processed with R11011)

MC11025 – For NAESB Version 2.1, minor correction to NAESB WGQ Standard No. 5.4.22: Transactional Reporting – Interruptible, add a code value to the data element "Rate Identification Code" for authorized overrun approved by the WGQ Executive Committee on August 18, 2011.

Recommendation: http://www.naesb.org/pdf4/wgq mc11025 rec 081811.doc (Effective date September 19, 2011)

MC11026 – For NAESB Version 2.1, minor correction to NAESB WGQ Standard Nos. 1.4.5 (Scheduled Quantity) and 1.4.6 Scheduled Quantity for Operator - request is for new Scheduled Quantity and Scheduled Quantity for Operator Reduction Reason codes as approved by the WGQ Executive Committee on October 27, 2011. Recommendation: http://www.naesb.org/pdf4/wgg mc11026 rec 102711.doc (Effective date December 2, 2011)

MC11027 – For NAESB Version 2.0, errata to NAESB WGQ Standard No. 4.3.29 - Notice Type is spelled "Operational flow order" as is the Code Value Description in Standard 5.4.16. Both the "f" and the "o" should be capitalized. The changes also need to be made in the QEDM manual, Booklet 1 of 1 as approved by the WGQ Executive Committee on October 27, 2011.

Recommendation: http://www.naesb.org/pdf4/wgq_mc11027 rec 102711.doc (Effective date December 2, 2011)

MC11028 – withdrawn by submitted on April 4, 2012

MC11030 – For NAESB Versions 1.9 and 2.0, Errata to delete the duplicate data element "Transportation Service Provider" in the Nomination Quick Response – NAESB WGQ Standard No. 1.4.2 as approved by the WGQ Executive Committee on October 27, 2011.

Recommendation: http://www.naesb.org/pdf4/wgq_mc11030 rec 102711.doc (Effective date December 2, 2011)

MC11031 – For NAESB Version 2.0, Errata to correct the Technical Implementation of Business Process, Code Values for the Data Element Associated Transaction Set, and ASC X12 Mapping Guidelines in Note/Special Instruction - NAESB WGQ Standard No. 5.4.17.

Recommendation: http://www.naesb.org/pdf4/wgq_mc11031_rec_112111.doc (Effective date January 5, 2012)

MC11032 – For NAESB WEQ Version 002.1 and WGQ Version 2.0, Joint WEQ/WGQ Minor Correction to the NAESB WEQ/WGQ Implementation Guide for Electronic Tariff Filing to correspond to modifications made by FERC to its Implementation Guide for Electronic Filing of Parts 25, 154, 284, 300, and 341 Tariff Filings as noted by FERC, dated December 22, 2011 as approved by the WEQ and WGQ EC's via notational ballot on February 3, 2012. NOTE: This minor correction will not be filed with FERC for Version 2.0, but will be included in the Version 2.1 FERC filing.

Recommendation: http://www.naesb.org/pdf4/weq_wgq_mc11032_rec_020312.doc (Effective March 6, 2012)

MC12001 – For NAESB Version 2.1, Correct spelling in NAESB WGQ Standard No. 2.4.1 – Pre-determined Allocation as approved by the WGQ Executive Committee on February 23, 2012. Recommendation: http://www.naesb.org/pdf4/wgq_mc12001_rec_022312.doc (Effective March 30, 2012)

MC12002 – For NAESB Version 2.1, Correct information in the NAESB WGQ Standard No. 5.4.26, Award Download in the TIBP for Award Download regarding the Replacement Shipper Role Indicator as approved by the WGQ Executive Committee on February 23, 2012.



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Recommendation: http://www.naesb.org/pdf4/wgq_mc12002_rec_022312.doc (Effective March 30, 2012)

MC12004 – For NAESB Version 2.1, Correct to NAESB WGQ Versions 1.9 and 2.0 the ASC X12 Mapping Guidelines in Confirmation Response - NAESB WGQ Standard No. 1.4.4 as approved by the WGQ Executive Committee on February 23, 2012. *NOTE: This minor correction will not be filed with FERC for Versions 1.9 and 2.0, but will be included in the Version 2.1 FERC filing.*

Recommendation: http://www.naesb.org/pdf4/wgq_mc12004_rec_022312.doc (Effective March 30, 2012)

MC12005 – For NAESB Version 2.0, Standard No. 0.3.19 - Modify standard language for 0.3.19 for clarification purposes as approved by the WGQ Executive Committee via notational ballot on March 27, 2012. Recommendation: http://www.naesb.org/pdf4/wgq_mc12005_rec_032712.doc (Effective April 30, 2012)

MC12006 – For NAESB Version 2.0, Standard No. 0.3.21 - Clarify standard language for 0.3.21 for clarification purposes as approved by the WGQ Executive Committee via notational ballot on March 27, 2012. Recommendation: http://www.naesb.org/pdf4/wgq_mc12006_rec_032712.doc (Effective April 30, 2012)

MC12008 – For NAESB Version 2.1, NAESB WGQ Standard No. 5.4.14 (Upload of Request for Download of Posted Datasets) and NAESB WGQ Standard No. 5.4.15 (Response to Upload of Request for Download of Posted Datasets) and for the data element Transportation Service Provider, add footnote references '*' and '4' as approved by the WGQ Executive Committee on May 3, 2012.

Recommendation: http://www.naesb.org/pdf4/wgq mc12008 rec 050312.doc (Effective June 11, 2012)

MC12009 – For NAESB Version 2.1, Add a new code value to the Transaction Type data element and modify the Code Value Definition for Reservation/Enhanced Nomination Service, Code Value 143, in the Transaction Type data element (added with MC11021), to clarify this code applies to Reservation charges as approved by the WGQ Executive Committee on May 3, 2012.

Recommendation: http://www.naesb.org/pdf4/wgq mc12009 rec 050312.doc (Effective June 11, 2012)

MC12011 – (Note this minor correction has been transferred to C12004)

MC12012 – For NAESB Version 2.1, Add five new code values to the Reduction Reason data element for NAESB WGQ Standard Nos. 1.4.5 (Scheduled Quantity) and 1.4.6 (Scheduled Quantity for Operator) as approved by the WGQ Executive Committee on May 3, 2012.

Recommendation: http://www.naesb.org/pdf4/wgq_mc12012_rec_050312.doc (Effective June 11, 2012)

MC12013 – For NAESB Version 2.1, Add two new code values to the Adjustment Type data element for NAESB WGQ Standard No. 2.4.4 (Shipper Imbalance) as approved by the WGQ Executive Committee on May 3, 2012. Recommendation: http://www.naesb.org/pdf4/wgq_mc12013 rec 050312.doc (Effective June 11, 2012)



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MC12014 – For NAESB Versions 1.9, 2.0 and 2.1, Correct the qualifier in the REF Segments (Heading) Transaction Set table for the data element Package Identifier in the following data sets: Version 1.9, NAESB WGQ Standard No. 5.4.7 (Offer Upload) and 5.4.1 (Offer Download); Versions 2.0 and 2.1, NAESB WGQ Standard No. 5.4.24 (Offer (Download Portion)) as approved by the WGQ Executive Committee on May 3, 2012. NOTE: This minor correction will not be filed with FERC for Versions 1.9 and 2.0, but will be included in the Version 2.1 FERC filing.

Recommendation: http://www.naesb.org/pdf4/wgq_mc12014_rec_050312.doc (Effective June 11, 2012) NOTE:

MC12015 – For NAESB Versions 1.9, 2.0 and 2.1, Correct the segment level usage and segment level note for the LQ Segment position 0800 in NAESB WGQ Standard Nos. 1.4.5 (Scheduled Quantity) and 1.4.6 (Scheduled Quantity for Operator) as approved by the WGQ Executive Committee on May 3, 2012. NOTE: This minor correction will not be filed with FERC for Versions 1.9 and 2.0, but will be included in the Version 2.1 FERC filing. Recommendation: http://www.naesb.org/pdf4/wgq_mc12015_rec_050312.doc (Effective June 11, 2012)

MC12016 – For NAESB Version 2.1, Add one code value for the data element "Validation Code (Sub-detail)" in NAESB WGQ Standard No. 1.4.2 (Nomination Quick Response) as approved by the WGQ EC on August 23, 2012. Recommendation: http://www.naesb.org/pdf4/wgq_mc12016 rec 082312.doc - (No further action needed)

MC12017 – For NAESB Version 2.1, Add one code value for the data element "Meter Type" in NAESB WGQ Standard No. 2.4.6 (Measured Volume Audit Statement) as approved by the WGQ EC on August 23, 2012. Recommendation http://www.naesb.org/pdf4/wgq_mc12017 rec 082312.doc (Effective September 28, 2012)

MC12018 – For NAESB Version 2.1, Add 4 code values for the data element "Charge Type" in NAESB WGQ Standard No. 3.4.1 (Transportation / Sales Invoice) as approved by the WGQ EC on August 23, 2012. Recommendation: http://www.naesb.org/pdf4/wgq_mc12018_rec_082312.doc_(Effective September 28, 2012)

MC12019/MC12021 (Revised 06/15/2012) – For NAESB Version 2.1, Add one code value for the data element "Capacity Type Location Indicator" in NAESB WGQ Standard No. 5.4.24 (Offer) as approved by the WGQ EC on August 23, 2012.

Recommendation: http://www.naesb.org/pdf4/wgq_mc12019_mc12021_rec_082312.doc (Effective September 28, 2012)

MC12022 – For NAESB Version 2.1, Add one code value for the data element "Transaction Type" NAESB WGQ Standard Nos. 1.4.1 (Nomination), 1.4.5 (Scheduled Quantity) and 3.4.1 (Invoice) as approved by the WGQ EC on August 23, 2012.

Recommendation: http://www.naesb.org/pdf4/wgq_mc12022_rec_082312.doc (Effective September 28, 2012)

MC12023 – For NAESB Versions 1.9, 2.0 and 2.1, Correct two code values in the code values dictionary of the Invoicing Related Standards Manual for the date element "Charge Type" in NAESB WGQ Standard No. 3.4.1 (Transportation/Sales Invoice) as approved by the WGQ EC on August 23, 2012. NOTE: This minor correction will not be filed with FERC for Versions 1.9 and 2.0, but will be included in the Version 2.1 FERC filing. Recommendation: http://www.naesb.org/pdf4/wgq_mc12023_rec_082312.doc (Effective September 28, 2012)

MC12024 – For NAESB Versions 2.0 and 2.1, Correct the condition for the data element Location Indicator Data in NAESB WGQ Standard No. 5.4.22 (Transactional Reporting – Interruptible Transportation) as approved by the WGQ EC on August 23, 2012. *NOTE: This minor correction will not be filed with FERC for Version 2.0, but will be included in the Version 2.1 FERC filing.*

Recommendation: http://www.naesb.org/pdf4/wgq_mc12024_rec_082312.doc (Effective September 28, 2012)



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MC12027 – For WGQ 2012 Annual Plan Item 6 Final Action Attachment - Government Acquisition Provisions Addendum (GAPA) to the Base Contract for Sale and Purchase of Natural Gas. - Ratified June 11, 2012 to correct legal cites to legal federal regulations as approved by the WGQ EC on August 23, 2012.

Recommendation: http://www.naesb.org/pdf4/wgq_mc12027_rec_082312.doc

Attachment: http://www.naesb.org/pdf4/wgq_mc12027_attachment_082312.doc (Effective September 28, 2012)

MC12028 – For NAESB Version 2.1, modify the Data Element Quick Guides to NAESB WGQ Standard Nos. 5.4.24 (Offer), 5.4.25 (Bid) and 5.4.26 (Bid Award) data sets to include new data elements that were inadvertently not added in the original recommendations (R09008 (Data Element "Overrun Responsibility Indicator") and R05027 (Data Element "Route")) as approved by the WGQ EC on August 23, 2012.

Recommendation: http://www.naesb.org/pdf4/wgq_mc12028_rec_082312.doc (Effective September 28, 2012)

MC12029 – For NAESB Version 2.1, for the Data Element "Cycle Indicator", minor correction MC10040 added 4 code values TD22-TD25 and modified the code value description for the existing 21 code values TD1 – TD21. It appears that the Code Value Definitions for the existing 21 code values were inadvertently not modified to be consistent with those of the four new ones (or the similar existing code value definitions in the Operating Capacity – NAESB WGQ Standard No. 0.4.2) as approved by the WGQ EC on August 23, 2012.

Recommendation: http://www.naesb.org/pdf4/wgq_mc12029_rec_082312.doc (Effective September 28, 2012)

MC12030 – For NAESB Version 2.1, for the Data Element "Location – Initiating Trader", inadvertently, in the data dictionaries, the new data element 'Location – Initiating Trader' was typed in as 'Location Period – Initiating Trader' (Ref: R09009 (adopted by the EC 8/18/11, ratified 9/19/11)). The purpose of this minor correction is to correct this typo by deleting the word 'Period' from the data element name as approved by the WGQ EC on August 23, 2012.

Recommendation: http://www.naesb.org/pdf4/wgq mc12030 rec 082312.doc (Effective September 28, 2012)

MC12031 – For NAESB WGQ Version 2.0, NAESB WGQ Standard No. 5.4.16 and Standard No. 4.3.29 - Minor correction request for the WGQ standards to provide consistency in abbreviation for Imbalance Trading between the notice types used by Informational Posting Website and System-Wide Notices as approved by the WGQ EC on February 21, 2013. NOTE: This minor correction will not be filed with FERC for Version 2.0, but will be included in the Version 2.1 FERC filing.

Recommendation: http://www.naesb.org/pdf4/wgq_mc12031_rec_022113.doc (Effective March 28, 2013)

MC12033 – For NAESB Version 2.1, Add 3 code values for the Data Element "Capacity Type Indicator" in the NAESB WGQ Standard No. 1.4.5 (Scheduled Quantity).

Recommendation: http://naesb.org/pdf4/wgq_mc12033_rec_102512.doc (Effective December 3, 2012)

MC12037 – For NAESB Version 2.1, Correct Data Element Quick Guide – Creation of Bid in the recommendation R11011 / MC11007 in the following data set: Bid NAESB WGQ Standard No.5.4.25.

Recommendation: http://naesb.org/pdf4/wgq_mc12037 rec 102512.doc (Effective December 3, 2012)

MC12038 – For NAESB Version 2.1, Minor Corrections to recommendation R05027 - NAESB WGQ Standard Nos. 2.4.2, 2.4.4 and 3.4.1.

Recommendation: http://naesb.org/pdf4/wgq_mc12038_rec_102512.doc (Effective December 3, 2012)



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NAESB UPDATE: VERSION 2.1 – WHOLESALE GAS QUADRANT (WGQ) APRIL 24, 2013

MC12039 – For NAESB Version 2.1, Correct the Transaction Set Tables for Errors and Warnings (Heading), (Detail), and (Sub-detail) in the following data set: Pre-determined Allocation Quick Response NAESB WGQ Standard No. 2.4.2.

Recommendation: http://naesb.org/pdf4/wgq_mc12039_rec_102512.doc (Effective December 3, 2012)

MC12041 – withdrawn by submitter on December 4, 2012

MC12043/MC12046 - For NAESB, Version 2.0, Change EBB Usage of Location Purpose and Location Purpose Description to "Conditional" and add Condition to Location Purpose and Location Purpose Description of "For EBB, at least one of the Location Purpose or Location Purpose Description is required for NAESB WGQ Standard Nos. 0.4.2 – Operational Capacity and 0.4.3 – Unsubscribed Capacity as approved by the WGQ EC on February 21, 2013. NOTE: This minor correction will not be filed with FERC for Version 2.0, but will be included in the Version 2.1 FERC filing.

Recommendation: http://www.naesb.org/member login check.asp?doc=wgq mc12043 mc12046 rec 022113.doc (Effective March 28, 2013)

MC12045 – For NAESB, Version 2.0, mandatory data element "Flow Indicator," add four new codes for flow indicators equal to North, South, East and West for NAESB WGQ Standard No. 0.4.2 - Operational Capacity as approved by the WGQ EC on February 21, 2013. NOTE: This minor correction will not be filed with FERC for Version 2.0, but will be included in the Version 2.1 FERC filing.

Recommendation: http://www.naesb.org/member-login-check.asp?doc=wgq-mc12045-rec-022113.doc (Effective March 28, 2013)

MC12046 – For NAESB, Version 2.0, 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). This request is a companion request to MC12043. MC 12043 uncovered an issue that is also resident in the three transactional reporting data sets. Therefore, this request asks for the same correction to be made in them as well. *NOTE: This minor correction will not be filed with FERC for Version 2.0, but will be included in the Version 2.1 FERC filing.* Recommendation combined with MC12043 (see above)



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NAESB UPDATE: VERSION 2.1 – WHOLESALE GAS QUADRANT (WGQ) APRIL 24, 2013

MC12047 – For NAESB Version 2.1, Request R10005, ratified on September 19, 2011 eliminated the business practice that was addressed in this interpretation. It was an oversight that the deletion of this interpretation was not included in the R10005 recommendation as approved by the WGQ EC on February 21, 2013.

Recommendation: http://www.naesb.org/member_login_check.asp?doc=wgq_mc12047_rec_022113.doc (Effective March 28, 2013)

MC12048 – For NAESB, Version 2.1, Add nine code values for data element Charge Type in Transportation / Sales Invoice - NAESB WGQ Standard No. 3.4.1 as approved by the WGQ EC on February 21, 2013.

Recommendation: http://www.naesb.org/member-login-check.asp?doc=wgq-mc12048-rec-022113.doc (Effective March 28, 2013)

MC12049 (Revised) – For NAESB Versions 1.9 and 2.0, correct the applicable LQ Segments (Detail and Subdetail), Data element Reduction Reason LQ02 Descriptions in the affected Transaction Set Tables for: Scheduled Quantity - NAESB WGQ Standard No. 1.4.5, Scheduled Quantity for Operator - NAESB WGQ Standard No. 1.4.6 and Confirmation Response - NAESB WGQ Standard No. 1.4.4 as approved by the WGQ EC on February 21, 2013. NOTE: This minor correction will not be filed with FERC for Version 2.0, but will be included in the Version 2.1 FERC filing.

Recommendation: http://www.naesb.org/member login check.asp?doc=wgq mc12049 rec 022113.doc (Effective March 28, 2013)

MC12050 – withdrawn by submitter on January 15, 2013

MC12051 – For NAESB Version 2.1, add 2 code values for the data element "Transaction Type" in the following datasets for NAESB WGQ Standard 1.4.5 – Scheduled Quantity and NAESB WGQ Standard 3.4.1 – Transportation / Sales Invoice as approved by the WGQ EC on February 21, 2013.

Recommendation: http://www.naesb.org/member login check.asp?doc=wgq_mc12051_rec_022113.doc (Effective March 28, 2013)

MC12053 - withdrawn by submitter on January 2, 2013

MC13001 – Correct the Code Value description in the Code Values Dictionary for the data element Transaction Type in the Nomination data set, NAESB WGQ Standard No. 1.4.1. Code Value 63 has an equals sign (=) but should be a hyphen (-). *Typographical error corrected by NAESB Office – No Further Action Needed*

MC13002 - NAESB WGQ Version 2.1 - Correction to R10004 - Sample Paper for Transactional Reporting - Capacity Release - NAESB WGQ Standard No. 5.4.20 as approved by the WGQ EC on February 21, 2013. Recommendation: http://www.naesb.org/member_login_check.asp?doc=wgq_mc13002_rec_022113.doc (Effective March 28, 2013)

MC13003 - NAESB WGQ Version 2.1 – Modification to 2011 Annual Plan Item 7 / 2012 Annual Plan Item 8 – NAESB WGQ Standard No. [0.3.z7] as approved by the WGQ EC on February 21, 2013. Recommendation: http://www.naesb.org/member_login_check.asp?doc=wgq_mc13003_rec_022113.doc (Effective March 28, 2013)



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NAESB UPDATE: VERSION 2.1 – WHOLESALE GAS QUADRANT (WGQ)
APRIL 24, 2013

MC13005 – NAESB WGQ Version 2.1 – Correct the technical implementation adopted as part of R11012 – specifically for the Scheduled Quantity, NAESB WGQ Standard No. 1.4.5.

Recommendation: http://www.naesb.org/member-login-check.asp?doc=wgq-mc13005-rec-032213.doc Requests for Comments: http://www.naesb.org/pdf4/wgq_mc040813reqcom.doc - comments due April 15, 2013 (Effective April 30, 2013)

 $MC13006 - NAESB\ WGQ\ Version\ 2.1 - Correct$ the data sets adopted as part of $R12003\ /\ R12004 - erroneous$ inclusion of two data elements.

Recommendation: http://www.naesb.org/member-login-check.asp?doc=wgq-mc13006-rec-032213.doc Requests for Comments: http://www.naesb.org/pdf4/wgq_mc040813reqcom.doc - comments due April 15, 2013 (Effective April 30, 2013)

TIMELINE:

Month - 0

- Version 2.1 is scheduled for publication in April 30, 2013.
- 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 - 2	Ratifications sent out and completes, minor corrections applied

Date of Publication.



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NAESB UPDATE: VERSION 003.1 – WHOLESALE ELECTRIC QUADRANT (WEQ)
March 22. 2013

ACTIONS TO BE APPLIED TO WEQ VERSION 003.0 TO CREATE WEQ VERSION 003.1:

Version 003.0 published on July 31, 2012.

2012-2013:

Final Actions:

WEQ 2012 Annual Plan Item 4.c.i-ii / R11014 / R11015 (Part 1) - Develop modifications for WEQ-012 as needed to reflect current market conditions (Authorized Certification Authority Standard and Credentialing Practice (R11014). Technology Review and Upgrade for NAESB Public Key Infrastructure Standard WEQ-012 (R11015)) as approved by the WEQ Executive Committee on August 21, 2012.

Final Action: http://www.naesb.org/member_login_check.asp?doc=weq_ec082112a3.docx

WEQ 2012 Annual Plan Item 4.c.i-ii / R11014 / R11015 (Part 2) - Develop modifications for WEQ-012 as needed to reflect current market conditions (Authorized Certification Authority Standard and Credentialing Practice (R11014). Technology Review and Upgrade for NAESB Public Key Infrastructure Standard WEQ-012 (R11015)) ratified October 4, 2012.

Final Action: http://www.naesb.org/member_login_form.asp?doc=fa_weq_2012_ap4ci-ii_r11014_r11015.doc

Retail 2012 Annual Plan Item 3(b) - (WEQ Consideration for consistency in definitions to terms that are used both in the Retail and Wholesale Electric Quadrants) ratified October 24, 2012.

Final Action: http://www.naesb.org/member login check.asp?doc=fa weq retail 2012 api 3b.docx

WEQ 2012 Annual Plan Item 4.a - PKI Business Practice Standards for OASIS ratified November 28, 2012.

Final Action: http://www.naesb.org/member login form.asp?doc=fa weq 2012 ap4a.doc

WEQ 2012 Annual Plan Item 4.b (Part 2) – PKI Business Practice Standards for e-Tagging as approved by the WEQ Executive Committee via notational ballot on November 28, 2012.

Final Action: http://www.naesb.org/pdf4/weq 2012 api4b part2 rec final.doc

Attachment - Electronic Tagging Functional Specifications, Version 1.8.1.1:

http://www.naesb.org/member login check.asp?doc=weq 2012 api4b part2 rec attach final.doc

WEQ 2012 Annual Plan Item 4.b (Part 1) – PKI Business Practice Standards for e-Tagging as ratified December 28, 2012.

Final Action: http://www.naesb.org/member-login-check.asp?doc=fa-weq-2012-ap4b-part1.doc

WEQ 2012 Annual Plan Item 6.a - Develop standards to support PAP 10 - Standards Energy Usage Information, Phase 2, Harmonization with CIM and SEP 2.0 ratified March 21, 2013.

Final Action: http://www.naesb.org/member_login_check.asp?doc=fa_weq_2012_ap6a.docx



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NAESB UPDATE: VERSION 003.1 - WHOLESALE ELECTRIC QUADRANT (WEQ)

March 22, 2013

Recommendations:

2012 Wholesale Electric Annual Plan Item No. 5.a – Add AFC and TFC Values to the "System_Attribute" Data Element as approved by the WEQ Executive Committee on February 21, 2012. Recommendation:

http://www.naesb.org/member login form.asp?doc=weq rat022412 2012 weq api 5a rec.docx – Remanded back to the subcommittee by the WEQ EC on February 21, 2012

2013 Wholesale Electric Annual Plan Item No. 3.b.i-iii – Review e-Tag specifications and make modifications as needed.

Recommendation: http://www.naesb.org/pdf4/weq_2013_ap_3bi-iii_rec.doc

Attachment -e-Tag Specifications 1.8.2 (Redline):

http://www.naesb.org/member_login_check.asp?doc=weq_2013_ap_3bi-iii_rec_attach_redline.doc

Attachment - e-Tag Specifications 1.8.2 (Clean):

http://www.naesb.org/member login check.asp?doc=weq 2013 ap 3bi-iii rec attach clean.doc Request for Comments: http://www.naesb.org/pdf4/weq 030713 reqcom.doc – Due April 5, 2013

R12010 - Request for requirements for scheduling interchange in 15 minute intervals. FERC order 764 directs transmission entities to accept scheduling interchange in 15 minute intervals within the operating hour. Currently no NAESB standards require, state, or give guidance that the default for these intervals should be on the quarter hour increment (i.e. 0 (top of the hour), 15, 30, and 45, etc.). In order to ensure a smooth, interconnection wide, transition to 15 minute scheduling a default definition of 15 minute schedules needs to be developed.

Recommendation: http://www.naesb.org/pdf4/r12010_rec.doc

Request for Comments: http://www.naesb.org/pdf4/weq-030713 reqcom.doc – Due April 5, 2013



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NAESB UPDATE: VERSION 003.1 – WHOLESALE ELECTRIC QUADRANT (WEQ)
March 22, 2013

Minor Corrections:

Minor Correction MC12032 – Submitted by JT Wood, Southern Company Services, Inc., correct NAESB WEQ Business Practice Standards, Version 003: NAESB Business Practice Standards WEQ-000 Abbreviations, Acronyms, and Definitions of Terms, NAESB Business Practice Standards WEQ-001 Open Access Same-Time Information Systems (OASIS), Version 2.0, and NAESB Business Practice Standards WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, Version 2.0 approved by the WEQ EC on October 23, 2012

Recommendation: http://www.naesb.org/pdf4/weq_mc12032_rec_102312.doc (Effective date November 28, 2012)

Minor Correction MC12034 – Submitted by E. Skiba, Midwest ISO, correct NAESB WEQ Business Practice Standards, Version 003: NAESB Business Practice Standards WEQ-000 Abbreviations, Acronyms, and Definitions of Terms and NAESB Business Practice Standards WEQ-019 Customer Energy Usage Information Communication approved by the WEQ EC on October 23, 2012.

Recommendation: http://www.naesb.org/pdf4/weq_mc12034_rec_102312.docx (Effective date November 28, 2012)

Minor Correction MC12035 – Submitted by E. Skiba, Midwest ISO, correct NAESB WEQ Business Practice Standards, Version 003: NAESB Business Practice Standards WEQ-008 Transmission Loading Relief (TLR) – Eastern Interconnection approved by the WEQ EC on October 23, 2012.

Recommendation: http://www.naesb.org/pdf4/weq_mc12035_rec_102312.doc (Effective date November 28, 2012)

Minor Correction MC12036 - Submitted by JT Wood, Southern Company Services, Inc., correct NAESB WEQ Business Practice Standards, Version 003: NAESB Business Practice Standards WEQ-001 Open Access Same-Time Information Systems (OASIS), Version 2.0, NAESB Business Practice Standards WEQ-002 Open Access Same-Time Information Systems (OASIS) and Communication Protocol (S&CP), Version 2.0, NAESB Business Practice Standards WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, Version 2.0, and NAESB Business Practice Standards WEQ-013 Open Access Same-Time Information Systems (OASIS) Implementation Guide, Version 2.0 approved by the WEQ EC on October 23, 2012.

Recommendation: http://www.naesb.org/pdf4/weq_mc12036_rec_102312.doc (Effective date November 28, 2012)

TIMELINE:

- Version 003.1 is scheduled for publication fourth quarter 2013.
- 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 2.1– RETAIL ELECTRIC AND RETAIL GAS QUADRANT (REQ/RGQ)
MARCH 28, 2013

ACTIONS TO BE APPLIED TO RETAIL VERSION 2.0 TO CREATE RETAIL VERSION 2.1:

Version 2.0 was published on April 30, 2012.

2012-2013:

Final Actions:

2012 Retail Annual Plan Item No. 13.a - Book 4 (Dispute Resolution) Update Existing Model Business Practices as approved by the Retail Executive Committees on August 22, 2012.

Final Action: http://www.naesb.org/member-login-check.asp?doc=fa-retail-2012ap13a.doc - Ratified September 28, 2012

Attachment 1 - Formal Dispute Process Flow:

http://www.naesb.org/member login check.asp?doc=fa retail 2012ap13a attach1.ppt

Attachment 2 - Informal Dispute Process Flow:

http://www.naesb.org/member_login_check.asp?doc=fa_retail_2012ap13a_attach2.ppt

2012 Retail Annual Plan Item No. 13.b - Book 12 (Inquiries) Update Existing Model Business Practices as approved by the Retail Executive Committees on August 22, 2012.

Final Action: http://www.naesb.org/member-login-check.asp?doc=fa-retail-2012ap13b.doc - Ratified September 28, 2012

Attachment - Process Flow:

http://www.naesb.org/member login check.asp?doc=fa retail 2012ap13b attach.ppt

2012 Retail Annual Plan Item No. 9.r – Review Book 0 (Overview of Model Business Practices and Master List of defined Terms), Book 1 (Market Participant Interactions), Book 6 (Contracts) and Book 21 (Energy Services Provider Interface) for the inclusion of definitions for all Defined Terms as approved by the Retail Executive Committees on August 22, 2012.

Final Action: http://www.naesb.org/member-login-form.asp?doc=fa-retail-2012ap9r.doc - Ratified September 28, 2012

Attachment: http://www.naesb.org/member_login_check.asp?doc=fa_retail_2012ap9r_attach.doc

Retail 2012 Annual Plan 9.b – Review / Update Book 2 - Creditworthiness Model Business Practices (RXQ.2) as approved by the Retail Executive Committees on August 22, 2012.

Final Action: http://www.naesb.org/member login check.asp?doc=fa retail 2012ap9b.doc
Attachment (Process Flows):

http://www.naesb.org/member_login_check.asp?doc=fa_retail_2012ap9b_attach.ppt - Ratified September 28, 2012

Retail 2012 Annual Plan Item 3.b - Develop business practice standards used to measure and verify reductions in energy and Demand from energy efficiency in wholesale and retail markets. This includes developing business practice standards to measure and verify energy reductions for energy efficiency or a stand-alone Energy Efficiency Portfolio Standard as approved by the REQ EC on August 22, 2012.

Final Action: http://www.naesb.org/member login form.asp?doc=fa req 2012ap3b.doc – Ratified October 26, 2012



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NAESB UPDATE: VERSION 2.1– RETAIL ELECTRIC AND RETAIL GAS QUADRANT (REQ/RGQ) MARCH 28, 2013

Retail 2012 Annual Plan Item 10.a / R10002 - Create common interfaces and data structures necessary for enrolling DR sites into a DR program. Enrollment process Model Business Practices development (R10002) as approved by the REQ EC on August 22, 2012.

Final Action: http://www.naesb.org/member-login-check.asp?doc=fa-req-2012ap10a-r10002.doc – Ratified October 26, 2012

Attachment 1 - Retail DR Programs - Account Information Change Process Flows:

http://www.naesb.org/member login check.asp?doc=fa req 2012ap10a r10002 attach1.pptx – Ratified October 26, 2012

Attachment 2 - Retail DR Programs - Drop Process Flows:

http://www.naesb.org/member login check.asp?doc=fa req 2012ap10a r10002 attach2.pptx - Ratified October 26, 2012

Attachment 3 - Retail DR Programs - Enrollment Process Flows:

http://www.naesb.org/member login check.asp?doc=fa req 2012ap10a r10002 attach3.pptx – Ratified October 26, 2012

Retail 2012 Annual Plan Item 7.b.i - Develop standards to support PAP 10 - Standards Energy Usage Information, Phase 2, Harmonization with CIM and SEP 2.0 as revised and approved by the REQ Executive Committee on February 20, 2013.

REQ Final Action: http://www.naesb.org/member login check.asp?doc=fa req 2012 retail ap7bi.docx – Ratified March 26, 2013

Retail 2012 Annual Plan Item 10.b - Retail Customer Authorization Form as revised and approved by the Retail Executive Committees on February 20, 2013.

Final Action: http://www.naesb.org/member_login_check.asp?doc=fa_retail_2012_ap10b.doc

Attachment - Retail Customer Authorization Form:

http://www.naesb.org/member login check.asp?doc=fa retail 2012 ap10b attach.doc – Ratified March 27, 2013

Recommendations:

Minor Corrections:

MC12040 - Minor correction to Retail MBPs Version 2.1 to update NAESB Retail RXQ.0 defined business term "Inquiry" and the definitions section of RXQ.12: http://www.naesb.org/pdf4/retail-mc12040-102412 rec.docx (Effective December 12, 2012)



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NAESB UPDATE: VERSION 2.1– RETAIL ELECTRIC AND RETAIL GAS QUADRANT (REQ/RGQ)
MARCH 28, 2013

TIMELINE:

Month - 0

- Version 2.1 is scheduled for publication in June 2013.
- 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

Date of Publication.



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April 19, 2013

TO: NAESB Board of Directors, Executive Committee (EC) Members, EC Alternates, and Invited

Guests

FROM: Jonathan Booe, NAESB Vice President

RE: Draft Minutes of the NAESB Board of Directors Meeting – April 4, 2013

NAESB BOARD OF DIRECTORS MEETING & MEETING OF THE MEMBERS

Four Seasons Hotel, Houston, Texas Thursday, April 4, 2013 – 9:00 a.m. to 1:00 pm Central DRAFT MINUTES

1. Administration and Welcome

Mr. Desselle welcomed the board members and guests in the room and on the phone. Mr. Booe provided the antitrust and meeting policy guidance and called the roll of the NAESB board members. Quorum was established in all quadrants. Mr. Desselle noted the incoming and outgoing members and thanked the invited guests for their attendance.

2. Adoption of the Consent Agenda

Mr. Gallagher moved, seconded by Mr. Fusco, to approve the consent agenda, which included the <u>agenda</u>, <u>draft minutes</u> from the December 6, 2012 Board of Directors meeting and the <u>Retail</u>, <u>Wholesale Electric</u> and <u>Wholesale Gas</u> 2013 annual plans. The motion passed without opposition.

3. Membership and Financial Report

Membership Report: Ms. McQuade reviewed the year end membership report and profile for 2012 with the board members. She noted that NAESB closed the year with 289 members and that the Wholesale Electric Quadrant (WEQ) a net loss of one member, the Wholesale Gas Quadrant (WGQ) has a net loss of two members, the Retail Electric Quadrant (REQ) experienced a gain of three members and the Retail Gas Quadrant (RGQ) had a loss of two members in 2012. She noted that the membership numbers are relatively stable but that there is significant fluctuation within the quadrants, as they represent a net accounting of resigning and new members. Segment membership in some of the quadrants will be monitored to ensure that the membership thresholds are met, and she asked members to review their primary company contacts for accuracy.

Next, Ms. McQuade reviewed the 2013 membership <u>report</u> and <u>profile</u> with the board members and noted a net gain of one member in the WGQ and a net loss of two members in the RGQ.

<u>Financial Report</u>: Ms. McQuade and Ms. Wishart reviewed the 2012 financial <u>profile</u> and <u>report</u>. Ms. McQuade noted that statistics concerning the number and hours of meetings held and the number of members in each of the last three years have been provided in the materials and demonstrate how the budget has decreased with the reduction in membership even though there has been an increase in the number of meetings and meeting hours. She stated that the continual increase in meetings over the last few years is due in part to the workload needed to meet regulatory and Administration directions that nearly doubled the number of standards in REQ and WEQ publications.

Ms. McQuade reviewed the 2012 accrual based financials with the participants and noted that in 2012 NAESB brought in a little less than \$ 1.9 million and spent just over \$ 1.9 million, which resulted in an increase to the negative retained earnings even though the organization came under budget for the year for expenses. On a cash accounting basis, the organization closed the year with over one half million dollars which has been typical in the past. She noted that the office works with member companies that intend to continue as members but are over 90 days delinquent, as in many cases, the invoices are making their way through the various company departments for approval signatures before payment.



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Next, Ms. McQuade reviewed the 2013 financial report and profile with the board members and noted that through January and February the organization is very close to budget. Mr. Desselle asked if the negative retained earnings has reached 25% of the NAESB budget. Ms. McQuade responded that it is relatively close but the projections are tracking in a positive direction. She noted that it is likely that the Revenue Committee will be meeting more frequently, now that the board is meeting only three times a year. Mr. Desselle noted that the Revenue Committee has an action item to review the current cost of the standards and determine if a price adjustment to the NAESB standards based on the comparisons to the fees charged by other standards organizations for similar products is advisable.

Mr. True asked if Mr. Desselle intended to hold a board conference call over the summer to discuss the financial state of the organization. Mr. Desselle responded that he intended the Revenue Committee to monitor the financials of the organization between the board meetings and only call a special board meeting if necessary. Ms. McQuade stated that she would send out a report on the financials in the summer for those interested parties. Mr. Desselle and Mr. True supported her recommendation.

4. Reports from Advisory Council, Board Committees

Advisory Council: Mr. Ellsworth provided an update of the activities of the Advisory Council. He stated that the meeting was held on February 2, 2013 and that there was good representation from past and present industry leadership. The council focused their discussions on smart grid activities, cybersecurity activities but spent a majority of the time discussing gas and electric market harmonization issues and reviewed a presentation from Skipping Stone. Mr. Ellsworth also noted that one recommendation was that the Advisory Council engage the Commodity Futures Trading Commission (CFTC). Mr. Kirby asked how the CFTC would be engaged. Ms. McQuade noted that NAESB could reach out to the Commission staff and ask if they are interested in participating in or attending the Advisory Council meetings.

<u>Managing Committee</u>: Mr. Desselle stated that the since the last board meeting the <u>Managing Committee</u> meet one time to review the recommendation of the Retail Structure Review Committee (RSRC), to discuss a request made by the association managing the Interchange Distribution Calculator (IDC), to review the waiver procedure recommended by the Revenue Committee and to discuss the status of the proposed modifications to section 2.3 of the bylaws. He noted that the NAESB office did not receive any suggested language changes to section 2.3 and that it will be discussed by the Parliamentary Committee at their next meeting.

Retail Restructuring: Ms. McKeever reviewed the activities of the RSRC and noted that the committee met three times since the last board meeting to develop the recommendation included in the board materials. She stated that the recommendation proposes the two quadrants and create four segments that will put the newly merged quadrant in compliance with the Bylaws. Ms. McQuade reviewed the recommendation with the participants. She stated that proposal three describes the recommendation of the committee and ensures that the Retail leadership of the Board of Directors and Executive Committee will remain in place. She also reminded the participants that the recommendation is an interim solution for a period of at least two years and thanked Ms. McKeever and Mr. Minneman for their leadership in the development of the recommendation. Mr. Mivaii moved to adopt the recommendation of the RSRC and Mr. Minneman seconded the motion. Mr. Kruse asked if simple majority votes taken by the board are determined on per quadrant basis. Ms. McQuade confirmed that when the bylaws were written it was the intent to require a majority of each quadrant for approval. Mr. Boswell stated that bylaw changes could be considered by the Parliamentary Committee to make the intent clear. Mr. Gent asked if there was a plan to address the lack of membership in the utility segment of the REO. Ms. McOuade noted that the segment has the requisite five members at this time but should be monitored going forward. Mr. Saini asked which segment distributors would fall into under the proposal. Ms. McQuade responded that they would be included in the retail gas segment. Mr. Kruse asked if the proposal would result in weighted voting of one third control by each quadrant. Ms. McQuade confirmed that the voting would be balanced across the three quadrants. Mr. Desselle stated that he is going to direct the Parliamentary Committee to consider the clarifying language changes to the bylaws referenced by Mr. Boswell. Mr. Desselle asked if there was any more discussion on the motion. No comments were offered. The motion passed a simple majority vote.



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Revenue Committee: Mr. Desselle reviewed the activities of the Revenue Committee. He stated that the committee met twice to discuss a few issues including the creation of a self-executing copyright waiver for members and nonmember purchasers of standards. He stated that the copyright issue was assigned to the Revenue Committee after the last board meeting because of the impact a change in the copyright policy could have on the funding of the organization. He stated that the committee discussed several options but determined that adjusting the revenue model of the organization would not be appropriate at this time and that creating a self-executing copyright waiver would address the concerns raised by the board during the December meeting. Mr. True made a motion to adopt the recommended copyright waiver procedure and the waiver itself. Mr. Stites seconded the motion. Mr. Young stated that he is in support of the waiver but noted that he would have preferred to see all of the recommended modifications proposed by Interstate Natural Gas Association of America incorporated into the waiver adopted by the committee. Mr. Langston stated that he agreed with the action of the committee concerning the revenue model of the organization but believes there is significant issues concerning the copyright policy that need to be addressed. Mr. Fields and Mr. Kruse stated his support of the compromise reached by the committee participants. Mr. Cargas stated that he disagrees with the assessment of NAESB's legal right to enforce its copyright described in some of the comments presented to the committee. Mr. Desselle asked if anyone had additional comments. None were offered. The motion passed a simple majority vote.

5. Project Discussions

PKI, Accreditation and the Certification Program: Mr. Booe provided an update of PKI related activities. He noted the January 29, 2013 report to the commission containing the ratified modifications to the WEQ-012 PKI standards and the supporting modifications made to the NAESB OASIS and Coordinate Interchange standards needed for implementation. He also stated that NAESB has begun accepting affidavits from certificate authorities seeking to become NAESB Authorized Certificate Authorities (ACA) as outlined by the ACA program and that the PKI Subcommittee is in the process of addressing the request from the Federal Energy Regulatory Commission (FERC) concerning the maximum lifespan for root keys.

<u>Cybersecurity Fact Sheet</u>: Ms. McQuade provided a summary of the wholesale <u>electric</u> and <u>natural gas</u> market cybersecurity fact sheets. She stated that fact sheets will be provided to the National Institute of Standards and Technology in response to their request for information concerning cybersecurity standards on April 8, 2013 and thanked the volunteers that helped develop the documents.

Electric Industry Registry Update: Mr. Booe provided an update of the registry related activities and described the proposed procedure for addressing change requests to the EIR and the form document to support it. He noted that the NAESB staff, the co-chairs of the Joint Electric Scheduling Subcommittee and OATI have continued to hold weekly calls to discuss any registry issues that may arise, initiate phase three of the registry project, which includes the retirement of legacy items from the NERC TSIN registry and the incorporation of adjacency data from the WECC, and finalize the emergency publication process. He also thanked Mr. Harshbarger and Mr. Aymond for their commitment to the project and the countless hours they have spent supporting the transition.

Gas-Electric Harmonization Update: Ms. Crockett provided an update of the natural gas-electric harmonization activities. She stated that the FERC held their first technical conference concerning the harmonization of the natural gas and electric markets on February 13, 2013. The technical conference focused on information sharing and communication issues between the two markets. The next technical conference has been scheduled for April 25, 2013 and will focus on the operational aspects of the markets. She also noted that the U.S. Senate Energy and Natural Resources Committee has scheduled a series of meetings during the month of May to discuss gas infrastructure, domestic supply of gas and exporting and field development. In addition, the NERC phase two study on natural gas-electric dependencies will be issued this month.

Smart Grid, Green Button and Data Privacy Update: Mr. Booe provided an update of the NAESB smart grid activities. He stated that all of the current smart grid activities are taking place in the REQ and that the Data Privacy Task Force is currently addressing a request from the Smart Grid Interoperability Panel (SGIP) Cybersecurity Working Group (CSWG) to update the data privacy standard based upon CSWG review. An initial review of the request was conducted but a recommendation was not voted on by the task force as the participants requested to



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delay moving forward until more information concerning a Department of Energy activity to produce a voluntary code of conduct concerning data privacy is made available. NAESB staff participated in the first meeting hosted by the Department of Energy on February 25, 2013 and there appears to be significant overlap between the NAESB data privacy standard and the scope of work endeavored by the Department of Energy Task Force. NAESB staff will continue to monitor and participate in the activities of the task force moving forward. Mr. Wollman provided an update of the Green Button activities. He noted that SGIP has been working with NAESB through a priority action plan to promote the adoption of the Green Button and thanked NAESB for their support. He also stated that Nick Saini, the Whitehouse Chief Technology Officer, is hosting a conference call and webinar to review the progress of the Green Button and encouraged those wishing to participate to contact him for the details.

Status of WGQ Publication: Ms. McQuade provided an update of the WGQ <u>publication schedule</u>. She stated that publication of WGQ Version 2.1 has been delayed from March 31 to April 30 to accommodate a couple of minor corrections that were identified just before publication. She stated that the shortened minor correction process will be employed to ensure that the delay is only one month. The delay should not impact publication in other quadrants.

WEQ OASIS and Parallel Flow Visualization: Ms. York provided an update of the OASIS Subcommittee activities and the status of the Business Practice Subcommittee's (BPS) Parallel Flow Visualization (PFV) project. She stated that the OASIS Subcommittee has continued to work extremely hard to formalize a process for both preemption and competition on the OASIS system. The preemption process is the act of displacing all or a portion of an existing reservation or pending request for transmission capacity to accommodate a higher priority transmission request for service. The competition process addresses the right of first refusal, which allows for, in certain instances, the holder of an existing reservation, known as a defender to modify its transmission reservation to match the characteristics of the challenger's higher priority request in order to avoid preemption. This standards development effort was initiated by FERC Order No. 890 and is one of the remaining items NAESB must address from the order. Since the last board meeting, the BPS completed a draft recommendation for PFV and distributed it for an informal comment period ending on March 18, 2013. The subcommittee is currently in the process of reviewing the comments and providing responses. Ms. York noted that there is currently uncertainty concerning the field test to take place after the standards are vetted, as NERC has transferred the Interchange Distribution Calculator to an association that will now manage the tool. Mr. Lauby confirmed that NERC has already made the transition and that the association will maintain the tool. Ms. McQuade asked if the obligation to conduct the PFV test was transferred when the IDC was assumed by the association. Mr. Desselle confirmed that NAESB will need to work with the NERC and the association when the time comes to conduct the field test. Mr. Lauby agreed.

NAESB/NERC Coordination: Ms. York provided an update or the NAESB and NERC coordination efforts. She stated that the WEQ leadership has continued to hold monthly calls with NERC staff to ensure that NAESB is in lockstep with the related activities of NERC. As NERC has engaged an aggressive schedule to complete a number of items that are related to NAESB standards, additional calls are being held to try and coordinate the organizations' efforts. She stated that in addition to the number of items that were moved from provisional to active to support the NERC schedule, there has been discussion within NERC about moving a number of the MOD standards to NAESB. As these activities by NERC may have impact on the NAESB annual plans, WEQ leadership and staff will continue to closely monitor the organization's activities. Mr. Lauby thanked NAESB for their efforts to keep the organizations coordinated.

6. Updates from Leadership Meetings

<u>WGQ</u>: Ms. Crockett provided a review of the WGQ Leadership meeting and noted that the group only discussed items that have already been discussed during the board meeting.

<u>WEQ</u>: Mr. Desselle stated that his report on the WEQ Leadership meeting is similar to Ms. Crockett's and that nothing out of the ordinary was discussed.

<u>Retail</u>: Mr. McKeever stated that Retail Leadership meeting mostly focused on the RSRC recommendation and that in addition, the group discussed the possibility of delaying the retail publication until August to ensure that some model business practices that are still in development are included. Ms. McQuade noted that the group also



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discussed the possibility of adding an annual plan item to consider standards to support net metering. She noted that she will hold a meeting in the near future to discuss the possibility further.

7. Old and New Business

Ms. McQuade reviewed the organization's interactions with external groups and the reports that NAESB has submitted to the Federal Energy Regulatory Commission since the last board meeting. She also noted that the Commission adopted the phase two demand response standards and the first set of energy efficiency standards. She was reappointed to the National Petroleum Council (NPC) by Secretary Chu. Mr. Gee thanked Ms. McQuade for her willingness to participate on the NPC and for allowing him to participate in the board meeting. Mr. Xi thanked NAESB for allowing him to address the board and commended the organization on its impact to the energy industry. Mr. Pena also noted the work of the Global Energy Safety Institute and their involvement with NASA in an effort to develop safety standards for the energy industry, which could have impacts for NAESB development. Mr. Desselle thanked the guests for their participation.

8. Adjourn

Mr. Young made a motion to adjourn the meeting and Mr. Stultz seconded the motion. The meeting adjourned at 11:27 am Central.



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9. Board Attendance

WGQ PRODUCERS SEGMENT	Γ	ATTENDANCE
Richard D. Smith	Regulatory & Compliance Manager, Noble Energy Inc.	In Person
Mark Stultz	Sr. Vice President – Policy and Regulatory Affairs, US America Gas and Power, BP Energy Company	In Person
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	In Person
Pete Frost	Director - Regulatory Affairs, ConocoPhillips Gas and Power Marketing	In Person
WGQ PIPELINE SEGMENT		
Douglas Field	Manager - Compliance, Southern Star Ventral Gas Pipeline	In Person
Michael Langston	Vice President and Chief Regulatory Officer, Panhandle Eastern Pipe Line (an Energy Transfer Interstate company)	In Person
Gene Nowak	Vice President – Transportation & Storage, Interstate Pipelines for Kinder Morgan (Natural Gas Pipeline Co of America	In Person
Randy Young	Vice President – Regulatory Compliance and Corporate Services, Boardwalk Pipeline Partners, LP	In Person
Richard Kruse	Senior Vice President, Spectra Energy Transmission	In Person
WGQ LOCAL DISTRIBUTION	COMPANY (LDC) SEGMENT	
Craig Colombo	Energy Trader III, Dominion Resources	
Tim Sherwood	Managing Director of Gas Operations and Capacity Planning, AGL Resources	
Karl Stanley	Vice President of Commercial Operations NIPSCO, representing NiSource, Inc.	In Person
James A. Stanzione	Director - Federal Gas Regulatory Policy, National Grid	Phone
Perry Pergola	Director - Gas Supply, Vectren Corporation	
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	Phone
Tina Burnett	Natural Gas Resources Administrator, The Boeing Company	In Person
Lori-Lynn C. Pennock	Senior Fuel Supply Analyst, Salt River Project	In Person
WGQ SERVICES SEGMENT		
Cleve Hogarth	Vice President & Chief Commercial Officer, Quorum Business Solutions	
Rakesh Agrawal	Executive Vice President, Blackstone Technology Group	Phone
Marty Patterson	Senior Vice President Commercial Services, American Midstream Partners, LP	Phone
Shelley L. Hurley	Partner, Accenture LLP	
Shelley E. Hulley		



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9. Board Attendar	ıce
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REQ SERVICE PROVIDE	RS/SUPPLIERS SEGMENT		
Wendell Miyaji	Senior Director - Systems, Comverge, Inc.	In Person	
Jim Minneman	Controller, PPL Solutions LLC	Phone	
J Cade Burks	President, Big Data Energy Services		In Person
REQ UTILITIES SEGMEN	VT		
Brandon Stites	Director – Energy Conservation & Advanced Metering Power	, Dominion Virginia	In Person
Dennis Derricks	Director Regulatory Policy and Analysis, Wisconsin Pu Corporation	ıblic Service	Phone
Ruth Kiselewich	Director – Demand Side Management Programs, Baltir Company	more Gas & Electric	Phone
Debbie McKeever	Market Advocate, Oncor		In Person
REQ END USERS/PUBLIC	C AGENCIES SEGMENT		
James P. Cargas	Senior Assistant City Attorney, City of Houston		Phone
Tobin Richardson	Director - Smart Energy, ZigBee Alliance		Phone
Chris Kotting	Executive Director, Energy Information Standards Allie	ance	Phone
Susan Anthony	Retail Market Liason, Electric Reliability Council of To	exas	In Person
WEQ TRANSMISSION SE	CGMENT	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
Mike Anthony	Manager – Tariff Adminstration and Business Services, Duke Energy Corp.	IOU	Phone
Alex DeBoissiere	Senior Vice President – Government Relations, The United Illuminating Company	at large	Phone
Narinder Saini	Policy Consultant, Entergy Services, Inc.	at large	In Person
WEQ GENERATION SEG	MENT		
William J. Gallagher	Special Projects Chief, Vermont Public Power Supply Authority	Muni/Coop	In Person
Kathy York	Senior Program Manager – Energy Markets, Policy and Compliance Reporting, Tennessee Valley Authority	Fed/State/Prov.	In Person
Wayne Moore	Regulatory Affairs & Energy Policy Director and Compliance Officer – Generation, Southern Company Services, Inc.	IOU	
Aundrea Williams	Vice President – NRG Retail Regulatory Strategy & Policy, NRG Energy, Inc.	at large	
Joe Hartsoe	Managing Director – Federal Policy, American Electric Power Service Corp.	at large	Phone



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9. Board Attendance

WEQ MARKETERS/BRO	OKERS SEGMENT		
Roy True	Manager of Regulatory and Market Affairs, ACES Muni/Coop Power Marketing		In Person
Jeff Ackerman	Manager – Colorado River Storage Project Energy Management and Marketing Office, Western Area Power Administration Fed/State/Prov.		Phone
Jim Drake	Trading Desk Head - Power, Florida Power & Light	IOU	
R. Scott Brown	Vice President and Director, Exelon Generation Power Team	IOU	
WEQ DISTRIBUTION/LO	OAD SERVING ENTITIES (LSE) SEGMENT		
Arthur G. Fusco	Vice President and General Counsel, Central Electric Power Cooperative Inc.	Muni/Coop	In Person
Paul McCurley	Manager – Power Supply, National Rural Electric Cooperative Association	Muni/Coop	In Person
Nelson Peeler	Vice President System Operations, Duke Energy	IOU	
Mark Lauby	Vice President and Director - Standards, NERC	at large	In Person
Bruce Ellsworth	New York State Reliability Council	At-Large	In Person
WEQ END USERS SEGM	IENT		
Jesse D. Hurley	Chief Executive Officer, Shift Research, LLC	at large	
Thomas G. Dvorsky	Director of the Office of Electricity, Gas, and Water at the New York State Department of Public Service, rep. National Association of Regulatory Utility Commissioners	Regulator	
Lila Kee	Chief Product Officer and Vice President of US Business Development, GMO Globalsign	at large	In Person
Michehl Gent	Open Access Technology International, Inc.	At-Large	In Person
WEQ INDEPENDENT GR	RID OPERATORS/PLANNERS		
Michael Desselle	Vice President Process Integrity, Southwest Power Pool		In Person
Joel Mickey	Director of Market Design and Development, ERCOT		Phone
Kevin Kirby	Vice President Market Operations, ISO New England, Inc.		In Person
Wes Yeomans	Operations Vice President, New York Independent System Operator, Inc. (NYISO)		
Andy Ott	Senior Vice President Marketing, PJM Interconnection, LLC		
Bill Phillips	Vice President Standards Compliance & Strategy, Midwest ISO (MISO)		
Mark Wilson	Director of Corporate Planning, Independent Electricity System Operator (IESO)		



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9. Board Attendance

D SERVICES	
Vice President Energy Industry Practice, 8760 Inc.	Phone
Leader, Smart Grid Team – Standards and Electrical Metrology Groups, National Institute of Standards and Technology (NIST)	In Person
Partner, Stryve Advisors	In Person
Director, Power Costs, Inc.	In Person
CRS/SUPPLIERS SEGMENT	
President, Latitude Technologies Inc.	
Vice President - External Affairs, SouthStar Energy Services, LLC	Phone
President & CEO, Systrends USA	Phone
President, Capacity Center	Phone
GMENT	
Alonzo Weaver Vice President of Engineering and Operations, Memphis Light, Gas & Water Division (APGA)	
	Leader, Smart Grid Team – Standards and Electrical Metrology Groups, National Institute of Standards and Technology (NIST) Partner, Stryve Advisors Director, Power Costs, Inc. ERS/SUPPLIERS SEGMENT President, Latitude Technologies Inc. Vice President – External Affairs, SouthStar Energy Services, LLC President & CEO, Systrends USA President, Capacity Center GMENT Vice President of Engineering and Operations, Memphis Light, Gas &



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10. Other Attendance

10. Otner Attendance		
Name	Organization	Attendance
Deborah Anderson	Oncor	In Person
Jonathan Booe	NAESB	In Person
Bill Boswell	NAESB	In Person
Kathryn Burch	Spectra Energy	In Person
John Ciza	Southern Company	In Person
Pete Connor	Representing American Gas Association	Phone
Chuck Cook	Chevron	In Person
Dale Davis	Williams Gas Pipeline	In Person
Megan Doss	Spectra Energy	In Person
Rachel Hogge	Dominion	In Person
Bob Gee	Gee Strategies	In Person
Mark Gracey	Tennessee Gas Pipeline Company	In Person
Dave Francis	Midwest ISO	In Person
Qianli Ma	State Grid Corporation of China	In Person
Elizabeth Mallet	NAESB	In Person
Marcy McCain	Spectra Energy	In Person
Rae McQuade	NAESB	In Person
Mike Novak	National Fuel Gas Distribution	Phone
Emil Pena	Global Energy Safety Institute	In Person
Joshua Phillips	SPP	Phone
Phil Precht	Baltimore Gas and Electric	Phone
Alan Pritchard	Duke Energy Corporation	Phone
Denise Rager	NAESB	In Person
Judy Ray	Alabama Power	Phone
Kathy Scott	Centerpoint	In Person
Commissioner Timothy Simon	NAESB Advisory Council	Phone
Lisa Simpkins	Constellation	Phone
Ed Skiba	Midwest ISO	In Person
Jim Stanton	Quanta Technologies	In Person
Tony Suarez	TVA	In Person
Veronica Thomason	NAESB	In Person



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10. Other Attendance

Name	Organization	Attendance
Caroline Trum	NAESB	In Person
Kim Van Pelt	Boardwalk Pipeline	In Person
Jill Vaughan	Preferred Legal Services	In Person
Eric Winkler	ISO New England	Phone
Darla Wishart	NAESB	In Person
JT Wood	Southern Company	Phone
Kai Xie	State Grid Corporation of China	In Person
Charles Yeung	SPP	Phone

NAESB Membership Statistics – Changes by Quadrant for 2013 as of March 31, 2013

NAESB Membership Re	port - Quadrant/Segment Membership Analysis	Number of Members
WGQ Segments	TOTAL	116
	End Users	14
	Distributors	17
	Pipelines	43
	Producers	13
	Services	29
REQ Segments	TOTAL	28
	End Users/Public Agencies	13
	Utilities	7
	Service Providers/Suppliers	8
RGQ Segments	TOTAL	14
	End Users/Public Agencies	1
	Distributors	5
	Service Providers/Suppliers	8
WEQ Segments	TOTAL	130
	End Users	7
	Distributors	20
	Transmission	41
	Generation	21
	Marketers	24
	None Specified	1
	Independent Grid Operators/Planners	9
	Technology /Services	7

WEQ	New Members: 1-Clark Public Utilities (Distribution/LSE, Muni/Coop); 2-TransAlta Energy Marketing (U.S.) Inc. (Marketers/Brokers, Not IOU Affiliated)	2
	Member Resignations: 1-Lincoln Electric System (Generation, Muni/Coop); 2-First Energy Service Company (Distribution, IOU)	2
WGQ	New Members: 1-Southwestern Energy Services Company (Producers)	1
	Member Resignations:	0
REQ	New Members: 1-CenterPoint Energy Houston Electric, LLC (Utilities)	1
	Member Resignations: 1-SunGard Consulting Services, LLC (Service Providers/Suppliers)	1
RGQ	New Members:	0
	Member Resignations: 1-Exelon Energy (Service Providers/Suppliers), 2-Vectren Retail, LLC (Service Providers/Suppliers)	2
TOTAL	New Members:	4
	Member Resignations:	5

	Organization	Seg	Contact	Sub Seg
Retail E	Electric Quadrant Members:			
1	ABB Ventyx	S	Robert Pulcini, Karen Wei	
2	Alabama Power	u	Judy W. Ray	
3	Ameren Services Company	u	Patrick Eynon	
4	Baltimore Gas & Electric Co.	u	Ruth Kiselewich, Phil Precht	
5	Big Data Energy Services	S	J. Cade Burks, Jennifer Teel	
6	CenterPoint Energy Houston Electric, LLC	u	John Hudson	
7	City of Houston	e	James P. Cargas	
8	Comverge, Inc.	S	Wendell Miyaji	
9	Dominion Retail	S	William Barkas	
10	Dominion Virginia Power	u	Brandon Stites	
11	Electric Reliability Council of Texas (ERCOT)	e	Susan Anthony	
12	Energy Information Standards Alliance	e	Christopher Kotting	
13	Intelometry, Inc.	S	Raymond W. Anderson	
14	ISO New England	e	Dennis Robinson, Douglas Smith, Eric Winkler	
15	ista	S	Judy Bailey	
16	Maryland Public Service Commission	e	Steven Theroux	
17	National Association of Regulatory Utility Commissioners	e	James Bradford Ramsay	
18	New Jersey Board of Public Utilities	e	Kristi Izzo	
19	Oncor	u	Debbie McKeever, Debra Anderson, Mark Carpenter	
20	Pennsylvania Office Of Consumer Advocate	e	Tanya J. McCloskey	
21	Pennsylvania Public Utility Commission	e	Annunciata E. Marino	
22	PPL Solutions, LLC	S	James M. Minneman, Kim Wall	
23	Public Utilities Commission of Ohio	e	Amanda Stallings	
24	Public Utility Commission of Texas	e	Christine Wright	
25	Southern Company Services	s	H. Neal Allen	
26	Vermont Public Service Board	e	Mary Jo Krolewski	
27	Wisconsin Public Service Corporation	u	Dennis Derricks, Ken Thiry	
28	ZigBee Alliance	e	Tobin Richardson	
Wholes	ale Gas Quadrant Members:			
1	8760, Inc.	S	Jim Buccigross	
2	Accenture, LLP	S	Shelley Hurley	

 1 The segment abbreviations are: $\underline{\mathbf{REQ}}$: u – utilities, e – end users/public agencies, s – service providers/suppliers. $\underline{\mathbf{RGQ}}$: d – distributors, e – end users/public agencies, s – service providers/suppliers. $\underline{\mathbf{WEQ}}$: m – marketer/broker, d – distribution, i – independent grid operators/planners, t – transmission owner, e – end user, g – generator, ts – technology/services. $\underline{\mathbf{WGQ}}$: 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

	Organization	Seg	Contact	Sub- Seg ²
3	AGL Resources Inc	1	Tim Sherwood	
4	Alliance Pipeline LP	pl	Cathie Legge, Brian Troicuk	
5	American Gas Association	1	Andrew K. Soto, Sr., Pete Connor	
6	American Midstream Partners, LP	S	Marty Patterson	
7	ANR Pipeline Company	S	Sandy Meyers, Joseph E. Pollard, Rene Staeb, Debbie Forth, Carol Wehlmann, Radha Raman, Mary Doss	
8	Arizona Public Service Company	e	Tom Carlson	
9	Atmos Energy	pl	Steve Easley	
10	Baltimore Gas & Electric Co.	1	Phil Precht	
11	Barclays Bank PLC	S	Guy Kern-Martin, Michelle Hiley	
12	Bentek Energy, LLC	S	Jack Weixel	
13	BG Energy Merchants, LLC	S	Martha Thalman, Susan Bailey, David Buckley, Victoria Versen	
14	Blackstone Technology Group	S	Rakesh Agrawal	
15	Boardwalk Pipeline Partners, LP	pl	Randy Young, Kim Van Pelt	
16	Boeing Co., The	e	Tina Burnett	
17	BP Energy	pr	Mark Stultz, Rhonda Denton	
18	Calpine Energy Services, LP	e	Shonnie Daniel, Jay Dibble	
19	Cargill Incorporated	S	Lester Welch	
20	Carolina Gas Transmission Corporation	pl	Rae Davis, Dana B. Randall	
21	Castleton Commodities Merchant Trading L.P.	S	Tara Liscombe	
22	CenterPoint Energy Services, Inc.	S	Mickey Moon, Larry Kunkle	
23	CenterPoint Energy Gas Transmission Company	pl	Cindy Suarez, Larry Thomas	
24	CenterPoint Energy Mississippi River Transmission Corporation	pl	Cindy Suarez, Mike Stoll	
25	Cheniere Pipeline Company	pl	Whit Scott	
26	Chevron Natural Gas	pr	Charles (Chuck) Cook	
27	Chevron Pipe Line Company	pl	Mary Anne Collins, Deborah Plattsmier, Jeff Kirk	
28	Cimarex Energy Co.	pr	Charlotte Baker	
29	Citigroup Energy Inc.	S	Carrie Southard, Angela Davis	
30	Colorado Springs Utilities	1	Joe M. Holmes	
31	Columbia Gas Transmission	pl	Claire Burum	
32	ConocoPhillips Gas and Power	pr	Catherine R. Abercrombie, Pete Frost	
33	Consolidated Edison Company of NY	1	Scott Butler	
34	Constellation Energy Commodities Group Inc.	S	Lisa Simpkins, Joseph Kirwan, Andrea Kullman, Jennifer Scott, Stephen C. Knapp	
35	Dauphin Island Gathering Partners	pl	Katie Rice	
36	DB Energy Trading	S	William Donnelly, Travis McCullough	
37	DCP Midstream, LLC	pl	Katrina E. White	
38	Defense Logistics Agency Energy	e	Veronica Jones, Kevin Ahern	
39	Department of Energy	e	Christopher Freitas	
40	Devon Energy Corporation	pr	Bill Green, Josephina Nguyen, Mike Dionisio	

	Organization	Seg	Contact	Sub- Seg ²
41	Dominion Resources	1	Craig Colombo	
42	Dominion Transmission, Inc.	pl	Becky Miller, Ron Tomlinson	
43	DTE Energy Trading, Inc.	S	Gregory V. Staton, James Buck, Dena Crawford, Marcia L. Hissong, Ann Marie Jambor, Cynthia Klots, Shelley Greene	
44	Eastern Shore Natural Gas Company	pl	Elaine B. Bittner	
45	El Paso Natural Gas Company, L.L.C.	pl	William Griffith	
46	Enbridge (U.S.) Inc.	pl	Elise Cort	
47	Encana Marketing (USA) Inc.	s	Keith Sappenfield, Jeff Jarvis	
48	Encana Oil & Gas (USA) Inc.	pr	Keith Sappenfield, Jeff Jarvis	
49	Energy Transfer Partners, L.P.	pl	Josie Castrejana, Miki Kolobara	
50	Enogex Energy Resources LLC	s	Cary Metz	
51	Entergy Services, Inc.	e	Laura Berryman, Terry Shields	
52	Enterprise Products Partners L.P.	pl	Jeff Molinaro	
53	EP Energy E&P Company, L.P.	pr	Stephanie Karm	
54	Equitrans, LP	pl	Paul W. Diehl	
55	ExxonMobil Gas & Power Marketing Company a division of Exxon Mobil Corporation	pr	Randy E. Parker, John W. Poe	
56	Florida Power & Light Company	e	Tim Gerrish, Art Morris	
57	Gas Transmission Northwest Corp.	pl	Joseph Pollard	
58	Golden Pass Pipeline, LLC	pl	Vickie Long	
59	Great Lakes Gas Transmission	pl	Joseph Pollard	
60	Iberdrola USA Management Corporation	1	Mark Marini	
61	Imperial Irrigation District	e	Susie Carrillo	
62	Integrys Energy Group, Inc.	1	David E. Wear	
63	Iroquois Gas Transmission System	pl	Tom Gwilliam	
64	JP Morgan Ventures Energy Corp	s	Paul Tramonte	
65	Kern River Gas Transmission Co	pl	Brenda Martin	
66	Latitude Technologies	s	Leigh Spangler	
67	Macquarie Energy LLC	s	Darlene Volker, Michele McLendon	
68	Marathon Oil Company	pr	Robin Perrine	
69	Mewbourne Oil Company	pr	Michael F. Shepard	
70	National Fuel Gas Supply Corp.	pl	Deborah Kupczyk	
71	Natural Gas Pipeline Co of America	pl	Paul Love, Gene Nowak	
72	National Grid	1	James A. Stanzione	
73	New Mexico Gas Company Inc.	1	Ericka DeCourcey	
74	Nexen Marketing	S	Deb Strang, Sharron Roberts	
75	NextEra Energy Power Marketing, LLC	e	Marty Jo Rogers	
76	NiSource, Inc.	1	Deepak Raval, Michael D. Watson	
77	Noble Americas Corp	pl	Joseph Limone, Marisa Scauzillo, Vanessa R. Mathieu	
78	Noble Energy, Inc.	pr	Richard Smith, Tammy M. Stevens	
79	Northern Border Pipeline Company	pl	Joseph Pollard	

	Organization	Seg	Contact	Sub- Seg ²
80	Northern Natural Gas	pl	Nancy A. Hetrick	
81	Northwest Natural Gas Company	1	Randolph Friedman	
82	NOVA Gas Transmission Ltd.	pl	Sherry Hill, Bob Jones	
83	ONEOK	1	Larry Dykes	
84	ONEOK Partners GP, LLC	pl	Teri Tingler, Lisa Nishimuta	
85	PAA Natural Gas Storage, LLC	s	Eileen W. Kisluk	
86	Panhandle Eastern Pipe Line	pl	Michael Langston, Larry Biediger	
87	Peoples Gas System (A division of Tampa Electric Co)	1	Wraye Grimard	
88	Portland Natural Gas Transmission System	pl	Sherry Hill, Bob Jones	
89	PPL EnergyPlus, LLC	e	Anne Lovett	
90	QEP Resources, Inc.	pr	Steve Stanton	
91	Questar Pipeline Co.	pl	Jerry H. Gross	
92	Quorum Business Solutions Inc.	s	Cleve Hogarth, Seth Peters	
93	Salt River Project Agricultural Improvement & Power District	e	Lori-Lynn C. Pennock	
94	Sempra Energy - Southern California Gas Co.	1	Lee Stewart, Rodger Schwecke	
95	Sempra U.S. Gas & Power	pl	Bill Rapp, Elizabeth Peters	
96	Sequent Energy Management, L.P.	S	Pat Metteauer	
97	Shell Energy North America (US), L.P.	S	Eric Gillaspie	
98	SNL Financial	s	Katrina Sumey	
99	Southern California Edison Company	e	Roman Bakke, Rob Grimm	
100	Southern Company Services, Inc.	e	Alan Kilpatrick, Travis DeJuan Law	
101	Southern Star Central Gas Pipeline	pl	Philip Rullman, Doug Field	
102	Southwest Gas Corporation	1	Larry Black, Mark Anderson, Mark Litwin, John Olenick	
103	Southwestern Energy Services Company	pr	Jason Kurtz	
104	Spectra Energy Transmission	pl	Richard Kruse, Kathryn Burch	
105	SunGard	S	Sylvia Munson	
106	Tennessee Gas Pipeline Company	pl	Mark Gracey	
107	Tennessee Valley Authority	e	Valerie Crockett	
108	Tiger Natural Gas	s	R.F. (Bob) Smith	
109	TransCanada Pipelines	pl	Sherry Hill, Bob Jones	
110	Transwestern Pipeline Company, LLC	pl	Blair V. Lichtenwalter, Mary Draemer	
111	Vector Pipeline L.P.	pl	Amy Bruhn	
112	Vectren Corporation	1	Elizabeth Beck	
113	WBI Energy Transmission, Inc.	pl	Keith Tiggelaar, Gwen Schoepp, Kelly Brooks, Lori Myerchin	
114	Williams Energy Resources, LLC	s	Tina Still, Cindy Bottomley, Kelly Knopp	
115	Williams Gas Pipeline	pl	Dale Davis, Christopher Burden	
116	WPX Energy Marketing, LLC	s	Rich Ficken	

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Jim Buccigross

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8760, Inc.

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	Organization	Seg	Contact	Sub- Seg ²
2	Alabama Municipal Electric Authority	d	Ray Phillips	muni
3	Alberta Electric System Operator	i	Diana Pommen	
4	Alliance for Cooperative Energy Services Power Marketing LLC (ACES)	m	Roy J. True, Amadou Fall	muni
5	American Electric Power Service Corp.	g	Joanne Goza, 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
8	Arizona Public Service Company	t	Robert Bean	iou
9	Arkansas Electric Cooperative Corporation	g	Ricky Bittle	muni
10	Associated Electric Cooperative, Inc.	t	Jeff Johns	muni
11	Avista Corporation	t	Jeff Schlect, Kenneth Dillon	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	BC Hydro	t	Al Woodruff, Brenda Ambrosi	fed
16	Black Hills Corporation	g	Kenna Hagan	iou
17	Bonneville Power Administration	d	Richard Gillman	other
18	Bonneville Power Administration	g	Francis Halpin, Erika Doot	fed
19	Bonneville Power Administration	m	Brenda Anderson, Ann Shintani	fed
20	Bonneville Power Administration	t	Russ Mantifel, Chris Jones	fed
21	California Department of Water Resources	g	Glenn Solberg, Chi Doan	fed
22	California ISO	i	Brian Jacobsen	
23	Central Electric Power Cooperative	d	Arthur Fusco	muni
24	Clark Public Utilities	d	Brenna Moore	muni
25	Cleco Power, LLC	t	Cindy Guillot	iou
26	Consolidated Edison Company of New York, Inc.	t	Scott Butler	iou
27	Deseret Power Electric Co-op	g	Curt Winterfeld	muni
28	Dominion Energy Marketing, Inc.	g	Lou Oberski	iou
29	Duke Energy Corp.	d	Alan Pritchard	iou
30	Duke Energy Corp.	m	John Sturgeon	iou
31	Duke Energy Corp.	t	Jack Armstrong, Michael Anthony, Lee Schuster	iou
32	Dynegy Marketing and Trade, LLC	g	Contracts - Legal Department	merc
33	Edison Electric Institute	n	David Owens, Dave Dworzak, James P. Fama	n
34	Electric Reliability Council of Texas (ERCOT)	i	John Dumas, Paul Wattles, Joel Mickey	
35	Empire District Electric Company, The	t	Bary K. Warren	iou
36	Entergy Services, Inc.	t	Yarrow Etheredge, Narinder Saini	iou
37	Exelon Generation - Power Team	m	Jack Crowley	iou
38	Florida Municipal Power Agency	g	Frank Gaffney, Dan O'Hagan, Susan Schumann	muni
39	Florida Municipal Power Agency	d	Frank Gaffney, Dan O'Hagan, Susan Schumann	muni
40	Florida Power & Light Company	m	Jim Drake, Tom Hartman	iou
41	Florida Power & Light Company	t	Bob Birch	iou
	Georgia Transmission Corporation	t	Patrick McGovern	muni

	Organization	Seg	Contact	Sub- Seg ²
43	GMO GlobalSign, Inc.	e	Lila Kee	at large
44	Hydro – Quebec Transenergie	t	Michel Prevost	fed
45	Iberdrola USA Management Corporation	t	Mark Marini	iou
46	Idaho Power Company	t	Kathy Anderson	iou
47	Independent Electricity System Operator (IESO)	i	Scott Berry, Mike Yealland	
48	Indiana Municipal Power Agency	g	Scott Berry	muni
49	ISO New England, Inc.	i	Matthew F. Goldberg, Douglas Smith, Eric Winkler	
50	LG&E and KU Services Company	t	Derek A. Rahn, Larry Monday	iou
51	Los Angeles Department of Water and Power	t	Mohammed Johar Beshir	muni
52	Los Angeles Department of Water and Power	m	Bradford L. Packer, Joel F. Cordero	muni
53	Maine Public Utilities Commission	e	Denis Bergeron	reg
54	Manitoba Hydro	t	Robin Smyrski	fed
55	Manitoba Hydro	m	Audrey Penner	fed
56	Michigan Public Power Agency	d	Peter J. Schimpke	muni
57	MidAmerican Energy Company	m	Dennis Kimm	iou
58	Midwest Independent Transmission System Operator	i	William (Bill) Phillips, Ed Skiba	
59	Midwest Reliability Organization	t	Dan Schoenecker	at large
60	Missouri River Energy Services	d	Thomas J. Heller	muni
61	Nalcor Energy	m	Brad Coady	fed
62	National Association of Regulatory Utility Commissioners	e	Lou Ann Westerfield	reg
63	National Grid	t	Edward M. Kremzier	iou
64	National Institute of Standards and Technology	ts	David A. Wollman	
65	National Rural Electric Cooperative Assoc.	d	Paul McCurley	muni
66	Nebraska Public Power District	t	Don Schmit	muni
67	New Jersey Board of Public Utilities	g	Kristi Izzo	fed
68	New York Independent System Operator (NYISO)	i	Wesley Yeomans, Donna Pratt	
69	New York State Reliability Council	d	P. Donald Raymond	at large
70	North American Electric Reliability Corporation	d	Mark Lauby	at large
71	North Carolina Electric Membership Corporation	d	David Beam, Diane Huis, Richard McCall, James R. Manning	muni
72	Northeast Utilities Service Company	t	David Boguslawski, Calvin A. Bowie	iou
73	Northwestern Corporation	t	Mike Cashell	iou
74	NRG Energy, Inc.	g	Alan Johnson, Jennifer J. Vosburg, Elizabeth Killinger	merc
75	NV Energy	m	Sheryl Torrey	iou
76	NV Energy, Inc.	t	Patricia Englin	iou
77	Open Access Technology International, Inc.	e	Michehl Gent	at large
78	Open Access Technology International, Inc.	t	Paul R. Sorenson	at large
79	Organization for the Advancement of Structured Information Standards (OASIS)	ts	Laurent M. Liscia	
80	PacifiCorp	m	John Apperson	iou
81	PacifiCorp	t	Sarah E. Edmonds	iou

	Organization	Seg	Contact	Sub- Seg ²
82	PJM Interconnection	i	Frank Koza, Cathy Wesley	
83	Portland General Electric	t	Frank Afranji, John Walker. Johnny Useldinger	iou
84	Power Costs, Inc. (PCI)	ts	TJ Ferreira	
85	Powerex Corp	m	Michael L McWilliams, Sharole Tylor	fed
86	PowerSouth Energy Cooperative	d	William Ronald Graham	muni
87	Public Service Company of New Mexico	m	Steven Maestas, Darren Wilkins, Roger Vaughn	iou
88	Public Utilities Commission of Ohio	e	Amanda Stallings	reg
89	Public Utility District No. 2 of Grant County, Washington	m	Casey Sprouse	muni
90	Puget Sound Energy, Inc.	t	George Marshall, Bob Harshbarger	iou
91	Sacramento Municipal Utility District	d	Steve Sorey	muni
92	Salt River Project Agricultural Improvement and Power District	t	Michael J. Pfeister	fed
93	Salt River Project Agricultural improvement and Power District	m	Richard Lehman	fed
94	San Diego Gas & Electric Company	t	Patricia vanMidde	iou
95	Santee Cooper	t	Tom Abrams	fed
96	Seattle City Light	d	Evelyn Hagar	muni
97	Seminole Electric Cooperative, Inc.	m	Steve Wallace	muni
98	Shell Energy America (US), L.P.	m	Robert Reilley, Paul Kerr	niou
99	Shift Systems	e	Jesse D. Hurley	at large
100	Snohomish County PUD No. 1	d	Kim Haugen	muni
101	South Carolina Electric & Gas Company	t	S. Porcher Stoney, James T. Starling, Jr. , Sonya Green-Sumpter, Matt Bullard, Kevin Spitzform	iou
102	Southern Company Services, Inc.	g	John Ciza	iou
103	Southern Company Services, Inc.	m	Joel Dison	iou
104	Southern Company Services, Inc.	t	Corey Sellers, JT Wood, James Y. Busbin, Corey Sellers, Antonio Grayson	iou
105	Southwest Power Pool	i	Carl Monroe, Michael Desselle, Charles Yeung	
106	Southwest Transmission Cooperative, Inc.	t	Shane Sanders, James Burson	muni
107	Stryve Advisors, LLC	ts	Bill Hunter	
108	SunGard	ts	Andrew Tritch	
109	Tacoma Power	d	Rick Applegate	mui
110	Tenaska, Inc.	g	Scott Helyer, William Simpson	merc
111	Tennessee Valley Authority	g	Kathy York	fed
112	Tennessee Valley Authority	m	Luis A. (Tony) Suarez, Valerie Crockett	fed
113	Tennessee Valley Authority	t	Chuck Feagans	fed
114	TransAlta Energy Marketing (U.S.) Inc.	m	Steve Lincoln	niou
115	Tri-State Generation and Transmission Association, Inc.	t	Doug Reese	muni
116	Tri-State G&T Association, Inc.	g	Janelle Marriott	muni
117	Tucson Electric Power Company	t	Raquel Aguilar, Ed Beck, Amy Welander	iou
118	United Illuminating Company, The	t	Jim Clemente, Laurie Lombardi	iou
119	Vermont Public Power Supply Authority	g	William J. Gallagher	muni

	Organization	Seg	Contact	Sub- Seg ²
120	Vermont Public Service Board	e	Mary Jo Krolewski	reg
121	We Energies (Wisconsin Electric)	d	Linda Horn	iou
122	We Energies (Wisconsin Electric)	g	James R. Keller	iou
123	Westar Energy, Inc.	g	Grant Wilkerson	iou
124	Western Area Power Administration	t	JB Hite	fed
125	Western Area Power Administration	m	Jeffrey Ackerman	fed
126	Western Electricity Coordinating Council	t	Michelle Mizumori, Craig L. Williams	at large
127	White & Case LLP	ts	Richard Cousins	
128	Wisconsin Public Service Corporation	g	Christopher Plante, Charles W. Severance, Neal Balu	iou
129	WPPI Energy	d	Todd Komplin	muni
130	Xcel Energy Inc.	m	David Lemmons	iou
Retail Ga	as Quadrant Members:			
1	Allegro Development	S	Kimberly Page	
2	American Public Gas Association (APGA)	d	Alonzo Weaver, Joe Stengel	
3	Capacity Center	S	Greg Lander	
4	Dominion Retail, Inc.	S	Richard A. Zollars	
5	Duke Energy Corp	d	Dan Jones	
6	Integrys Energy Group, Inc.	d	Tom Aridas, Ken Thiry	
7	Latitude Technologies	S	Leigh Spangler	
8	National Fuel Gas Distribution Corporation	d	Mike Novak	
9	Pennsylvania Office of Consumer Advocate	e	Tanya J. McCloskey	
10	SouthStar Energy Corp	S	Michael Braswell, Joseph C. Monroe	
11	Sprague Operating Resources LLC	S	Paul Scoff	
12	Systrends USA	S	Dave Darnell	
13	UGI Utilities, Inc.	d	Paul Szykman	
14	World Alliance for Decentralized Energy	s	David Sweet	



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via posting

TO: NAESB Board Revenue Committee Members and posting for interested industry parties

FROM: Jonathan Booe, Vice President, NAESB

RE: Meeting Notes from the NAESB Board Revenue Committee Meeting on March 20, 2013

DATE: March 20, 2013

Dear Revenue Committee Members.

A Revenue Committee meeting was held in Boston, Massachusetts on March 20, 2013. The meeting was called to order at 9:00 am Eastern. Mr. Desselle presided over the meeting. The notes and attachments below serve as a record for the meeting.

Notes from the March 20, 2013 NAESB Board Revenue Committee Meeting - Boston, Massachusetts

Administrative:

Mr. Desselle welcomed the participants in the room and on the phone. Mr. Desselle noted that Revenue Committee and Resources Committee have been merged and that a number of new members have been added. Mr. Booe provided the antitrust and meeting policy guidance. The participants on the phone and in the room introduced themselves and quorum was established. Mr. Ellsworth moved to adopt the agenda as drafted and Ms. Crockett seconded the motion. The motion passed without opposition. Ms. Crockett moved to adopt the meeting notes from the October 19, 2012 conference call. Mr. Ellsworth seconded the motion and the motion passed without opposition.

Update on the Revenue Committee Recommendations Approved by the Board of Directors

Ms. McQuade reviewed the status of the Revenue Committee recommendations approved by the Board of Directors in December 2012. She noted the following:

- The membership fee was raised to \$7000 in 2013.
- The Revenue Committee reported to the Board of Directors regarding the consideration of an assessment to offset negative retained earnings and discussed the establishment of a threshold for negative retained earnings after the mid-year accounting.
- The financial report during Board meetings will focus on cash based accounting in addition to accrual based accounting.
- The fee to non-members for contracts and standards related to individual topics were raised to \$250 and the cost of attendance for non-members at NAESB courses has been raised. No one has voiced concerns to NAESB about this action.
- Modifications to the NAESB website to delineate member benefits more clearly member and non-member portions are still under testing. The member side of the web site stays as it is today. There may be changes in the future to further expand membership benefits. Non-members would have access to one rolling month of meeting notices, agendas and work papers. After 30 days, the materials would no longer be accessible to them. An April 29, 2013 implementation date is anticipated if testing is successful over the next week. The initiation of the non-member meeting attendance fee is contingent on the implementation of the website. For individual non-members, the attendance fee will be set at a rate of \$100 for meetings of 4 hours or less and \$300 for more meetings lasting more than 4 hours. As an alternative, individual non-members may pay an annual subcommittee/task force fee of \$1000 in lieu of the non-member meeting participation fee.
- Testing of the automated process for accepting meeting RSVPs and accepting payment by



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Notes from the March 20, 2013 NAESB Board Revenue Committee Meeting – Boston, Massachusetts

credit card for non-member attendees is also underway. The related security necessary to protect online registration and payment for meetings has been verified.

 Additionally, NAESB has consolidated the website and related functions onto a single server and upgraded both the hardware and the software.

Mr. Desselle asked if any members had any questions. Mr. Parker asked that the revenue received from the purchase of standards is captured in the budget and includes the sales of standards. Ms. McQuade noted that she anticipates an increase in income as a result of the non-members participating in smart grid activities, data privacy activities and demand response and energy efficiency activities but not from other NAESB activities. Mr. Connor confirmed that subcommittee work papers containing copyrighted standards would still be password protected on the non-member website.

Update on Revenues and Actions Taken by the Board to Increase Revenues Ms. McQuade reviewed the membership report from 2012 and noted that NAESB had a net loss of two members throughout the year. The REQ was the only quadrant to have a net gain in membership for the year. The trend of a slight net membership loss in the RGQ, WEQ and WGQ and a net increase in membership in the REQ has continued in the first quarter of 2013. She noted that there is an anticipated revenue increase of \$130,000 in response to membership fee increase and that the organization's expenses have continued to decline under budget. She noted that the revenue increase projection incorporates the decreased fees received from the organization's, regulatory members, consumer advocates and "membership in-kind" members. Ms. Van Pelt asked if Ms. McQuade could provide any examples of membership in-kind members. Ms. McQuade responded that NAESB has in-kind membership agreements with Organization for the Advancement of Structured Information Standards (OASIS) and the ZigBee Alliance, both in the smart grid space.

Discussion on Identifying Other Proposed Revenue Actions Mr. Desselle stated that during the leadership and Board meetings held in December the participants discussed the possibility of introducing a membership entrance fee to encourage members to keep their memberships current. He noted that he asked for proposals during those meetings but did not receive any feedback. Mr. Buccigross stated that he would like the Revenue Committee to consider raising the cost of the standards to generate more revenue and stay consistent with other standards development organizations. Ms. McQuade stated that a formal proposal with an analysis of the standards market should be done before any action is taken. Ms. Van Pelt asked if the standards price increase would be for pipeline affiliates or just non-members purchasing standards. Mr. Ellsworth cautioned that there should a member driven justification for the price increase beyond consistency with other standards development organizations. Mr. Desselle recommended that Ms. McQuade and Mr. Buccigross investigate the possibility of standards price increase.

Discussion on the Copyright Policy

Mr. Desselle stated that he asked the Revenue Committee to address the copyright policy issue raised at the December Board meeting because of its close relationship between the maintenance of the NAESB copyright and the organization's revenue model. He referenced the letter he distributed on March 1, 2013 asking for recommendations for the group to consider and noted that he did not receive any. He also referenced the letter submitted by INGAA and stated that it is beyond the scope of the Revenue Committee to consider the legality of the NAESB copyright and that discussions on the topic should be held in a different forum. Mr. Desselle stated that a new policy for allowing self-executed copyright waivers had been proposed in response to the FERC request of NAESB in the FERC Order on the Spectra tariff and that it had been posted for the



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Notes from the March 20, 2013 NAESB Board Revenue Committee Meeting - Boston, Massachusetts

meeting this morning. He opened the floor for comments.

Mr. Langston asked how much of the organization's budgeted income is actually received from the purchase of standards. Ms. McQuade stated that \$25,000 of the \$120,000 received from courses and materials sales is from sale of the contracts as part of the attendance fees for courses and that roughly \$95,000 is generated from standards purchases. Mr. Desselle stated that forgoing the protection of the copyright would result in a much more serious revenue loss than the \$95,000 produced through standards purchases.

Mr. Gent asked if Mr. Desselle would review the origin of the issue to help facilitate the discussion. Mr. Desselle stated that NAESB has had a copyright policy in place for a number of years that has been reviewed several time by Mr. Boswell during NAESB meetings and that in November of 2012 NAESB made a filing with the FERC articulating that policy. This caused concern among a number of member companies that filed tariffs with the FERC containing verbatim standards language. This concern was discussed during the Board meeting in December and since that time the NAESB office has worked with a number of companies who have requested waivers and corrected their tariffs. During the Board meeting, Mr. Desselle agreed to hold a meeting to discuss modifications to the copyright policy that will continue to support the NAESB business model while providing a less burdensome method of allowing member companies to quote NAESB standards in their regulatory compliance documents.

Mr. Boswell stated that the FERC made a request that NAESB consider a method that would simplify the copyright waiver process and that a simplified waiver process has been proposed and posted to the website and printed for the meeting participants. He reviewed the proposed procedure with the participants. Mr. Parker confirmed that the proposed procedure would only require members and non-members with valid access to the standard to include a citation to the NAESB copyright when submitting regulatory compliance documents. Mr. Boswell confirmed Mr. Parker's statement and noted that the ultimate goal of the procedure is to make the process easy for those with valid access to the standards while maintaining the NAESB copyright.. Mr. Parker also stated that several organizations were asked to support the letter submitted by INGAA concerning the NAESB copyright claim and declined as they wanted to allow NAESB the opportunity to address the issue as noted by the FERC. Mr. Langston asked about the risks involved if NAESB did not enforce its copyright. Ms. McQuade noted that there are several standards development organizations that develop open standards that do not have copyright protections but that their standards development process is closed and they operate under a different business model. Mr. Booe noted that most of those organizations are not ANSI accredited. Mr. Boswell reiterated that the proposed procedure only asks member companies to cite the NAESB copyright and to only reproduce standards that are absolutely necessary. All other standards should be referenced by number.

Mr. Kruse stated that his primary concern about requiring member companies to make a request to NAESB every time they wish to quote the standards is resolved with the proposal but that he still has an issue with providing the standards language to customers. He suggested that the organization consider a new business model that produces open standards. He noted that pipeline companies may be hesitant to standardize tariff provisions if those provisions then become copyright protected NAESB standards. Ms. McQuade confirmed that Mr. Kruse meant that the organization would produce "partially" open standards, in that they are available to affiliates. He confirmed that he was proposing a modified open standards process and stated that pipelines need to provide some standards on their bulletin boards and communicate with their customers. Mr. Connor supported Mr. Kruse's statements and asked if the procedure is intended to have an impact



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Notes from the March 20, 2013 NAESB Board Revenue Committee Meeting - Boston, Massachusetts

on the availability of standards contained in work papers. Mr. Boswell stated that the procedure was not intended to impact subcommittee activities. Mr. Field supported Mr. Kruse's statements and stated that his company is not a NAESB member to gain access to the standards but to participate in the process. He strongly suggested that the procedure be crafted to support the member companies in their daily business.

Mr. Boswell proposed the following language to be incorporated into item one.

"As a self-executing waiver, NAESB members or non-members with valid access to NAESB standards through purchase may publish in their tariffs, compliance filings, in communications with customers or stakeholders in conducting day to day business or in communications with regulatory agencies some or all of the language contained in NAESB standards protected by copyright, provided the member or non-member includes appropriate citations in the submission."

The participants supported the inclusion of the proposed language. Mr. Parker reminded the participants that the impacts of the policy will reach far beyond the revenue from the sale of standards and will affect the value of membership. Mr. Kruse stated that members do not want to be involved in the policing of the NAESB copyright. Mr. Desselle confirmed that they would not be asked to enforce the copyright with their customers. Mr. Buccigross stated that nothing in the copyright policy restricts members from discussing the standards with customers; it only applies to publication of the standards.

Mr. Langston stated that he would like some time to review the language with his outside counsel and suggested that the current process be employed until the issue is resolved. Mr. True noted that the term customers could be interpreted broadly and noted that there is a distinction between customers and non-members. Ms. Crockett stated that she cannot support changes that would put at risk the NAESB accreditation status with ANSI, and supported the procedures as described by Mr. Boswell. Mr. Boswell stated that he believes the procedure is responsive to both the FERC request and the concerns raised by INGAA and the pipelines and should satisfy all parties.

Mr. Parker recommended that Revenue Committee reconvene to consider the procedure after additional time for review. Mr. Boswell recommended that any comments submitted on the procedure be drafted from the perspective of a NAESB member. Mr. Fusco stated that he supports the recommended procedure but does not support the consideration of a fundamental change to the NAESB business model. Ms. McQuade confirmed that the recommended language provided by Mr. Boswell be included in the revised draft. The participants supported its inclusion.

Ms. Van Pelt recommended that number four of the proposed procedure be expanded to include the download of data set standards as required by NAESB WGQ Standard No. 4.3.53. She also confirmed that pipeline companies would not be required to police copyright violations by their customers. Mr. Buccigross stated that Ms. Van Pelt's concern is addressed by the existing language in number four. Ms. R. Davis recommended that NAESB take steps to ensure that the revenue streams are being optimized. Ms. D. Davis stated that the procedure does not seem to address situations where external legal or IT service companies work on behalf of companies that need to make standards available. Ms. McQuade stated that service companies working as agents for member companies are granted the same privileges as member companies when working on behalf of the member company - however thse benefits cannot extend from the agent to other clients who may not be members of NAESB. In short, the member benefits are provided to an



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Notes from the March 20, 2013 NAESB Board Revenue Committee Meeting - Boston, Massachusetts

agent solely in his role of acting as an employee of the member company.

Mr. Desselle asked if any of the members objected to the Committee holding a follow up meeting and continue in the direction of adopting the proposed procedure. In the room, all members of the Committee were in support. On the phone, Mr. True, Mr. Fusco and Mr. Gent made statements in support and Mr. Langston stated that he would need to review the draft revised document with counsel before approving the direction of pursuing a self-executing waiver.

Mr. Desselle thanked the participants and stated that he will schedule a follow up Revenue Committee meeting on Wednesday, March 27, 2013 and ask that any comments on the proposed procedure be submitted to the NAESB office by close of business on Monday, March 25, 2013. Mr. Ellsworth confirmed that the comments will be limited to the document itself and will not address the NAESB business model or the copyright policy. Mr. Boswell noted that the issues concerning the copyright policy should be addressed by the Parliamentary Committee.

The revised NAESB Copyright Procedure Regarding Member and Purchaser Self-Executing Waiver document can be found through the following hyperlink: http://www.naesb.org/pdf4/bd_revenue032013a1.doc

Other Business/Next Meeting and Action Items: No new business discussed. Mr. True asked if the action item concerning the pricing of the NAESB standards would be discussed at the next meeting. Mr. Desselle stated that it would not.

Adjourn:

Mr. Parker moved to adjourn the meeting and Mr. True seconded the motion. The meeting was adjourned at 11:16 am Eastern.

Work Papers Provided for the Meeting:

Meeting Related Documents:

- Announcement and Agenda: http://www.naesb.org/pdf4/bd revenue032013a.docx (Several work papers are contained as links in the agenda)
- Spectra Pipeline Tariff Work Paper
 3/1/13: http://www.naesb.org/pdf4/bd revenue032013w1.docx
- NAESB Copyright Participation
 Synopsis: http://www.naesb.org/pdf4/bd_revenue032013w2.doc
- NAESB Copyright Waiver Process: http://www.naesb.org/pdf4/bd_revenue032013w3.doc
- Work Paper Submitted by INGAA: http://www.naesb.org/pdf4/bd revenue032013w4.pdf
- Correspondence to NAESB Board from M. Desselle RE: NAESB Copyright Policy: http://www.naesb.org/pdf4/bd_revenue032013w5.pdf
- NAESB Copyright Procedure Regarding Member and Purchaser Self-Executing Waiver: http://www.naesb.org/pdf4/bd_revenue032013w6.doc



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Notes from the March 20, 2013 NAESB Board Revenue Committee Meeting – Boston, Massachusetts REVENUE COMMITTEE MEMBERS

Name	Organization	Attendance			
Bill Boswell	NAESB	In Person			
Jim Buccigross	8760, Inc.	In Person			
Cade Burks	Big Data Energy	Phone			
Valerie Crockett	Tennessee Valley Authority	In Person			
Michael Desselle	Southwest Power Pool	In Person			
Bruce Ellsworth	New York State Reliability Council	In Person			
Art Fusco	Central Electric Power Cooperative	Phone			
Mike Gent	OATI	Phone			
Michael Langston	Energy Transfer	Phone			
Debbie McKeever	Oncor				
Randy Parker	ExxonMobil	In Person			
Rick Smead	Navigant Consulting, Inc.				
Roy True	Aces Power Marketing	Phone			
OTHER ATTENDEES					

Name	Organization	
Jonathan Booe	NAESB	In Person
Kathryn Burch	Spectra Energy	In Person
Pete Connor	Representing AGA	Phone
Dale Davis	Williams Gas Pipeline	In Person
Rae Davis	Carolina Gas Transmission	Phone
Megan Doss	Spectra Energy	Phone
Doug Field	Southern Star Central Gas Pipeline	Phone
Pete Frost	ConocoPhillips	Phone
Tom Gwilliam	Iroquois Gas Transmission	Phone
Rachel Hogge	Dominion	Phone
Richard Kruse	Spectra Energy	Phone
Rae McQuade	NAESB	In Person
Lori-Lynn Pennock	Salt River Project	Phone
Denise Rager	NAESB	Phone
Dan Regan	INGAA	Phone
Veronica Thomason	NAESB	In Person
Kim Van Pelt	Boardwalk Pipeline	Phone
Randy Young	Boardwalk Pipeline	Phone



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via posting

TO: NAESB Board Revenue Committee Members (Bill Boswell, Jim Buccigross, Cade Burks, Valerie Crockett,

Bruce Ellsworth, Art Fusco, Mike Gent, Michael Langston, Debbie McKeever, Randy Parker, Rick

Smead, Roy True) and posting for interested industry parties

Jonathan Booe, Vice President, NAESB FROM:

RE: Meeting Notes from the NAESB Board Revenue Committee Conference Call on March 27, 2013

DATE: March 27, 2013

Dear Revenue Committee Members,

A Revenue Committee conference call was held on March 27, 2013. The meeting was called to order at 10:00 am Central. Mr. Desselle presided over the meeting. The notes and attachments below serve as a record for the meeting.

Notes from the March 27, 2013 NAESB Board Revenue Committee Conference Call

Administrative:

Mr. Desselle welcomed the participants and provided background information for the meeting. He reviewed the agenda and Ms. Crockett made a motion to adopt the agenda as drafted. Mr. Ellsworth seconded the motion and the motion passed without opposition. Mr. Booe provided the antitrust and meeting policy guidance. The participants on the phone introduced themselves and quorum was established.

Consideration of the Draft Self-**Executing Waiver** Language

Mr. Desselle stated that the NAESB Copyright Procedure Regarding Member and Purchaser Self-Executing Waiver ("Procedure") was distributed for comment after the Revenue Committee meeting on March 21, 2013. He noted that a single set of comments was submitted by INGAA and the comments have been posted for the meeting. In response to the comments, Mr. Desselle made a recommendation that the Procedure be modified to make reference to the INGAA comments and that the comments become the Irrevocable, Self-Executing, Limited Waiver of NAESB Copyright for NAESB Members and Non-Members Purchasers of NAESB Standards ("Waiver") with a few exceptions. He suggested that the following paragraph be added to the Procedure -

5. Upon request, a member or a purchaser of standards will be provided by NAESB with an irrevocable waiver that reflects the conditions set forth above, which shall remain irrevocable as long as the stated conditions are compiled with by the requestor.

He also recommended that the Waiver be modified to remove the last sentence of the introductory paragraph, and encourage members that wish to note their disagreement with the NAESB Copyright Policy do so through a separate communication. He suggested that the citation in paragraph two "Pursuant to NAESB policy" be struck, as it has a legal implication that should not be addressed in the Waiver, and he recommended that paragraph three be struck, given the structure of the Procedure and Waiver documents. Mr. True asked if the suggested language changes were proposed as a motion. Mr. Desselle responded that his recommendations were in the form of a motion. Mr. True seconded the motion and Mr. Desselle opened the floor for discussion.

Mr. Langston stated that incorporating the proposed paragraph to the Procedure would create a requirement that NAESB members and non-members that have purchased the standards contact the NAESB office and could be considered contradictory to the "self-executing" nature of the waiver. Mr. Boswell stated that the language was intended to be a belt and suspenders solution to clarify the relationship between the Procedure and Waiver and that the Waiver would be available for the



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Notes from the March 27, 2013 NAESB Board Revenue Committee Conference Call

records or any NAESB member or non-member purchaser of standards.

Mr. Desselle recommended that the language be modified as follows to address the issue noted by Mr. Langston –

5. Upon request, aA member or a purchaser of standards will beis provided by NAESB through this procedure with an irrevocable waiver that reflects the conditions set forth above, which shall remain irrevocable as long as the stated conditions are compiled with by the requestor member or purchaser of standards.

Mr. Langston asked if the Waiver would be attached to the Procedure. Mr. Desselle stated that the documents are intended to work in tandem and that the Waiver would be attached to the Procedure. Ms. Van Pelt asked where the documents would be made available. Ms. McQuade stated that the documents would be posted to the NAESB website and would be made available to those downloading and purchasing the documents. Ms. McQuade also noted that if the Procedure and Waiver are adopted they would be applicable to all NAESB members including the WEQ and both retail quadrants and that the terms used in the Waiver need to apply to all markets. Mr. Connor asked if the documents would go on the Copyright Policy section of the website. Ms. McQuade noted that the waiver and procedures would be posted with the copyright procedures and with the standards.

Mr. Kruse recommended that the language in the citation in paragraph two, "reproduction in any form is strictly prohibited without first obtaining permission from NAESB" be removed, as it may have a legal implication. Mr. Boswell stated that the purpose of the language was to provide clear notice to third parties that the language is copyrighted and that they should contact the NAESB office if they wish to reproduce it, but that removing the language would not have an impact on the responsibilities of the parties. The participants supported the removal of the language in both the Waiver and the Procedure documents related to the notice. Mr. Desselle and Mr. True stated that they would accept the redaction as a friendly amendment to the motion on the table. Mr. Langston asked if striking the last sentence of the introductory paragraph in the Waiver was absolutely necessary. Mr. Desselle stated that he believed that it is important to take any legal issues out of the document and that the statement did not belong in the Waiver. Ms. McQuade noted that participants wishing to voice their opinion concerning the NAESB copyright could do so through an email to the NAESB office and that the situation is similar to those non-members that purchase standards despite their protests that the standards should be made free. Mr. Boswell reminded the participants that legal issues concerning NAESB processes should be addressed by the General Counsel and the Parliamentary Committee.

Mr. Connor asked how the Procedure and Waiver would impact the use of the LockLizard software tool for non-members and asked if parties are limited to using the software tool a single time for each standard, as described in the November 30, 2012 NAESB submission to the FERC. Mr. Desselle stated that there would be no impact on the use of LockLizard, as the Waiver is only available for members and non-members who have purchased the standards. Ms. McQuade clarified that the one-time use limitation in the use of LockLizard is only applicable per instance, meaning non-members can use the tool for a single standard multiple times if they are viewing it related to a different event each time. Mr. Langston asked if the waiver would be retroactive. Mr. Boswell and Mr. Desselle confirmed that the waiver would be applied retroactively.

Ms. R. Davis asked if the Revenue Committee should consider limiting use of the LockLizard tool to a specific number of times. Ms. McQuade stated that the purpose of the tool is to make sure that



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Notes from the March 27, 2013 NAESB Board Revenue Committee Conference Call

people have access to the standards when necessary and that there should not be a limitation placed on access when needed.

Ms. Crockett asked Mr. Desselle to call the question. Mr. Desselle asked if there were any Revenue Committee members opposed to adopting the Waiver and Procedure as revised during the meeting. None were opposed. Mr. Desselle asked if any Revenue Committee would like to abstain from the vote. No abstentions were noted and the motion unanimously passed a simple majority vote.

A redline version of the Procedure can be found through the following hyperlink: http://www.naesb.org/pdf4/bd revenue032713a4.doc

A redline version of the Waiver can be found through the following hyperlink:

http://www.naesb.org/pdf4/bd revenue032713a2.doc

Other Business/Next Meeting and Action Items: No new business discussed.

Adjourn:

Mr. True moved to adjourn the meeting and Ms. Crockett seconded the motion. The meeting was adjourned at 10:45 am Central.

Work Papers Provided for the Meeting: Meeting Related Documents:

- Announcement and Agenda: http://www.naesb.org/pdf4/bd_revenue032713a.docx
 (Several work papers are contained as links in the agenda)
- INGAA Comments: http://www.naesb.org/pdf4/bd_revenue032713w1.doc



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Notes from the March 27, 2013 NAESB Board Revenue Committee Conference Call REVENUE COMMITTEE MEMBERS

Name	Organization		
Bill Boswell	NAESB		
Cade Burks	Big Data Energy		
Valerie Crockett	Tennessee Valley Authority		
Michael Desselle	Southwest Power Pool		
Bruce Ellsworth	New York State Reliability Council		
Mike Gent	OATI		
Michael Langston	Energy Transfer		
Debbie McKeever	Oncor		
Randy Parker	ExxonMobil		
Rick Smead	Navigant		
Roy True	Aces Power Marketing		
OTHER ATTEMPER			

OTHER ATTENDEES

Name	Organization
Jonathan Booe	NAESB
Kathryn Burch	Spectra Energy
Pete Connor	Representing AGA
Dale Davis	Williams Gas Pipeline
Rae Davis	Carolina Gas Transmission
Megan Doss	Spectra Energy
Tom Gwilliam	Iroquois Gas Transmission
Richard Kruse	Spectra Energy
Rae McQuade	NAESB
Veronica Thomason	NAESB
Kim Van Pelt	Boardwalk Pipeline

Irrevocable, Self-Executing, Limited Waiver of NAESB Copyright for NAESB Members and Non-Member Purchasers of NAESB Standards

Since their creation, the North American Energy Standards Board (NAESB) and its predecessor organization, the Gas Industry Standards Board, have granted limited copyright waivers to entities. The limited copyright waiver serves as a tool to allow access to protected materials when such access is necessary for any number of reasons including, but not limited to, the clear articulation of a tariff provision by an entity when reference to a standard is insufficient for comprehension of the provision. The integrity of copyright protection is diminished if not enforced, it is essential that NAESB make every effort to protect its copyrights, including the grant of limited copyright waivers when appropriate.

For the purpose of clarity, and consistent with the foregoing, NAESB hereby grants an irrevocable, self-executing, limited copyright waiver as follows:

- 1. NAESB members and non-member purchasers of past, current, and future NAESB standards have, as a condition of their valid access to such materials, an irrevocable, self-executing, limited waiver of NAESB's copyright and NAESB's assertion of ownership of copyright in such materials. With regard to the standards to which they have valid access, this waiver authorizes members and non-member purchasers to use some or all of the language contained in such standards in the following materials:
 - a. proposed tariffs and tariff sheets, and approved tariffs and tariff sheets;
 - b. compliance filings;
 - c. communications with customers, stakeholders, or both in conducting day to day business;
 - d. communications with regulatory agencies; and
 - e. electronic and other media making tariffs, tariff sheets and other documents available to the public as required by law;

provided the member or non-member includes the appropriate citation in the material.

2. The citation referenced in paragraph 1 must state in the material that the language has been reproduced subject to a limited copyright waiver from NAESB with all rights reserved. The citation should include the following:

"© YEAR NAESB, all rights reserved."

This citation need only be included once in an appropriate place in the material. This requirement is prospective only, and does not require those with valid access to revise previously prepared materials, including tariffs and tariff sheets.

- 3. Under this waiver, a user with legitimate access to a NAESB data set standard does not violate NAESB copyright by using data element names, descriptions, code values, or error messages, in a software product or a mobile application; by displaying data element names, descriptions, code values, or error messages on a webpage; or by communicating the corresponding technical parameters.
- Any questions concerning this waiver should be directed to NAESB (naesb@naesb.org; (713) 356-0060).



NORTH AMERICAN ENERGY STANDARDS BOARD

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--Draft

NAESB Copyright Procedure Regarding Member and Purchaser Self-Executing Waiver

The North American Energy Standards Board (NAESB) and its predecessor organization, the Gas Industry Standards Board, have granted limited copyright waivers to entities since their creation. As the integrity of copyright protection is diminished if not enforced, it is essential that NAESB make every effort to enforce its copyrights, including the grant of limited copyright waivers when protected language must be made public. The limited copyright waiver serves as a tool to allow access to protected materials when such access is necessary for any number of reasons including the clear articulation of a tariff provision by an entity when reference to a standard is insufficient for comprehension of the provision. For the purpose of clarity, NAESB has memorialized the following process for the grant of limited copyright waivers.

- As a self-executing waiver, NAESB members or non-members with valid access to NAESB standards through purchase may publish in their tariffs, compliance filings, in communications with customers or stakeholders in conducting day to day business or in communications with regulatory agencies some or all of the language contained in NAESB standards protected by copyright, provided the member or nonmember includes appropriate citations in the submission.
- 2. Citations must state in the publication that the language has been reproduced subject to a limited copyright waiver from NAESB with all rights reserved. The following citation should be used:
 - "© YEAR NAESB, all rights reserved."
- 3. NAESB encourages members and non-members with valid access to NAESB standards through purchase to publish the minimum necessary copyright protected language required to meet their needs.
- 4. Specific to NAESB data set standards, using standalone data element names, descriptions, code values, or error messages in a software product or displayed on a webpage is not a violation of the NAESB Copyright Policy, provided the user has legitimate access to the data set standard.
- 5. A member or a purchaser of standards is provided through this procedure an irrevocable waiver that reflects the conditions set forth above, which shall remain irrevocable as long as the stated conditions are complied with by the member or purchaser of standards.
- 6. Any questions concerning the NAESB Copyright Procedure Regarding Member and Purchaser Self-Executing Waiver process should be directed to the NAESB office (naesb@naesb.org; (713) 356-0060).



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March 1, 2013

TO: NAESB Board of Directors

FROM: Michael Desselle

RE: NAESB Copyright Policy

Dear NAESB Board Members -

If you were in attendance at the recent board meeting or leadership meetings, as many of you were, you will recall that there was a strident discussion regarding NAESB's copyright policy and the filing made to the Federal Energy Regulatory Commission on November 20.1 The NAESB copyright policy is not new: it has been in effect since 1996, when we first published GISB standards and has since continued to be maintained through subsequent publications of NAESB standards. Each publication carries a note reminding users of the copyright protections of our work products. In 2006, to support our policy, we began preparing monthly reports noting all entities that have legal access to the standards. That report has been prepared and included in the board materials for each board meeting.² Regardless of the fact that we have a copyright policy in place, the Federal Copyright Law provides protection for the all of our copyrighted work products, and the law continues to do so today.

Bill Boswell, NAESB's General Counsel and founding chairman of this organization, has provided guidance to the board on many occasions regarding copyright; our copyright protects the integrity of the work products for its users, it is an integral part of our revenue model, and it is designed to incent companies to join our organization. It bears repeating that in copyrighting our standards, and enforcing the copyright, our organization assures the users of the standards that the text provided is the language of our current standard, and not a misstatement or the recitation of an older, supplanted standard. In support of the copyright, when waivers are granted, the party receiving the waiver must publish with reference to the copyright, which is noted in our filing with the FERC. As an alternative to a waiver for access, NAESB has purchased a product that allows non-members read-only access for evaluative purposes.

As I stated at the board meeting, I am convening a meeting to address, among other items, the copyright discussions held at the board meeting; the announcement of that meeting is attached. I have decided that the most efficient forum to have the discussions is to have the Revenue Committee of the board to address the issues. With the Revenue Committee now undertaking resources and membership issues, it seemed natural that they would also address the copyright issues that were discussed, as there is a strong relationship between copyright and our revenue model. Through outreach to several key industry leaders on the board, I have expanded the Revenue Committee to include additional board members. The expanded committee provides a level of balance across interests. While the Revenue Committee numbers twelve members, the meetings are open to any interested party. I am sure that the committee members will welcome and take into consideration any suggestions you might have.

In addition to the other agenda items the Revenue Committee will address, the group will consider options to resolve the copyright issues raised during our board meeting that, depending on how they are implemented, would run counter to our revenue model, namely:

¹NAESB report provided to the FERC on NAESB Copyright Policy (http://www.naesb.org/pdf4/ferc112012_naesb_copyright.pdf).

² The NAESB copyright policy and report can be found on the NAESB web site at http://www.naesb.org/copyright.asp.



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Page 2 of 2

- Submitters or commenters that prefer to place the text of some or many of the NAESB standards verbatim into the filings or tariffs, as a benefit to their customers, many of whom may not be members of NAESB or have legal access to the standards
- Entities who do not have access to the standards to more easily review and use them at no cost, without requesting waivers or using the Lock Lizard product
- Groups to make our standards available to their stakeholders free of charge, including the ability to post or distribute them as they determine appropriate.

I know that as Board members, you understand that the financial health of our organization is paramount. I also know this copyright issue has touched a nerve, and I hope that you will provide input towards a solution that benefits us all. Please forward your thoughts and ideas to the NAESB office for inclusion in the meeting materials.

With Best Regards,

Michael Desselle, Chairman, NAESB Board of Directors

cc: Rae McQuade

William P. Boswell



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Via email, Friday April 19, 2013

Posting for Interested Parties

TO: Parliamentary Committee Members: Bill Boswell, Jim Buccigross, Cade Burks, James Cargas, Valerie

Crockett, Michael Desselle, Bruce Ellsworth, Joe Hartsoe, Art Fusco, Richard Kruse, Greg Lander,

Debbie McKeever, Randy Parker

Cc: NAESB Board of Directors, NAESB Advisory Council

FROM: Rae McQuade

RE: Draft Agenda for the Parliamentary Committee Meeting – May 15, 2013

Dear NAESB Parliamentary Committee Members:

The Parliamentary Committee of the Board chaired by Michael Desselle has scheduled a meeting on Wednesday, May 15, 2013 from 10:00 am to 2:00 pm PT. The agenda following is also posted on the NAESB web site (http://www.naesb.org/parliamentary.asp) and contains links to some work papers. As additional work papers become available, the links in the agenda will be revised and the agenda reposted.

WHEN: Wednesday, May 15, 2013

10:00 am to 2:00 pm PT

CONFERENCE CALLING: Conference number: 866-740-1260, Access code: 3560063, Security code: 2501

We look forward to your participation. As with all NAESB meetings, these are open to any interested party. As always, please feel free to call the NAESB office should you have any questions or comments.

Best Regards,

Rae McQuade

Rae McQuade NAESB President



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NAESB PARLIAMENTARY COMMITTEE CONFERENCE CALL - WEDNESDAY, MAY 15, 2013 - 10 AM TO 2 PM PT

Торіс	Information/Requests
Creation of the Group	• The Parliamentary Committee is established in the NAESB bylaws, § 7.8(c):
	There shall be a Parliamentary Committee, consisting of members of the Board with at least two Directors from each Quadrant. The function of the Parliamentary Committee is to address issues related to corporate governance, including, but not limited to, the Certificate of Incorporation, the Bylaws and the Operating Procedures. Members of the Parliamentary Committee shall be appointed by the Chair of the Board, who shall serve as the chair of this committee.
	 The last committee meeting was held on January 12, 2012, during which meeting several NAESB operating practices were recommended for board approval. The notes were circulated for comments and none were received, (http://www.naesb.org/pdf4/parliamentary011212dm.doc) Materials for this group are posted on the NAESB web site: http://www.naesb.org/parliamentary.asp.
Purpose of Parliamentary Committee Call	• At the Board of Directors meeting on April 4, 2013 (http://www.naesb.org/pdf4/bd040413dm.docx), several actions were taken which may have an impact on the work which would typically be prepared by the Parliamentary Committee. After coordinating schedules, it was determined to hold a conference call on May 15 from 10 am PT to 2 pm PT.
Pre-meeting Assignments	 Committee members have been asked to forward any other agenda items or comments to the NAESB office, attention of Veronica Thomason (<u>vthomason@naesb.org</u>).
Attendance Callin information:	• Call-in information for attendance by phone: Conference number: 866-740-1260, Access code: 3560063, Security code: 2501
	• 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. Please contact the NAESB Office (713-356-0060 or naesb@naesb.org) should you need any additional information or have questions or comments.
Meeting & Reference Materials	Antitrust guidance: http://www.naesb.org/misc/antitrust_guidance.doc
	 Roster: http://www.naesb.org/pdf4/parliamentary_committee_roster.pdf January 12, 2012 draft minutes: http://www.naesb.org/pdf4/parliamentary011212dm.doc
Upcoming Conference Calls	 Thursday June 13, From 1:00 pm to 4:00 pm C Friday June 28, from 1:00 pm to 4:00 pm C



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NAESB PARLIAMENTARY COMMITTEE CONFERENCE CALL – WEDNESDAY, MAY 15, 2013 – 10 AM TO 2 PM PT

Торіс	Information/Requests		
Draft Agenda	1.	Administration and Welcome	
		Antitrust guidance	
		Roll call to establish quorum	
		Adoption of the agenda	
		• Review and adopt January 12, 2012 draft minutes (These notes had been sent to Parliamentary Committee members in January 2012 and no adverse comments had been received)	
	2.	Discussion on copyright policy and recent actions taken by the Board of Directors	
	3.	Discussion on quadrant structure and Managing Committee structure considering the recent actions taken by the board on the retail quadrants	
	4.	Discussion on clarifying language for simple majority voting at the board	
	5.	Discussion on clarifying language for §2.3 of the bylaws	
	6.	Recap of action items and possible assignments	
	7.	Other Business	
		Calendar of conference calls for the Parliamentary Committee	
		• Other items	
	8.	Adjourn	
Considerations	•		
	•		



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TO: Managing Committee: Michael Desselle, Valerie Crockett, Bruce Ellsworth, Cade Burks, Bill Boswell,

Rae McQuade, Posting on the NAESB Web Site

FROM: Jonathan Booe, NAESB Vice President

RE: Notes from the March 27, 2013 Managing Committee Call at 12 p.m. C

DATE: March 27, 2013

The NAESB Managing Committee met via conference call on March 27, 2013 to review: (1) the decisions of the Revenue Committee and the Retail Structure Review Committee, and (2) potentially endorse the Committees' action. The meeting was convened at 12:00 p.m. C by Mr. Desselle. All members were in attendance. Mr. Gracey from Kinder Morgan was in attendance along with NAESB staff member Jonathan Booe, who served as counsel for the meeting.

Mr. Booe directed the attendees to review the antitrust guidance. Mr. Desselle reviewed the agenda items and asked for a motion to adopt the agenda. The motion was made by Ms. Crockett and seconded by Mr. Burks. The agenda was adopted with no opposition noted.

After an overview of the decisions made by the Revenue Committee related to the NAESB Copyright Waiver Procedure, and confirmation from Mr. Boswell that there would not be any negative legal impacts, the committee voted, without opposition, to support the actions taken by the Revenue Committee on March 27. The motion was made by Valerie Crockett and seconded by Cade Burks and Bruce Ellsworth to endorse and present to the Board of Directors next week the self-executing copyright waiver procedure and the waiver itself as modified during the Revenue Committee meeting earlier today. The motion passed unanimously.

After an overview of the decisions made by the Retail Structure Review Committee related to Committee's draft report, Ms. Crockett motioned seconded by Mr. Burks to support the recommendation of the Committee as described in the report. The motion passed unanimously. The Managing Committee noted their appreciation of the Committee's hard work to develop the report.

There was a quick review of the Board agenda, dinner speaker and leadership meetings. As a separate discussion, Mr. Desselle noted that he was working with the NAESB office to schedule a meeting of the Parliamentary Committee. The place, date and time of the meeting have not yet been determined.

There was no other business to address. The motion was made by Mr. Ellsworth and seconded by Ms. Crockett to adjourn with no opposition. The meeting adjourned at 12:20 pm C.

142 FERC ¶ 61,131 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 38

[Docket No. RM05-5-020; Order No. 676-G]

Standards for Business Practices and Communication Protocols for Public Utilities

(Issued February 21, 2013)

AGENCY: Federal Energy Regulatory Commission.

ACTION: Final Rule.

SUMMARY: The Federal Energy Regulatory Commission (Commission) is amending its regulations at 18 C.F.R. § 38.2 (which establish standards for business practices and electronic communications for public utilities) to incorporate by reference updated business practice standards adopted by the Wholesale Electric Quadrant of the North American Energy Standards Board to categorize various products and services for demand response and energy efficiency and to support the measurement and verification of these products and services in organized wholesale electric markets. These standards provide common definitions and processes regarding demand response and energy efficiency products in organized wholesale electric markets where such products are offered. The standards also require each regional transmission organization (RTO) and independent system operator (ISO) to address in the RTO or ISO's governing documents the performance evaluation methods to be used for demand

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response and energy efficiency products. The standards thereby facilitate the ability of demand response and energy efficiency providers to participate in organized wholesale electric markets, reducing transaction costs and providing an opportunity for more customers to participate in these programs, especially for customers that operate in more than one organized market.

<u>EFFECTIVE DATE</u>: This rule will become effective [insert date 60 days after publication in the FEDERAL REGISTER]. Dates for implementation of the standards are provided in the Final Rule. This incorporation by reference of certain publications in the rule is approved by the Director of the *Federal Register* as of [insert date 60 days after publication in the FEDERAL REGISTER].

FOR FURTHER INFORMATION CONTACT:

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SUPPLEMENTARY INFORMATION:

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Standards for Business Practices and Communication Docket No. RM05-5-020 Protocols for Public Utilities

ORDER NO. 676-G

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142 FERC ¶ 61,131 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;

Philip D. Moeller, John R. Norris, Cheryl A. LaFleur, and Tony T. Clark.

Standards for Business Practices and Communication

Docket No. RM05-5-020

Protocols for Public Utilities

ORDER NO. 676-G

FINAL RULE

(Issued February 21, 2013)

1. The Federal Energy Regulatory Commission (Commission) is amending its regulations at 18 C.F.R. § 38.2(a) (which establish standards for business practices and electronic communications for public utilities)¹ to incorporate by reference² updated business practice standards adopted by the Wholesale Electric Quadrant (WEQ) of the North American Energy Standards Board (NAESB) to categorize various products and services for demand response and energy efficiency and to support the measurement and verification (M&V) of these products and services in organized wholesale electric markets. These standards provide common definitions and processes regarding demand

¹ 18 CFR 38.2(a) (2012).

² Incorporation by reference makes compliance with these standards mandatory for public utilities subject to Part 38 of the Commission's regulations.

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response and energy efficiency products in organized wholesale electric markets where such products are offered. The standards also require each regional transmission organization (RTO) and independent system operator (ISO) to address in the RTO's or ISO's governing documents the performance evaluation methods to be used for demand response and energy efficiency products. The standards thereby facilitate the ability of demand response and energy efficiency providers to participate in organized wholesale electric markets, reducing transaction costs and providing an opportunity for more customers to participate in these programs, especially for customers that operate in more

I. Background

than one organized market.

2. NAESB is a private consensus standards developer that divides its activities among four quadrants, each of which is composed of members from all segments of its respective industry.³ NAESB is an accredited standards organization under the auspices of the American National Standards Institute (ANSI). NAESB's procedures are designed to ensure that all industry participants can have input into the development of a standard, whether or not they are members of NAESB, and each wholesale electric standard that NAESB's WEQ adopts is supported by a consensus of the seven industry segments: End Users, Distribution/Load Serving Entities, Transmission, Generation, Marketers/Brokers, Independent Grid Operators/Planners, and Technology/Services. The WEQ process

³ The four quadrants are the wholesale and retail electric quadrants and the wholesale and retail natural gas quadrants.

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requires a super-majority vote of 67 percent of the members of the WEQ's Executive Committee, with support from at least 40 percent of each of the seven industry segments, to approve a business practice standard.⁴ For final approval, 67 percent of the WEQ's general membership must ratify the standards,⁵ at which point compliance with NAESB's standards would be voluntary.

3. In 2006, the Commission adopted Order No. 676, a Final Rule that incorporated by reference business practice standards adopted by NAESB applicable to public utilities. Since 2006, the NAESB consensus industry stakeholder process has reviewed the NAESB business practice standards for public utilities with a view to creating a more efficient marketplace and it has adopted revisions. In a number of instances, the Commission has incorporated the standards by reference into the Commission's regulations, making them mandatory for the entities identified in the standards.

⁴ Under NAESB's procedures, interested persons may attend and participate in NAESB committee meetings, and phone conferences, even if they are not NAESB members.

⁵ See Standards for Business Practices and Communication Protocols for Public Utilities, Order No. 676, FERC Stats. & Regs. ¶ 31,216, n.5 (2006), reh'g denied, Order No. 676-A, 116 FERC ¶ 61,255 (2006).

⁶ *Id*.

⁷ Standards for Business Practices and Communication Protocols for Public Utilities, Final Rule, Order No. 676-F, FERC Stats. & Regs. ¶ 31,309 (2010); Final Rule, Order No. 676-E, FERC Stats. & Regs. ¶ 31,299 (2009); order granting clarification and denying reh'g, Order No. 676-D, 124 FERC ¶ 61,317 (2008), Final Rule, Order No. 676-C, FERC Stats. & Regs. ¶ 31,274 (2008), Final Rule, Order No. 676-B, FERC Stats. & Regs. ¶ 31,246 (2007).

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- 4. NAESB began work on developing business practice standards pertaining to the measurement and verification of demand response⁸ products and services in July 2007, when the NAESB WEQ Demand Side Management (DSM) Energy Efficiency (EE) subcommittee began work on this issue. Key to obtaining consensus on the initial set of demand response measurement and verification standards was the agreement to proceed with further work on more detailed technical standards for the measurement and verification of demand response resources. This effort led to the adoption and ratification by NAESB of measurement and verification standards early in 2009.
- 5. On April 17, 2009, NAESB filed a report informing the Commission that it had adopted an initial set of business practice standards to categorize various demand response products and services and to support the measurement and verification of these products and services in organized wholesale electric markets (Phase I Demand Response M&V Standards). As mentioned above, the NAESB report recognized that adoption of these standards would need to be followed by the development of more detailed technical standards for the measurement and verification of demand response products and services in RTO and ISO areas.

⁸ Demand response means a reduction in the consumption of electric energy by customers from their expected consumption in response to an increase in the price of electric energy or to incentive payments designed to induce lower consumption of electric energy. 18 CFR 35.28(b)(4) (2012).

⁹ Report, North American Energy Standards Board, Measurement and Verification of Demand Response Products, Docket No. RM05-5-017, at 2 (filed Apr. 17, 2009) (April 2009 Report).

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6. On April 15, 2010, the Commission issued Order No. 676-F, incorporating by reference the Phase I Demand Response M&V Standards that categorize various demand response products and services and support the measurement and verification of these products and services in organized wholesale electric markets. ¹⁰ The Commission stated that "[w]hile NAESB's Phase I [Demand Response] M&V Standards represent a good first step, additional substantive standards would appear beneficial in creating transparent and consistent measurement and verification of demand response products and services in wholesale electric markets." ¹¹ The Commission also stated that "we expect Phase II will address issues related to baseline development" ¹² The Commission anticipated that the measurement and verification standards needed to accomplish this goal would be a focus of NAESB's Phase II measurement and verification standards development efforts. ¹³

¹⁰ Standards for Business Practices and Communication Protocols for Public Utilities, Order No. 676-F, FERC Stats. & Regs. ¶ 31,309 (2010).

¹¹ Order No. 676-F, FERC Stats. & Regs. ¶ 31,309 at P 32.

¹² *Id.* P 37. The NAESB Phase I Demand Response M&V Standards defines "baseline" as "an estimate of the electricity that would have been consumed by a Demand Resource in the absence of a Demand Response Event."

¹³ *Id.* P 32.

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7. NAESB subsequently initiated specific plans to improve and adopt additional technical standards and filed a report¹⁴ with the Commission on May 3, 2011 informing the Commission that NAESB had adopted a revised set of standards covering measurement and verification (Phase II Demand Response M&V Standards) and a new set of standards covering energy efficiency¹⁵ (Wholesale Energy Efficiency M&V Standards), and explaining its efforts to develop these standards.

8. After a review of NAESB's May 2011 Report, the Commission issued a notice of proposed rulemaking (NOPR) on April 19, 2012 proposing to amend the Commission's regulations at 18 C.F.R. § 38.2 to incorporate by reference specific enumerated business

[r]efers to programs that are aimed at reducing the energy used by specific end-use devices and systems, typically without affecting the services provided. These programs reduce overall electricity consumption (reported in megawatthours), often without explicit consideration for the timing of program-induced savings. Such savings are generally achieved by substituting technologically more advanced equipment to produce the same level of end-use services (e.g. lighting, heating, motor drive) with less electricity. Examples include high-efficiency appliances, efficient lighting programs, high-efficiency heating, ventilating and air conditioning (HVAC) systems or control modifications, efficient building design, advanced electric motor drives, and heat recovery systems.

U.S. Energy Information Administration Glossary, http://www.eia.gov/tools/glossary/index.cfm?id=E (last visited Feb. 6, 2013).

¹⁴ Report, North American Energy Standards Board, Measurement and Verification of Demand Response Products, Docket No. RM05-5-020 (filed May 3, 2011) (May 2011 Report).

¹⁵ Energy efficiency, Electricity:

Docket No. RM05-5-020 -7practice standards¹⁶ and seeking comment on both the proposed Energy Efficiency and
Phase II Demand Response M&V Standards.¹⁷ In light of the Commission's statements
in Order No. 676-F regarding the importance of consistency and specificity as discussed
above, the Commission requested comments in the NOPR as to whether the Phase II
Demand Response M&V Standards were sufficiently detailed to provide transparent

¹⁶ NAESB Phase II Demand Response M&V Standards collectively identified by NAESB as 2010 Wholesale Electric Quadrant Annual Plan Item 4(a) and 4(b): General – Section 015-1.0; Telemetry – Section 015-1.1; After-the-Fact Metering – Section 015-1.2; Performance Evaluation – Section 015-1.3; General – Section 015-1.4; Telemetry – Section 015-1.5; After-the-Fact Metering – Section 015-1.6; Performance Evaluation – Section 015-1.7; General – Section 015-1.8; Telemetry – Section 015-1.9; After-the-Fact Metering – Section 015-1.10; Performance Evaluation – Section 015-1.11; General – Section 015-1.12; Telemetry – Section 015-1.13; After-the-Fact Metering – Section 015-1.14; Performance Evaluation – Section 015-1.15; Baseline Information – Section 015-1.16; Event Information – Section 015-1.17; Special Processing – Section 015-1.18; Baseline Information – Section 015-1.19; Event Information – Section 015-1.20; Special Processing – Section 015-1.21; Baseline Information – Section 015-1.22; Event Information – Section 015-1.23; Special Processing – Section 015-1.24; Baseline Information – Section 015-1.25; Event Information – Section 015-1.26; Special Processing – Section 015-1.27; Baseline Information – Section 015-1.28; Event Information – Section 015-1.29; and Special Processing – Section 015-1.30. NAESB Energy Efficiency M&V Standards collectively identified by NAESB as 2010 Wholesale Electric Quadrant Annual Plan Item 4(d): Energy Efficiency Resource Use Criteria in Wholesale Markets – Section 021-3.1; General Measurement and Verification Plan Requirements – Section 021-3.2; Post Installation M&V Report Components – Section 021-3.3; Performance Reporting – Section 021-3.4; M&V Supporting Documents – Section 021-3.5; M&V Methodologies – Section 021-3.6; Energy Efficiency Baseline Conditions – Section 021-3.7; Statistical Significance – Section 021-3.8; Nominated Energy Efficiency Value Calculations/Demand Reduction Value Calculations – Section 021-3.9; Measurement and Monitoring – Section 021-3.10; Measurement Equipment Specifications – Section 021-3.11; and Data Validation – Section 021-3.12.

¹⁷ Standards for Business Practices and Communication Protocols for Public Utilities, Notice of Proposed Rulemaking, 77 FR 24427 (Apr. 24, 2012), FERC Stats. & Regs. ¶ 32,688 (2012) (Energy Efficiency and Phase II M&V NOPR).

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measurement and verification among regions, and whether greater detail or prescriptiveness would be appropriate. The Commission also requested comments on the degree to which encouraging greater consistency among markets and regions would reduce costs for customers and market participants or otherwise facilitate participation by end users in multiple markets.

9. To the extent that commenters recommended greater detail in the standards, the Commission requested additional comment as to whether market participants have attained sufficient experience in demand response to allow them to identify best practices in the area of measurement and verification, particularly for performance evaluation-type areas such as baseline calculations, to help inform any guidance that the Commission may provide. Similarly, the Commission requested comment regarding particular areas where enhancing such detail or consistency would be most useful. The Commission also requested comment on whether further development of more substantive measurement and verification standards broadly applicable to RTOs and ISOs is necessary and, if so, whether a NAESB or a Commission-led, or other process should carry out the task. Further, the Commission requested that, if commenters prefer the NAESB process, they comment on the best relationship between NAESB and the RTO and ISO stakeholder process to facilitate the formulation of standards.

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10. In response to the NAESB Energy Efficiency and Phase II M&V NOPR, 21 entities filed comments. ¹⁸ On July 17, 2012, NAESB filed a report with the Commission stating it made a modification to the Energy Efficiency M&V Standards by deleting reference to the International Performance Measurement and Verification Protocol (IPMVP). ¹⁹ Using NAESB operating procedures for minor clarifications and corrections to standards, the WEQ Executive Committee approved the correction on June 15, 2012.

II. Discussion

A. <u>Overview</u>

11. In this Final Rule, the Commission is revising its regulations at 18 C.F.R. § 38.2 to incorporate by reference the Phase II Demand Response M&V Standards and the Wholesale Energy Efficiency M&V Standards. The Commission concludes that the Phase II Demand Response M&V Standards represent an incremental improvement to the business practices for measuring and verifying demand resource products and services in the organized wholesale electric markets. This phase of demand response standard development builds upon the work that already has been accomplished to provide demand response resources with opportunities to participate in organized wholesale electric markets, including accurate measurement and verification of demand response

¹⁸ The names of entities that filed comments are listed in the Appendix to this Final Rule.

¹⁹ Errata Report, North American Energy Standards Board, Measurement and Verification of Demand Response Products, Docket No. RM05-5-000, RM05-5-020 (filed July 17, 2012).

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resources' performance. Similarly, the Commission concludes that the Wholesale Energy Efficiency M&V Standards facilitate energy efficiency providers' ability to participate in electricity markets by providing standardized measurement requirements and reducing transaction costs, and assure more effective evaluation of the performance of energy efficiency products and services.

- 12. The Phase II Demand Response M&V Standards and Wholesale Energy Efficiency Standards were approved by the WEQ and ratified by the NAESB membership under NAESB's consensus procedures. As the Commission found in Order No. 587, adoption of consensus business practice standards is appropriate because the consensus process helps ensure the reasonableness of the standards by requiring that the standards draw support from a broad spectrum of industry participants representing all segments of the industry. Moreover, since the industry itself has to conduct business under these standards, the Commission's regulations should reflect those business practice standards that have the widest possible support.
- 13. The specific NAESB standards that the Commission is incorporating by reference in this Final Rule are the Phase II Demand Response M&V Standards and associated terms, and the Wholesale Energy Efficiency M&V Standards and associated terms.²²

²⁰ As noted earlier, 67 percent of the WEQ's general membership voting is required for ratification of a business practice standard.

²¹ Standards for Business Practices of Interstate Natural Gas Pipelines, Order No. 587, 61 FR 39053 (July 26, 1996), FERC Stats. & Regs. ¶ 31,038 (1996).

²² The specific standards are enumerated in n.16 *supra*.

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B. NAESB Phase II Demand Response M&V Standards

14. In the NOPR, the Commission proposed to incorporate by reference the NAESB Phase II Demand Response M&V standards, which include three sections: the first section (Introduction and Definition of Terms) contains an overview of the standards and definitions, the second section (Standards 015-1.0 through 015-1.15) contains standards on Provision of Wholesale Electric Demand Response Energy, Capacity, Reserve and Regulation Products, and the third section (Standards 015-1.16 through 015-1.30) contains standards on the five performance evaluation methodologies: (1) Maximum Base Load; (2) Meter Before / Meter After; (3) Baseline Type-I (Interval Meter); (4) Baseline Type-II (Non-Interval Meter); and (5) Metering Generator Output.

1. <u>Comments</u>

a. Adoption of Phase II Demand Response M&V Standards

- 15. The Commission sought comments on whether it should incorporate by reference NAESB's proposed Phase II Demand Response M&V Standards. Commenters supporting incorporation of the proposed NAESB Phase II Demand Response M&V business practice standards into the Commission's regulations include the IRC, EPSA, AEP, Indicated New York Transmission Owners, DR Supporters, IECA, Hess, PSEG, and WEM. DR Supporters, IECA, Hess and PSEG also recommend further standardization, as discussed in detail below.
- 16. Viridity generally supports the incorporation of the Phase II Demand Response M&V Standards, but also requests that the Commission include in the final rule a

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requirement for RTOs and ISOs to adopt performance evaluation methods that provide a reasonably accurate, reasonably unbiased, and reasonably consistent baseline for a customer's highly-variable load.²³

- 17. EEI and Southern also generally support incorporation of the Phase II Demand Response M&V Standards, but request that, to avoid inadvertent ambiguity, the Commission clarify in the Final Rule and in revisions to 18 C.F.R. § 38.2 that the NAESB standards and associated terms for the Phase II Demand Response M&V and the Wholesale Energy Efficiency M&V apply only in markets administered by RTOs and ISOs. EEI and Southern further request that the Commission incorporate by reference those provisions of the NAESB standards that limit their applicability to RTO and ISO markets.
- 18. NAPP and the PJM IMM recommend against adopting the Phase II Demand Response M&V Standards. As discussed below, the PJM IMM states that the proposed standards do not reference the Peak Load Contribution recently adopted in PJM, that they do not adequately define "Capacity Service," and that they inappropriately allow the same five approaches for capacity as for energy products. It states that adopting the standards as applicable to capacity creates the potential to "reopen and confuse the issue

²³ Viridity notes that NAESB defines "highly-variable load" as a customer that has a "fluctuating or unpredictable electricity usage pattern." Viridity states that these customers' "business-as-usual" loads may have little or no relation to the weather; thus predicting their loads is based on factors specific to the customer instead of more universal factors such as the weather.

Docket No. RM05-5-020 - 13 - of double counting in PJM that was only recently resolved." ²⁴ The PJM IMM also notes the difficulty of trying to apply common measurement and verification standards across all RTOs and ISOs.

b. Level of Detail, Standardization, and Best Practices

- 19. The Commission sought comments on whether the proposed NAESB Phase II

 Demand Response M&V Standards were sufficiently detailed and whether greater detail

 would be appropriate. The IRC believes that the five performance evaluation

 methodologies in the NAESB Phase II Demand Response M&V standards provide RTOs

 and ISOs with the necessary flexibility to enable accurate M&V. EPSA agrees and

 believes it is appropriate to defer to the RTO and ISO for an assessment of whether

 greater detail is needed for a particular region, and to establish the best next steps for

 refining demand response M&V mechanisms.
- 20. On the other hand, IECA states there has been minimal forward movement in developing greater standardization and "best practices" for demand response M&V, and argues that the status quo is unjust, unreasonable or unduly discriminatory and that the NAESB process discriminates against manufacturers. DR Supporters indicate that the proposed standards do not include specific and detailed characteristics of performance evaluation methodologies and that, because the NAESB standards defer to the RTO and ISO governing documents, the Phase II standards do little to bring consistency or standardization to the manner in which demand response is measured. The DR

²⁴ See PJM Interconnection, L.L.C., 138 FERC ¶ 61,138 (2012).

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Supporters argue that greater detail or prescriptiveness is appropriate with respect to the measurement and verification of energy. However, DR Supporters state that efforts to impose consistent M&V approaches across RTO and ISO capacity markets would be misspent given that M&V in those markets is so intertwined with the details of the specific capacity markets themselves.

- 21. PSEG suggests that additional standards be developed that define the testing and auditing requirements for demand response resources to ensure that they have the capability to reduce demand during their time commitment. PSEG also argues that the requirement to provide real-time telemetry data for all four products (i.e., energy, capacity, reserve, and regulation) should be mandatory, and requests that the language in the standards be revised in the future to require specific language in this regard. PSEG also requests that additional standards be developed that require providers to measure demand response delivered via behind-the-meter generation, noting that it is important for system reliability planners to evaluate the impact of environmental regulations that affect those types of facilities.
- 22. The Commission also sought comments on whether encouraging greater consistency would reduce costs and facilitate participation. The IRC contends that further efforts at developing a standardized M&V performance evaluation methodology will not be productive at this time, and could reduce the accuracy of demand response M&V and exclude participation by resources with load shapes that do not conform to the standard. The IRC believes that a flexible, regional approach to demand response M&V

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is crucial to ensuring the growth of demand response resources in wholesale electric markets. Hess recommends that the Commission pursue simplicity and consistency over time (i.e., stability), as opposed to simply consistency across all RTOs and ISOs. Hess urges the Commission to be mindful that confusion and loss of customer confidence due to frequent rule changes might outweigh marginal benefits of rule improvements.

- 23. However, DR Supporters indicate that encouraging greater consistency among RTO and ISO energy markets and regions would reduce costs and facilitate participation. DR Supporters argue that differences in baseline designs require demand response providers that are active across the country to pay for and/or develop, maintain and adapt diverse systems in order to settle energy payments for demand response customers in order to accommodate each market's differences, and that this can result in customer dissatisfaction related to increased costs and confusion.
- 24. The Commission also sought comments on whether the demand response industry has had sufficient experience to enable it to identify best practices. DR Supporters believe the industry has had sufficient experience, and that this experience should be used to develop a common energy baseline methodology for use across all RTOs and ISOs, which would be available as an alternative to the approach a particular RTO and ISO already has implemented. Hess agrees that there is sufficient experience to identify best practices, and suggests that the standards proposed for incorporation do not draw upon available market experience to provide the details necessary to allow for true standardization.

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25. The Commission also asked commenters to identify particular areas in which enhancing detail or consistency would be useful. Viridity indicates that the proposed M&V standards give RTOs and ISOs complete discretion as to whether a region utilizes any baseline methodology that is suitable for highly-variable loads, ²⁵ leaving these resources without a reasonable baseline against which their performance can be measured. EPSA asserts that a lack of specific comparability between demand resources and other resources that participate in the wholesale market risks artificially skewing incentives towards potentially less reliable resources, discouraging needed investments

c. Other Matters

and compromising the reliability of the system.

26. The Commission requested comments on whether, if further development of more substantive measurement and verification standards broadly applicable to RTOs and ISOs is required, a NAESB, Commission-led, or other process should carry out the task. ²⁶ Several commenters, including EVO, Hess, IECA, DR Supporters, PSEG, and NYTOs prefer a Commission-led process, with some suggesting that the Department of Energy and NAESB also should participate. IECA, NYTOs, and DR Supporters variously ask the Commission to undertake technical conferences to review the M&V methods used by the different RTOs and ISOs in order to fully understand their differences, develop a set of consistent, detailed demand response M&V standards to enable demand response

²⁵ See supra note 23.

²⁶ NOPR, FERC Stats. & Regs. ¶ 32,688 at P 19.

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resources to participate in multiple jurisdictions without incurring costs of complying with different standards, determine the M&V floor required to provide demand response compensation, and establish a single Baseline Type I measurement and verification approach for energy that any curtailment service provider would be permitted to use in any Commission-jurisdictional market.

- 27. IRC states that in some cases, Commission action has provided critical guidance that can be more effective in providing direction than can be achieved in trying to reach consensus; therefore, future Commission guidance potentially can avoid significant hours of debate among NAESB participants on additional contentious M&V issues.
- 28. IRC further states that stakeholders have expressed only limited support for launching an additional NAESB process. IRC urges the Commission not to press for additional standardization at this time; however, should the Commission decide to do so, IRC suggests that the NAESB process is preferable to creating a new institutional process and requests that the Commission provide detailed guidance on the nature of further efforts. EPSA supports using existing NAESB processes in order to avoid establishing competing processes for developing demand response M&V baselines. EPSA believes the Phase II standards serve as a benchmark for RTO and ISO governing documents, establishing parameters that regional standards must either meet or surpass.
- 29. NAPP supports an industry-led standard development process, because it believes the NAESB process has little participation from demand response providers, energy efficiency providers and end use customers.

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- 30. The PJM IMM also recommends that if the Commission decides to incorporate NAESB standards into its rules, the Commission should clarify that "Capacity Service" necessarily means achieving a reduction to a level at or below a resource's peak load contribution in order to prevent confusion in the industry and to avoid inefficient market rules. Additionally, the PJM IMM considers the NAESB standards to be flawed because they do not differentiate metrics appropriate to energy demand from metrics appropriate for capacity demand.
- 31. EPSA requests that the Commission confirm EPSA's understanding of the NOPR's explanation regarding conflicts between the RTO's or ISO's governing documents and the NAESB business standards. Specifically, EPSA requests that the Commission clarify that, if a conflict arises between a system operator's governing documents and the NAESB business standards, the system operator's governing documents would have precedence over the NAESB business standards with respect to things such as consistency of terms or definitions, but that such conflicts should not refer to use of or reliance on less rigorous regional demand response M&V techniques. EPSA believes this provision should allow for regional variation while protecting against a region adopting measures and protocols that are inferior to those prescribed in the Phase II proposal.
- 32. Mr. Lynch states that he opposes the proposed standard for power plants regulating carbon dioxide emissions from new coal-based power plants, arguing that such

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a regulation would effectively outlaw coal as a fuel source for the next generation of power plants, causing energy costs to rise.

2. Commission Determination

- 33. The Commission is revising its regulations at 18 C.F.R. § 38.2 to incorporate by reference the revised NAESB Phase II Demand Response M&V Standards, as they represent an incremental improvement to the existing standards that we incorporated by reference in Order No. 676-F. This phase of the demand response standard development builds upon the work that allows demand response to participate in organized wholesale electric markets, including accurate measurement and monitoring of demand response resources' performance.
- 34. The Phase II Demand Response M&V Standards provide common definitions and processes regarding demand response products in organized wholesale electric markets where such products are offered. The standards address the applicability of performance evaluation, metering, and processes to each of the organized wholesale electric markets. The changes included in the Phase II Demand Response M&V Standards add greater specificity on items such as meter data reporting deadlines. The standards also require each RTO and ISO to address in the RTO's or ISO's governing documents the performance evaluation methods to be used for demand response products. The performance evaluation standards define each of the individual methods and their use during demand response events. The changes to the performance evaluation standards

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potential market manipulation.

included in the Phase II Demand Response M&V Standards add greater specificity on the

use of the individual performance evaluation methods.

35. The Commission concludes that the Phase II Demand Response M&V Standards facilitate the ability of demand response providers to participate in organized wholesale electric markets, reducing transaction costs and providing an opportunity for more customers to participate in these programs, especially for customers that operate in more than one organized market. The improvements to the uniform set of definitions and applicability requirements in the Phase II Demand Response M&V Standards should further reduce differences in performance evaluation methods between regions.

Incorporating by reference these measurement and verification standards also will improve the methods and procedures for accurately measuring the performance of demand response resources and assist in monitoring demand response services for

36. The Commission appreciates the thoughtful comments and proposals related to increasing the detail of the Phase II Demand Response M&V Standards, as well as the proposals to establish a common M&V approach that would supplement each RTO's and ISO's approved methods. As the Commission has explained in prior orders, in choosing to take advantage of the efficiency of the NAESB process to establish technical standards for business practices and communication protocols for the gas and electric industries, we follow the standard regulatory process by which standards are incorporated by

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reference.²⁷ These rules appropriately balance the interests of the standards organization and the expediency of governmental use of privately developed standards. We find that, on balance, the objections raised to adopting the standards do not warrant rejecting them. While additional efforts to increase consistency across regions could benefit end users and demand response providers, as presented the Phase II Demand Response M&V Standards nonetheless represent an incremental improvement to the standards incorporated by reference in Order No. 676-F. The Commission therefore will incorporate by reference the standards without modification. While the Commission will not require any additional process to further refine or develop demand response measurement and verification standards at this time, we will monitor efforts at RTOs and ISOs and NAESB to address the issues raised in this proceeding and otherwise made known to us, and take action in the future in a separate docket as necessary.

37. We agree with EEI and Southern that the particular standards we are incorporating by reference in this Final Rule apply only in organized wholesale electric markets administered by RTOs or ISOs. NAESB made this clear in the applicability section of its standards, and we do not see any need to further amend 18 C.F.R. § 38.2. With respect to questions regarding whether the relevant RTO or ISO governing documents take precedence over the standards that we are incorporating by reference, we find that the standards adopted are sufficiently clear. To the extent that the Phase II Demand

²⁷ See, e.g., Standards for Business Practices and Communication Protocols for Public Utilities, Order No. 676-E, FERC Stats. & Regs. ¶ 31,299, at P 118 (2009).

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Response M&V Standards refer to "Governing Documents," in the event of a conflict with the otherwise applicable NAESB standard, the governing documents will take precedence. If such a conflict arises and is of concern to affected parties, they may bring that concern to the Commission for consideration.

- 38. We also find merit in the suggestions to develop baselines that are more accurate for highly-variable load, to consider whether further work is needed to reflect in the standards the distinct functions provided by capacity and energy products, and to consider further development of appropriate rules for demand response supported by behind-the-meter generation. We encourage stakeholders to pursue these issues as they consider potential enhancements to the NAESB standards.
- 39. Mr. Lynch's comments are not related to the issues in this proceeding and, therefore, we will not address them here.

C. NAESB Energy Efficiency M&V Standards

40. In the NOPR, the Commission proposed to incorporate by reference the NAESB Wholesale Energy Efficiency M&V Standards, which include the following new standards -- Energy Efficiency Resource Use Criteria in Wholesale Markets – Section 021-3.1; General Measurement and Verification Plan Requirements – Section 021-3.2; Post Installation M&V Report Components – Section 021-3.3; Performance Reporting – Section 021-3.4; M&V Supporting Documents – Section 021-3.5; M&V Methodologies – Section 021-3.6; Energy Efficiency Baseline Conditions – Section 021-3.7; Statistical Significance – Section 021-3.8; Nominated Energy Efficiency

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Value Calculations/Demand Reduction Value Calculations – Section 021-3.9;

Measurement and Monitoring – Section 021-3.10; Measurement Equipment

Specifications – Section 021-3.11; and Data Validation – Section 021-3.12. We address below the issues raised by the commenters.

1. <u>Comments</u>

- a. Adoption of Wholesale Energy Efficiency M&V
 Standards
- 41. The Commission sought comments on whether it should incorporate by reference NAESB's proposed Energy Efficiency M&V Standards. Several commenters, including EEI, AEP, and IRC support incorporating the NAESB Energy Efficiency M&V business practice standards into the Commission's regulations.
- 42. Several other parties offer qualified support, including the DR Supporters, IECA, and PSEG. While generally supporting the incorporation of the energy efficiency business standards into the Commission rules, these commenters recommend several changes. The DR Supporters and IECA recommend that "streamlined, cost-effective application of coincidence factors for simple conversion of energy use to peak demand reduction" be included in the NAESB Energy Efficiency M&V standards, particularly for capacity markets. In its comments, PSEG recommends several specific modifications to the proposed Energy Efficiency M&V standards including wording changes, changes in report timing, and deletion of Standard 021-3.11.1.9, which addresses the precision of measurement or monitoring equipment for proxy variables that do not directly measure electrical demand. IRC states that the Commission also should adopt and incorporate

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into its regulations the Introduction and Principles and Applicability sections identified in the Annual Plan item 4(d) as WEQ-021-1 and WE1-021-2, respectively. IRC argues that the Introduction and Principles frame the context of the standards and that the Applicability section: limits the applicability of the standard to RTOs and ISOs; establishes that RTO and ISO governing documents take precedence over the standard where there is a conflict; clarifies that the standard does not establish requirements related to compensation, design, operation, or use of energy efficiency products and services, and does not require system operators to offer energy efficiency products and services; and states that the standard includes the requirements on energy efficiency resource providers for M&V of energy efficiency products and services offered into wholesale electric markets.

43. NEEP, NAPP, WEM, Alliance to Save Energy, and EVO recommend against adopting the NAESB Energy Efficiency M&V Standards. NEEP and EVO share PSEG's objections to the required precision of measurement of monitoring equipment in Standard 021-3.11.1.9. NAPP, NEEP, Alliance to Save Energy, and EVO object to removing references to the International Performance Measurement and Verification Protocol (IPMVP). These commenters are concerned that deleting references to the IPMVP in the body of the Energy Efficiency M&V Standards removes the connection of the NAESB energy efficiency standards to the leading industry-accepted energy efficiency M&V guidance document. They argue that removing the references to IPMVP could cause confusion in the field and impede credible and consistent energy efficiency M&V, and

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will make it much more difficult for the Commission to be assured of consistency and transparency. NAPP argues that the NAESB process resulting in removing references to

the IPMVP did not involve broad industry participation.

44. DNV KEMA and NEEP recommend several modifications to the Energy Efficiency M&V standards that address statistical significance and accuracy of the measurement of proxy variables. NEEP proposes modifications stating that the plus or minus two percent accuracy requirement on equipment required in WEQ.021.3.11.9 is redundant with the overall accuracy level required in Section WEQ.021.3.8. NEEP argues that this requirement could lead to a departure from standard practice in evaluating energy efficiency resources, and may compromise the overall accuracy of the M&V results while imposing higher evaluation costs. NEEP contends the prescribed level of accuracy for measurement for monitoring equipment extends beyond the hardware-specific scope of Section WEQ.021.3.11.

b. Other Matters

45. Several comments request that the Commission initiate a process to examine specific energy efficiency standards or to convene a technical conference to discuss the proposed energy efficiency standards in general in order to resolve areas of concern.

IECA requests that the Commission add a process to create streamlined, cost-effective application of factors for simple conversion of energy use to peak reduction. EVO, NECPUC, and NEEP ask the Commission to convene a technical conference to address energy efficiency issues identified by commenters in this rulemaking process and to

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resolve areas of concern. EVO, supported by NEEP, also asks the Commission to convene a technical conference to address the removal of references to IPMVP from the energy efficiency standards, arguing that the removal constitutes a material change to the substance of the Wholesale Energy Efficiency M&V Standards.

46. NECPUC states its understanding that there is a significant divergence in views amongst the NAESB board with respect to the equipment accuracy requirement in WEQ.021.3.11.9, and NEEP states that its comments on statistical precision (discussed above) were not sufficiently considered or understood within the NAESB process.

2. <u>Commission Determination</u>

- 47. The Commission is revising its regulations at 18 C.F.R. § 38.2 to incorporate by reference the NAESB Wholesale Energy Efficiency M&V Standards. The new standards define terms and definitions that can be used to facilitate communications and provide standards for measurement and verification methodologies for energy efficiency in organized wholesale electric markets. These standards will reduce transaction costs and provide an additional opportunity and increased incentive for energy efficiency resources to participate in the wholesale markets established in RTO and ISO regions.
- 48. As with the Phase II Demand Response M&V Standards discussed above, the Wholesale Energy Efficiency M&V Standards were developed through the consensus-based NAESB process. Most of the modifications commenters suggest in response to the NOPR have already been considered through the NAESB process; consequently, the Commission declines to require that such modifications be included here. We find the

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standard requiring a plus or minus two percent accuracy for measuring equipment, to be reasonable; thus we incorporate it here, noting that its applicability is limited to measuring equipment only. These standards on measuring equipment accuracy reflect industry consensus, arrived at through the NAESB standards development process, on the specific statistical precision requirements associated with the reliable operation of organized wholesale electric markets. Additionally, while some express concern with NAESB's use of the minor clarifications and correction procedures to remove the IPMVP requirement, this procedure is permitted by NAESB's rules, and the NAESB Executive Committee reached a consensus on the removal of references to IPMVP from the energy efficiency M&V standards. Since the standards before us do not include the IPMVP references, we will not address the comments in that regard. As previously stated, NAESB followed its processes to remove these references. We find that standards as presented are incremental improvements and incorporation by reference does not foreclose stakeholders from pursuing these enhancements and their concerns through RTO and ISO or NAESB processes. The Commission, therefore, incorporates the standards.²⁸

49. Additionally, a few commenters suggested modifications that were not considered during the consensus-based NAESB process, and the Commission declines to require that those additional modifications here. Specifically, we will not include provisions

²⁸ See n.21 supra; see also OMB Circular A-119 Revised, February 10, 1998, available at http://www.whitehouse.gov/omb/circulars_a119.

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requiring RTOs to carefully consider acceptance of industry developed coincidence factors when evaluating Energy Efficiency M&V plans, and thus the Commission will not undertake a Commission-led process to develop such coincidence factors. We encourage stakeholders to pursue these issues as they consider potential enhancements to the NAESB standards.

- 50. We will not incorporate into our regulations the Introduction and Principles and Applicability sections identified in the Annual Plan item 4(d) as WEQ-021-1 and WE1-021-2, respectively, as we find that standards that we are incorporating by reference are sufficiently clear that the standards apply to organized wholesale electric markets administered by RTOs or ISOs.
- 51. The Commission also declines to convene a process or conduct technical conferences to discuss potential changes to the Wholesale Energy Efficiency M&V Standards. We conclude that it is appropriate to allow industry to gain additional experience with these new standards prior to considering additional enhancements. If the Commission determines that further efforts are warranted at a later time, it will take appropriate steps in a separate docket.

D. Incorporation by Reference/Copyrighted Standards

52. EVO and WEM object to the incorporation by reference of the NAESB standards, maintaining they should not have to pay to obtain copies of the copyrighted standards. Similarly, WEM expresses concern that NAESB was utilized to develop the standards and contends that the fee NAESB charges for access to its standards will be onerous for

published in full in the Federal Register.

Docket No. RM05-5-020 - 29 - some entities, noting that it experienced complications in getting free access to the standards from NAESB during the NOPR comment period. The PJM IMM also recommends that the Commission ensure that any standards incorporated into its rules are

53. We addressed this issue at length in Order No. 676-E²⁹ in November of 2009, concluding that the NAESB process is an efficient and cost-effective method of developing these standards, incorporation by reference is the appropriate method for the Commission to adopt the regulations, and the Commission is required to observe NAESB's copyright.³⁰ As we pointed out in that order, obtaining these standards is not cost prohibitive. NAESB, in fact, makes the standards available free for a limited period of time to those that want to view the standards during comment periods related to Commission proposals to incorporate standards by reference.³¹ For non-members seeking to purchase a copy, an email copy of any final action (e.g., the Demand Response Phase II standards) is available for \$50, which is not prohibitive.

III. Implementation Dates and Procedures

54. The Commission is requiring, consistent with our regulations at 18 C.F.R. § 35.28(c)(vi), each RTO and ISO to revise its OATT to include the NAESB Energy Efficiency and Phase II Demand Response M&V Standards we are incorporating by

²⁹ Order No. 676-E, FERC Stats. & Regs. ¶ 31,299 at PP 115-121.

³⁰ *Id*.

³¹ See http://www.naesb.org/misc/NAESB Nonmember Evaluation LockLizard.pdf.

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reference herein. For standards that do not require implementing tariff provisions, the Commission will allow the RTO or ISO to incorporate the WEQ standard by reference in its OATT. Compliance with the standards incorporated in this Final Rule will be required beginning on the same date that the rule becomes effective (i.e., sixty days after publication in the Federal Register), even if this precedes the filing of a revised OATT reflecting these new requirements.

- 55. However, as we directed in the Phase I Demand Response M&V Final Rule, to lighten the burden associated with an immediate, stand-alone filing of a revised tariff reflecting the standards incorporated by reference in this Final Rule, we are giving RTOs and ISOs the option of including these changes as part of an unrelated tariff filing, even though compliance with the revised standards is required beginning on the effective date of this Final Rule.³² If the RTO or ISO makes no unrelated tariff filing by December 31, 2013, it must make a separate tariff filing incorporating these standards by that date.
- 56. If adoption of these standards does not require any changes or revisions to existing OATT provisions, RTOs and ISOs may comply with this rule by adding a provision to their OATTs that incorporates the standards adopted in this rule by reference, including the standard number used to identify the standard. To incorporate this standard into their OATTs, RTOs and ISOs must use the following language in their OATTs: Measurement and Verification of Wholesale Electricity Efficiency (WEQ-021)

³² See Order No. 676-F, FERC Stats. & Regs. ¶ 31,309 at P 44.

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2010 Annual Plan Item 4(d), July 16, 2012; and Measurement and Verification of Wholesale Electricity Demand Response (WEQ-015, 2010 Annual Plan Items 4(a) and 4(b), March 21, 2011).

57. If a RTO or ISO requests waiver of a standard, it will not be required to comply with the standard until the Commission acts on its waiver request. Therefore, if a RTO or ISO has obtained a waiver or has a pending request for a waiver, its proposed revision to its OATT should not include the standard number associated with the standard for which it has obtained or seeks a waiver. Instead, the RTO's or ISO's OATT should specify those standards for which the RTO or ISO has obtained a waiver or has pending a request for waiver. If and when a waiver request is denied, the RTO or ISO will be required to include in its OATT the standard(s) for which waiver was denied.

IV. Notice of Use of Voluntary Consensus Standards

58. In section 12(d) of NTT&AA,³³ Congress affirmatively requires federal agencies to use technical standards developed by voluntary consensus standards organizations, like NAESB, as the means to carry out policy objectives or activities determined by the agencies unless use of such standards would be inconsistent with applicable law or otherwise impractical.³⁴ NAESB approved the standards under its consensus procedures. Office of Management and Budget Circular A-119 (§ 11) (February 10, 1998) provides that federal agencies should publish a request for comment in a NOPR when the agency

³³ National Technology Transfer and Advancement Act of 1995.

³⁴ *Id*.

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is seeking to issue or revise a regulation proposing to adopt a voluntary consensus standard or a government-unique standard. The Commission published a request for comment in the Energy Efficiency and Phase II Demand Response M&V NOPR.

V. **Information Collection Statement**

- 59. The Office of Management and Budget's (OMB) regulations require approval of certain information collection requirements imposed by agency rules.³⁵ Upon approval of a collection of information, OMB will assign an OMB control number and an expiration date. Respondents subject to the filing requirements of a rule will not be penalized for failing to respond to these collections of information unless the collections of information display a valid OMB control number. The OMB Control Numbers will not be displayed in the NAESB standards; an explanation will be included in the clearance package submitted to OMB.
- 60. This Final Rule upgrades the Commission's current business practice and communication standards to include NAESB's Energy Efficiency M&V Standards and Phase II Demand Response M&V Standards. The implementation of these standards is necessary to increase the efficiency of demand response and energy efficiency in organized wholesale electric markets. In addition, requiring such information ensures a common means of communication and ensures common business practices that provide participants engaged in transactions with demand response programs with timely information and consistent business procedures across multiple markets. The

³⁵ 5 CFR 1320.11.

Docket No. RM05-5-020 - 33 - implementation of these data requirements will help the Commission carry out its responsibilities under the Federal Power Act.

61. The Commission sought comments on its burden estimates associated with adoption of the NOPR proposals. In response to the NOPR, no comments were filed that addressed the reporting burden imposed by these requirements. Therefore the Commission will use these same estimates in this Final Rule.

	FERC Collection Number	No. of Respondents (A)	No. of Responses Per Respondent (B)	Hours Per Response (C)	Total No. of Hours (A)x(B)x(C)
Demand	FERC-516 ³⁶	6	1	4	24
Response Standards	FERC-717 ³⁷	6	1	9	54
Energy Efficiency	FERC-516	6	1	6	36
Standards	FERC-717	6	1	12	72
Total for FERC-516					60
Total for FERC-717					126
Total One- Time Burden					186

³⁶ "FERC-516" is the Commission's identifier that corresponds to OMB control no. 1902-0096 which identifies the information collection associated with Electric Rate Schedules and Tariff Filings.

³⁷ "FERC-717" is the Commission's identifier that corresponds to OMB control no. 1902-0173, which identifies the information collection associated with Standards for Business Practices and Communication Protocols for Public Utilities.

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Total Annual Hours for Collection: (Reporting and Recordkeeping, (if appropriate)) = 186 hours.

Information Collection Costs: The Commission projects the average annualized cost for all respondents to be the following:³⁸

FERC-516: 60 hours *\$59/hour = \$3,540 (\$590 per respondent).

FERC-717: 126 hours*59/hour= \$7,434 (\$1,239 per respondent).

The following table breaks out the cost by standard:

	FERC-516 (Tariff Filing)	FERC-717 (Standards Implementation)
Demand Response Standards Capital/Startup Costs	\$1,416	\$3,186
Demand Response Standards Annualized Costs (Operations & Maintenance)	N/A	N/A
Energy Efficiency Standards Capital/Startup Costs	\$2,124	\$4,248
Energy Efficiency Standards Annualized Costs (Operations & Maintenance)	N/A	N/A
Demand Response Standards Total Costs	\$1,416	\$3,186 ³⁹

³⁸ The Total Annual Cost for information collection is \$10,974. This number is reached by multiplying the total hours to prepare responses (186) by an hourly wage estimate of \$59 (a composite estimate of wages plus benefits that includes legal, technical and support staff rates. Based on data from the Bureau of Labor Statistics at http://bls.gov/oes/current/naics3_221000.htm and http://www.bls.gov/news.release/ecec.nr0.htm). (78 hours for demand response standards + 108 hours for energy efficiency standards) x \$59/hour= \$10,974.

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Energy Efficiency Standards Total Costs	\$2,124	\$4,248 ⁴⁰
All Standards Total Costs	\$3,540	\$7,434

62. These new information collection requirements are mandatory.

<u>Title</u>: Standards for Business Practices and Communication Protocols for Public Utilities (FERC-717); Electric Rate Schedule Filings (FERC-516).

Action: Information collection.

OMB Control No.: 1902-0096 (FERC-516); 1902-0173 (FERC-717).

Respondents: RTO and ISOs.

<u>Frequency of Responses</u>: One-time implementation.

- of Mecessity of Information: The Commission's regulations adopted in this rule upgrade the Commission's current business practices and communication standards by standardizing the definitions used by RTOs and ISOs to identify their various energy efficiency and demand response products and to measure and verify the results obtained by these products. Moreover, the implementation of these data requirements will help ensure consistency among the RTOs/ISOs with respect to the measurement and verification of energy efficiency and demand response performance in their organized wholesale electric markets.
- 64. <u>Internal Review</u>: The Commission has reviewed the information collection requirements and has determined, as discussed above, that its action in this proceeding is

³⁹ We note that 24 hours at \$59/hour= \$1,416 and 54 hours at \$59/hour= \$3,186.

⁴⁰ We note that 36 hours at \$59/hour= \$2,124 and 72 hours at \$59/hour= \$4,248.

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necessary because this rule increases access to standardized information for participants in wholesale energy markets that administer demand response and energy efficiency products and services. This rule also facilitates the ability of demand response and energy efficiency providers to participate in electricity markets, reducing transaction costs and providing an opportunity for more customers to participate in these programs.

- 65. Interested persons may obtain information on the reporting requirements by contacting the following: Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426 [Attn: Ellen Brown, Office of the Executive Director, email: DataClearance@ferc.gov, phone: (202) 502-8663, fax: (202) 273-0873],
- 66. For submitting comments concerning the collection of information and the associated burden estimate, please send your comments to the Office of Management and Budget, Office of Information and Regulatory Affairs, Washington, DC 20503

 [Attention: Desk Officer for the Federal Energy Regulatory Commission, phone: (202) 395-4718, fax: (202) 395-7285]. For security reasons, comments to OMB should be submitted by e-mail to: oira.submission@omb.eop.gov. Comments submitted to OMB should reference the appropriate OMB Control Number(s) and collection number(s) (OMB Control No. 1902-0096 for FERC-516, and/or OMB Control No. 1902-0173 for FERC-717).

VI. Environmental Analysis

67. The Commission is required to prepare an Environmental Assessment or an Environmental Impact Statement for any action that may have a significant adverse effect

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on the human environment. The Commission has categorically excluded certain actions from these requirements as not having a significant effect on the human environment. The actions adopted here fall within categorical exclusions in the Commission's regulations for rules that are clarifying, corrective, or procedural, for information gathering analysis, and dissemination, and for sales, exchange, and transportation of natural gas and electric power that requires no construction of facilities. Therefore, an environmental assessment is unnecessary and has not been prepared in this Final Rule.

VII. Regulatory Flexibility Act

68. The Regulatory Flexibility Act of 1980 (RFA)⁴³ generally requires a description and analysis of final rules that will have significant economic impact on a substantial number of small entities. The Small Business Administration's (SBA) Office of Size Standards develops the numerical definition of a small business.⁴⁴ The SBA has established a size standard for electric utilities, stating that a firm is small if, including its affiliates, it is primarily engaged in the transmission, generation and/or distribution of

 $^{^{41}}$ Regulations Implementing National Environmental Policy Act of 1969, Order No. 486, 52 FR 47897 (Dec. 17, 1987), FERC Stats. & Regs., Regulations Preambles 1986-1990 \P 30,783 (1987).

⁴² 18 CFR 380.4.

⁴³ 5 U.S.C. 601-612.

⁴⁴ 13 CFR 121.101.

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- 69. The regulations we are incorporating by reference in this Final Rule impose filing requirements only on RTOs and ISOs, none of which is a small business. Moreover, these requirements are designed to benefit all customers, including small businesses. As noted above, adoption of consensus standards helps ensure the reasonableness of the standards by requiring that the standards draw support from a broad spectrum of industry participants representing all segments of the industry. Because of that representation and the fact that industry conducts business under these standards, the Commission's regulations should reflect those standards that have the widest possible support.
- 70. Accordingly, pursuant to section 605(b) of the RFA, the Commission hereby certifies that the regulations incorporated by reference herein will not have a significant impact on a substantial number of small entities.

VIII. Document Availability

71. In addition to publishing the full text of this document in the Federal Register, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through FERC's Home Page (http://www.ferc.gov) and in FERC's Public Reference Room during normal business hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street, NE, Room 2A, Washington, DC 20426.

⁴⁵ 13 CFR 121.201, Sector 22, Utilities & n.1.

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- 72. From FERC's Home Page on the Internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.
- 73. User assistance is available for eLibrary and the FERC's website during normal business hours from FERC Online Support at 202-502-6652 (toll free at 1-866-208-3676) or email at ferc.gov, or the Public Reference Room at (202) 502-8371, TTY (202) 502-8659. E-mail the Public Reference Room at public.referenceroom@ferc.gov.

IX. Effective Date and Congressional Notification

74. These regulations are effective [insert date 60 days from publication in Federal Register]. The Commission has determined, with the concurrence of the Administrator of the Office of Information and Regulatory Affairs of OMB, that this rule is not a "major rule" as defined in section 351 of the Small Business Regulatory Enforcement Fairness Act of 1996.

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List of subjects in 18 CFR Part 38

Conflict of interests, Electric power plants, Electric utilities, Incorporation by reference,

Reporting and recordkeeping requirements.

By the Commission.

(SEAL)

Nathaniel J. Davis, Sr., Deputy Secretary.

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In consideration of the foregoing, the Commission amends part 38,

Chapter I, Title 18, <u>Code of Federal Regulations</u>, as follows.

PART 38 – BUSINESS PRACTICE STANDARDS AND COMMUNICATION PROTOCOLS FOR PUBLIC UTILITIES

1. The authority citation for part 38 continues to read as follows:

AUTHORITY: 16 U.S.C. 791-825r, 2601-2645; 31 U.S.C. 9701; 42 U.S.C. 7101-

7352.

2. Section 38.2 is amended by revising paragraph (a)(12) and adding paragraph (a)(13) to read as follows:

§ 38.2 Incorporation By Reference Of North American Energy Standards Board Wholesale Electric Quadrant Standards

- (a) * * *
- (12) Business Practices for Measurement and Verification of Wholesale Electricity Demand Response (WEQ-015, 2010 Annual Plan Items 4(a) and 4(b), March 21, 2011).
- (13) Business Practice Standards for Measurement and Verification of Energy Efficiency Products (WEQ-021, 2010 Annual Plan Item 4(d), May 13, 2011).

* * * * *

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Note: Appendix will not be published in the Code of Federal Regulations.

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List of Commenters 46

Alliance to Save Energy (Alliance)

American Electric Power Service Corporation (AEP)

DNV KEMA

DR Supporters⁴⁷

Edison Electric Institute (EEI)

Efficiency Evaluation Organization (EVO)

Electricity Consumers Resource Council (ELCON)

Electric Power Supply Association (EPSA)

Hess Corporation (HESS)

Independent Market Monitor for PJM (PJM IMM)

Industrial Energy Consumers of America (IECA)

ISO/RTO Council (IRC)

John Lynch (Mr. Lynch)

North America Power Partners (NAPP)

New England Conference of Public Utilities Commissioners (NECPUC)

⁴⁶ The abbreviations used to identify these commenters in this Final Rule are shown parenthetically.

⁴⁷ DR Supporters include Comverge, Inc., Energy Connect, Inc., Energy Curtailment Specialists, Inc., EnerNOC, Inc., and Wal-Mart Stores, Inc.

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New York Transmission Owners (NYTOs)⁴⁸

Northeast Energy Efficiency Partnerships, Inc. (NEEP)

PSEG Companies (PSEG)⁴⁹

Southern Company Services, Inc. (Southern)

Viridity Energy, Inc.; EnergyConnect, Inc.; and PJM Industrial Customer Coalition (Viridity)

Women's Energy Matters (WEM)

⁴⁸ New York Transmission Owners includes Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Long Island Power Authority, New York Power Authority, New York State Electric & Gas Corporation, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation.

⁴⁹ The PSEG Companies are: Public Service Electric and Gas Company (PSE&G), PSEG Power LLC (PSEG Power) and PSEG Energy Resources & Trade LLC (PSEG ER&T).

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April 8, 2013

Mr. Adam Sedgewick U.S. Department of Commerce 1401 Constitution Avenue NW Washington, DC 20230

RE: Response to the Request for Information on "Developing a Framework to Improve Critical Infrastructure Cybersecurity"

Dear Mr. Sedgewick,

Thank you for the opportunity to offer these general comments in response to the February 26, 2013 request for information from the Department of Commerce through the National Institute of Standards and Technology (NIST) concerning the development of a framework to improve critical infrastructure cybersecurity. Please find attached two documents that describe the North American Energy Standards Board (NAESB) cybersecurity related standards, their purpose, use and to which market based transactions they are intended to apply. Attachment "A" describes the standards applicable to the wholesale electricity market and attachment "B" describes the standards applicable to the wholesale natural gas market. The information contained in the documents was developed at the request of the NAESB Board of Directors and includes contributions from numerous subject matter experts in the fields of cybersecurity and energy market design.

As background, the North American Energy Standards Board (NAESB) is an American National Standards Institute (ANSI) accredited, non-profit 501(c)(6) corporation formed with the support of the Department of Energy (DoE) for the purpose of developing voluntary standards and model business practices designed to promote more competitive and efficient natural gas and electric services that streamline the transactional processes of the natural gas and electric industries. NAESB and its predecessor organization, the Gas Industry Standards Board (GISB), have developed voluntary consensus based standards in these industries for nearly twenty years with the support of the Federal Energy Regulatory Commission (FERC), the DoE, the North American Electric Reliability Corporation (NERC), the National Association of Regulatory Utility Commissioners (NARUC) and state utility commissions among other governmental and industry agencies.

NAESB maintains a membership of over three hundred corporate members that represent interests in the wholesale gas, wholesale electric, retail gas and retail electric markets. In addition, NAESB has more than two-thousand member and non-member participants active in various standards development efforts that address a wide range of subjects and levels of technical detail. While NAESB is primarily funded through its corporate memberships, the NAESB standards development process allows for all interested parties to participate and vote in the standards development activities regardless of membership status. This practice is vital to ensure that all NAESB standards have been properly vetted by the industry prior to adoption. All NAESB standards developed for the wholesale gas and wholesale electric markets are filed with the FERC and all NAESB standards developed for the retail gas and retail electric markets are submitted to NARUC and made available to all state commissions. With few exceptions, all NAESB wholesale market standards have been adopted by the FERC and mandated as federal regulation for federally jurisdictional entities



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through the FERC process of incorporation by reference. Many of the NAESB retail market standards have also been adopted by various state commissions and enforced in a similar manner.

Again, we are grateful for the opportunity to contribute and look forward to supporting the efforts of NIST to develop a framework to reduce the cyber risks to critical infrastructure and to supporting other federal agencies as they address Executive Order 13636.¹ We hope you find this information helpful and should you need additional information, please do not hesitate to contact the NAESB office.

With Best Regards,

Jonthan Booe

Jonathan Booe, Vice President, NAESB

Cc via email: Michael D. Desselle, Chairman of the NAESB Board of Directors

Valerie Crockett, Wholesale Gas Quadrant Vice Chair of the NAESB Board of Directors

Rae McQuade, NAESB President

William P. Boswell, NAESB General Counsel

¹ "Executive Order 13636—Improving Critical Infrastructure Cybersecurity" 78 Fed. Reg. 11739 (February 19, 2013).



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NAESB WHOLESALE ELECTRIC MARKET CYBERSECURITY STANDARDS FACT SHEET

To provide additional information on the purpose and use of the NAESB cybersecurity standards related to the wholesale electric market, this fact sheet includes; a brief description of our wholesale electric market cybersecurity related standards, their purpose, to which market based transactions they were intended to apply, and their use by specific wholesale electric market segments. There is also a brief discussion on regulatory implications, future developments and how these standards interact with the NAESB cybersecurity standards for the natural gas market. We hope you will find this fact sheet helpful. We understand that the standards, by their nature, are technical. However, it is important that decision-makers, who may not be well versed in the technical aspects of cybersecurity, have an opportunity to understand the benefits of implementing these cybersecurity standards and the protections and benefits they provide to the market.

Description and purpose of the NAESB cybersecurity standards applicable to the wholesale electric market

NAESB has developed wholesale electric market standards that support mutual entity authentication through the use of digital signatures, authorized certificate authorities, issuance of certificates and provision for public-private keys to access and protect market information and execute transactions -- thus supporting an infrastructure of secure electronic communications.

A trusted network of certificate authorities is one of the key ingredients needed to authenticate Internet data transfers. The NAESB business practices related to cybersecurity, in concert with the accreditation specifications for authorized certification authorities (CAs) and the program by which CAs are accredited as NAESB Authorized Certification Authorities (ACAs), provides for such a trusted network and establishes a secure public key infrastructure (PKI) for applicable NAESB wholesale electric market based transactions. This is implemented through a three pronged approach. First, the NAESB business practices related to cybersecurity describe the minimum PKI requirements of an end entity, typically a utility or independent system operator or regional transmission organization. Second, the accreditation specifications describe the minimum requirements for the CA, typically a service provider for the industry who issues the digital certificates to the end entities so that the Internet data transfers may be securely performed with the assurance of confidentiality, authentication, integrity and non-repudiation. Third, the ACA process describes the procedures by which a CA may become a NAESB ACA and issue digital certificates to the end entities are responsible for creating their own public-private key pairs. The ACA issues digital certificates using the public key of an end entity.

So, how does the mutual entity authentication work as described in the standards, the accreditation process and the minimum requirements of the certificate authorities? As best described in "Entity Authentication Using Public Key Cryptography (FIPS PUB 196)," entities in two computers authenticate their identities to one another by two challenge-response protocols. In this case, it is the end entity and the service provider operating the system – such as OASIS or the Registry participating in the mutual entity authentication. The FIPS publication goes on to note that "These protocols may be used during session initiation, and at any



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other time that entity authentication is necessary. The challenge-response protocols are derived from an international standard for entity authentication based on public key cryptography, which uses digital signatures and random number challenges. Authentication based on public key cryptography has an advantage over many other authentication schemes because no secret information has to be shared by the entities involved in the exchange. A user attempting to authenticate oneself must use a private key to digitally sign a random number challenge issued by the verifying entity. This random number is a time variant parameter which is unique to the authentication exchange. If the verifier can successfully verify the signed response using the user's public key, then the user has been successfully authenticated."

The standards language specific to this description on public key cryptography use notes that the end entities acknowledge as the industry's endorsement of public key cryptography (using asymmetric algorithms such as RSA) which utilize public key certificates to bind a person's or computer system's public key to its entity, and to support symmetric encryption (using symmetric algorithms such as AES) — which means that the same key is used to encrypt and decrypt a message. Therefore, the standards support a hybrid system that uses both symmetric and asymmetric algorithms to provide the needed protection, yet also allow for manageable keys and encryption/decryption transaction speed. ¹

The Accreditation Requirements for ACAs includes specifications for certificate uses, assurance levels, identification and authentication, certificate lifecycles, facility management and operations controls, identification of auditable events, maintenance of audit logs, technical security controls, key sizes, activation data, lifecycle security controls, security management controls, network security controls, certificate profiles and CRL profiles.

Application of the NAESB cybersecurity standards in the wholesale electric market

NAESB's long-standing support for open standards has served to create a competitive marketplace of interoperable E-commerce products to serve the energy industry. As with other NAESB business practice standards initiatives, the cybersecurity related standards and specifications is intended to facilitate the availability of interoperable PKI products from multiple vendors.

The NAESB cybersecurity related standards and specifications facilitate an infrastructure to secure electronic communications, and they establish the obligations of both ACAs and end entities, but the standards do not specify how certificates issued by ACAs may be used in specific software applications or electronic transactions within the guidance of NAESB. Our business practice standards do not apply to nor impact the reliability of the bulk power grid – that is the domain of the North American Electric Reliability Corporation (NERC). The cybersecurity related standards and specifications were developed to apply to business practices and processes for electricity reservations and scheduling. For use, the standards apply to the Electric Industry Registry, e-Tagging and OASIS systems, and to other electronic transactions deemed

¹ http://support.microsoft.com/kb/257591



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NAESB WHOLESALE ELECTRIC MARKET CYBERSECURITY STANDARDS FACT SHEET

mutually agreeable by the transacting parties. The entities using the standards and program are the utilities, ISOs, RTOs, third party service providers issuing certificates as NAESB ACAs, entities providing information to the Electric Industry Registry or accessing information from the Electric Industry Registry, and entities requiring e-Tags. The Electric Industry Registry is a central repository for commercial industry information defining the roles played by entities to support the electronic transactions related to reservations and scheduling of wholesale power. E-Tags are used to identify interchange transaction information between parties resulting in the physical flow of electricity from one point to another in the wholesale electric market.

For specifics on the cybersecurity standards, the standards require the use of a PKI using X.509 v3 digital certificates, issued by NAESB ACAs, to provide for (1) confidentiality: the assurance to an entity that no one can read a particular piece of data except the receiver(s) explicitly intended, (2) authentication: the assurance to one entity that another entity is who he/she/it claims to be, (3) integrity: the assurance to an entity that data has not been altered (intentionally or unintentionally) from sender to recipient and from time of transmission to time of receipt, and (4) technical non-repudiation: a party cannot deny having engaged in the transaction or having sent the electronic message.

While the cybersecurity related standards and specifications could be applied more broadly, they were defined for these purposes. As other electronic transactions in the wholesale electric market are determined to require such entity authentication, they too could be included as applicable.

Regulatory Implications of the NAESB cybersecurity standards

The cybersecurity standards and the accreditation requirements were developed to align with industry best practices for PKI as prescribed by the National Institute of Standards and Technology (NIST) in publication NIST Special Publication (SP) 800-57 Part 1, 800-130 and 800-131A, Internet Engineering Task Force PKI guidelines and standards (including but not limited to RFC 3280, 3647, and 4210). The cybersecurity standards have been provided to the Federal Energy Regulatory Commission (FERC) as part of Docket No. RM05-5-022, on January 29, 2013, and an update report regarding the development and revisions of these cybersecurity standards were provided to FERC on November 30, 2012. If FERC determines to adopt the standards, then they would become mandatory for jurisdictional entities – typically the utilities and independent system operators and regional transmission owners who are reflected in the standards as end entities. Should the standards become mandatory through actions of FERC, the administration that accompanies compliance with the standards would be a function of FERC.

NAESB Data Privacy Standards in Support of Smart Grid

The NAESB data privacy standards were developed to support the retail electric market as it implements smart grid applications. These standards do not apply to the wholesale electric market; however, provide a



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better understanding of the work undertaken to support cybersecurity needs, so we have included this section. The data privacy standards define the responsibilities of utilities and third party service providers as they exchange and maintain smart meter customer energy usage data. The Smart Grid Interoperability Panel has requested changes that are now under consideration, including:

- additional cybersecurity requirements for supporting privacy as well as traditional cybersecurity requirements for third party access to smart meter-based information,
- utility privacy requirements that utilities should undertake for the privacy of retail customer data, including a requirement that contracted agents protect the data throughout the entire data lifecycle,
- utility provision of information to customer s to support customer protection of data after the data has been transferred to a third party, and
- third party identity verification standards in support of smart-meter based information.

Future Developments for the NAESB cybersecurity standards

There are several items that are identified for cybersecurity standards development in 2013, and as our organization receives requests throughout the year, more activity could be identified. On our 2013 annual plan for standard development, the following items have been approved for development:

- review and develop standards as needed to support adequate session encryption (SSL/TLS issues: US-Cert Vulnerability Note VU#864643),
- review the FERC Report, "Report on Use of North American Energy Standards Board Public Key Infrastructure Standards," Docket No. EL12-86-000, issued on August 27, 2012, to determine which standards changes are needed to be responsive to suggestions made by the Commission, and
- review annually at a minimum, the accreditation requirements for ACAs to determine if any changes are needed to meet market conditions.

Also, there have been initial dialogs held with the U.S. Department of Energy (DoE) regarding a surety assessment for the technical standards of NAESB, which would include the cybersecurity standards. Should this surety assessment take place, it would be the third assessment conducted by Sandia National Laboratories (SNL) on behalf of DoE. The form of the surety assessments looked much like a series of audit findings, where the standards were reviewed, observations made, and findings along with recommended actions provided. The recommended actions focused on cybersecurity, scalability, performance, data and transactional integrity, and confidentiality. The assessments also provided critical success factors and metrics of importance that would support the organization going forward as new standards were developed and existing standards were modified. NAESB's responses also took a form much like a response to an audit. For each finding and recommendation, a response was prepared that identified the action to be taken and when it would be completed. These independent surety assessments by the recognized experts of SNL were crucial to the credibility of our work products and the safety of the



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NAESB WHOLESALE ELECTRIC MARKET CYBERSECURITY STANDARDS FACT SHEET

electronic transactions that used NAESB standards. In short, it was a tremendous benefit and we are grateful to DoE and SNL for providing such a service.

Interaction with the NAESB cybersecurity standards for the natural gas market

NAESB develops standards for wholesale and retail natural gas and electricity markets. This fact sheet has centered on the development in support of the wholesale electric market. That said, it is recognized that the wholesale natural gas and electricity markets are interconnected through the increased demand for natural gas by power generators.

NAESB is now focusing on the changing nature of both the natural gas and electricity markets – changes that require the two markets to more closely coordinate as natural gas becomes more and more the fuel selected by power generators. This effort is supported by the National Petroleum Council, who also noted that the two markets were becoming increasingly interdependent. Cybersecurity and the use of electronic transactions are critical to ensuring that the markets communicate effectively not only within each market, but also across markets. Standards usage plays a role in providing effective and efficient electronic transactions. These technical standards that support electronic transactions, are built by the technical experts within the markets – with a strong understanding of the market requirements. As the markets interact more frequently, the policy, commercial arrangements, business practices and technical standards will be asked to reflect those interactions, rather than present barriers. A review of our existing technical standards in light of these changes would be advisable.

The technical standards we have today were built in somewhat of a silo fashion. The technical standards supporting natural gas transactions were developed by the natural gas market participants. Similarly, the technical standards supporting commercial transactions for electricity were developed by the electricity market participants. Now, as these markets interact more frequently, the standards that support their transactions may be required to be consistent, at a minimum. The technical standards, of which the cybersecurity standards are a part, may be required to function as an umbrella over both markets – supporting the needs of the interdependent natural gas and electricity markets, to ensure that the commercial arrangements between both markets are protected.

Conclusion

The cybersecurity standards (referenced by NAESB as WEQ-012) were developed to apply to business practice standards and processes for wholesale electricity reservations and scheduling or any future business applications identified as applicable with mutual agreement by the transacting parties. They have been recently revised to ensure that they address market needs and the revisions were provided to FERC for its consideration.



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The announcement of the effort to modify the WEQ-012 standards and put the credentialing process in place was posted for public access and the status reported at many NAESB Board and Executive Committee meetings, open to all interested parties. The recommendations for the revisions were adopted by the subcommittee with no negative votes cast and received overwhelming approval by the Executive Committee and members during the ratification process.



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NAESB WHOLESALE GAS MARKET CYBERSECURITY STANDARDS FACT SHEET

To provide additional information on the purpose and use of the NAESB cybersecurity standards related to the wholesale natural gas market, this fact sheet includes; a brief description of our wholesale natural gas market cybersecurity related standards, the purpose of the standards, the transactions to which they apply, and their use by specific wholesale natural gas market segments. There is also a brief discussion on regulatory implications, future developments and how these standards interact with the NAESB cybersecurity standards for the wholesale electric market. We hope you will find this fact sheet helpful. We understand that the standards, by their nature, are technical. However, it is important that decision-makers, who may not be well versed in the technical aspects of cybersecurity, have an opportunity to understand the benefits of implementing these cybersecurity standards and the protections and benefits they provide to the market.

NAESB has developed wholesale natural gas market cybersecurity standards that support mutual entity authentication through the use of digital signatures, self-certification, and provision for public-private keys to access and protect market information and execute transactions, thus supporting an infrastructure of secure electronic communications.

The NAESB wholesale natural gas cybersecurity standards that support Electronic Data Interchange (EDI)-based transactions utilize PGP (Pretty Good Privacy), a process that encrypts and decrypts transactional data and is also used to create encrypted digital signatures. PGP provides: (1) confidentiality: the assurance that no one can read a transaction except the intended receiver(s), (2) authentication: the assurance that an entity is who it claims to be, (3) integrity: the assurance that data has not been altered (intentionally or unintentionally) from sender to recipient and from time of transmission to time of receipt, and (4) technical non-repudiation: that a party cannot deny having engaged in the transaction or having sent the electronic message.

PGP employs public-private key pairs, and the NAESB cybersecurity standards rely upon PGP as defined by IETF RFC 2440 protocol, or if parties mutually agree, PGP version 2.6 or greater using the RSA algorithm to generate the key pairs. The trading partners using PGP are self-certified and key policies, including polices for exchanges are communicated between trading partners. The lifecycle of the encryption keys is suggested to be no more than one year, and is determined by the key's owner. The key exchange procedures are identified in NAESB's Trading Partner Agreement document, (NAESB WGQ Standard 6.3.3).

For transactions utilizing Internet web sites, servers, and browsers, 128-bit Secure Socket Layer encryption (SSL) is used to secure the transport of electronic information between trading partners. The public and private keys (asymmetric) are used to create the symmetric session key. The session key is used to encrypt



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NAESB WHOLESALE GAS MARKET CYBERSECURITY STANDARDS FACT SHEET

all transmitted data, thus providing protection and not adversely impacting transaction speed. In addition access to the underlying data is protected by user login and password requirements.

Application of the NAESB cybersecurity standards in the wholesale natural gas market

NAESB's long-standing support for open standards has created a competitive marketplace of interoperable e-commerce products to serve the energy industry. As with other NAESB business practice standards initiatives, the cybersecurity related standards are intended to facilitate a wide array of implementations utilizing either in-house or third party software systems.

The NAESB wholesale natural gas cybersecurity standards facilitate an infrastructure of secure electronic communications under which the electronic transmission of data via EDI or browser based transactions is protected. There are more than fifty separate transactions identified for nominations, confirmations, scheduling of natural gas; flowing gas transactions including measurement, allocations, and imbalances; invoicing related transactions including invoices, remittances, statement of account; and capacity release transactions. The cybersecurity standards apply to interstate transmission providers, their customers and stakeholders who are parties to the transactions noted above. As other electronic transactions in the wholesale natural gas market are determined to require such electronic protection, they too can be included as applicable.

Regulatory Implications of the NAESB cybersecurity standards

The cybersecurity standards were developed to align with industry best practices and the most recent version (Version 2.0) of the standards were provided to the Federal Energy Regulatory Commission (FERC) as part of Docket No. 96-1-037, on March 4, 2011. On July 19, 2012, FERC, through incorporation by reference, adopted the standards and as such they are mandatory for entities that are jurisdictional under the Natural Gas Act. These standards, as is true for all NAESB standards, are reviewed against current market requirements, and are provided to FERC as they are updated.

Future Developments for the NAESB cybersecurity standards

There is a standing development item in the NAESB WGQ Annual Plan that specifically tasks NAESB with updating the wholesale natural gas cybersecurity standards based on advances in technology, markets and cyber threats. We are aware that there are updated version of the IETF protocols used for PGP, notably, IETF RFC 4880, and the cybersecurity industry is moving towards use of TLS rather than SSL,

¹ http://www.ietf.org/rfc/rfc2440.txt, http://www.ietf.org/rfc/rfc4880.txt

² https://tools.ietf.org/rfc/rfc5246.txt, , http://tools.ietf.org/html/rfc6101



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NAESB WHOLESALE GAS MARKET CYBERSECURITY STANDARDS FACT SHEET

all of which may be considered by NAESB as the wholesale natural gas cybersecurity standards are reviewed. Additionally, NAESB receives requests for standards development throughout the year from industry participants.

Also the NAESB wholesale natural gas cybersecurity standards have been reviewed on two occasions by Sandia National Laboratories (SNL) on behalf of the Department of Energy (DoE). Each assessment worked much like an audit, where the standards were reviewed, observations made, and findings along with recommended actions provided. The recommended actions focused on cybersecurity, scalability, performance, data and transactional integrity, and confidentiality. The assessments also provided critical success factors and metrics of importance that would support the organization going forward as new standards were developed and existing standards were modified. In response to each assessment, NAESB has implemented numerous changes and refinements to the standards. There have recently been dialogs regarding a third SNL security assessment of NAESB's technical standards. These independent surety assessments by the recognized experts of SNL are crucial to the credibility of NAESB work products and the safety of the electronic transactions that used NAESB standards. In short, it was a tremendous benefit and we are grateful to DoE and SNL for providing such a service.

Interaction with the NAESB cybersecurity standards for the wholesale electric market

NAESB develops standards for wholesale and retail natural gas and electricity markets. This fact sheet has centered on the development in support of the wholesale natural gas market. That said, it is recognized that the wholesale natural gas and electricity markets are interconnected through the increased demand for natural gas by power generators.

NAESB is now focusing on the changing nature of both the natural gas and electricity markets – changes that require the two markets to more closely coordinate as natural gas increasingly becomes the fuel selected by power generators. This effort is supported by the National Petroleum Council, who also noted that the two markets were becoming increasingly interdependent. Cybersecurity and the use of electronic transactions are critical to ensuring that the markets communicate effectively not only within each market, but also across markets. Standards play a role in providing effective and efficient electronic transactions. These technical standards that support electronic transactions are built by the technical experts within the markets – with a strong understanding of the specific market requirements. As the markets interact more frequently, the policies, commercial arrangements, business practices and technical standards that support market transactions will be required to be complementary, at a minimum. Cybersecurity standards will be required to support the needs of the interdependent natural gas and electricity markets and to ensure that the commercial arrangements between both markets are protected. A review of our existing technical standards in light of these changes would be advisable.

The technical standards we have today were built in somewhat of a silo fashion. The technical standards supporting natural gas transactions were developed by the natural gas market participants. Similarly, the



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NAESB WHOLESALE GAS MARKET CYBERSECURITY STANDARDS FACT SHEET

technical standards supporting commercial transactions for electricity were developed by the electricity market participants. Now, as these markets interact more frequently, the standards that support their transactions may be required to be consistent, at a minimum. The technical standards, of which the cybersecurity standards are a part, may be required to function interoperably for both markets – supporting the needs of the interdependent natural gas and electricity markets, to ensure that the commercial arrangements between both markets are protected.

Conclusion

NAESB has developed cybersecurity standards for the wholesale natural gas market that facilitate the secure transfer of transactions either via EDI or Internet web sites. Moreover, the standards are applicable to future business applications as they are identified. Lastly, the NAESB wholesale natural gas cybersecurity standards undergo continual internal and third-party review to ensure that they address evolving market needs and threats.



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April 18, 2013 Filed Electronically

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street N.E., Room 1A Washington, D.C. 20426

RE: NAESB Copyright Procedure Regarding Member and Purchaser Self-Executing Waiver

Dear Ms. Bose:

The North American Energy Standards Board ("NAESB") herewith submits this report to the Federal Energy Regulatory Commission ("FERC" or "Commission") in response to the March 1, 2013 FERC Order on Spectra Pipelines' Tariff Amendments in Docket Nos. RP13-502-000, et al. This report describes the NAESB Copyright Procedure Regarding Member and Purchaser Self-Executing Waiver adopted by the NAESB Board of Directors on April 4, 2013 as part of the NAESB Copyright Policy.

The cover letter, report and enclosures are being filed electronically in Adobe Acrobat[®] Print Document Format (.pdf). The filing is also available on the NAESB web site (www.naesb.org). Please feel free to call me at (713) 356-0060 or refer to the NAESB website (www.naesb.org) should you have any questions or need additional information regarding the NAESB standards or the NAESB copyright policy.

Respectfully submitted,

Re McGuade

Ms. Rae McQuade

President & COO, North American Energy Standards Board

cc without enclosures: Chairman Jon Wellinghoff, Federal Energy Regulatory Commission

Commissioner Tony Clark, Federal Energy Regulatory Commission Commissioner Cheryl LaFleur, Federal Energy Regulatory Commission Commissioner Philip D. Moeller, Federal Energy Regulatory Commission Commissioner John Norris, Federal Energy Regulatory Commission

Mr. Joseph McClelland, Director, Office of Energy Infrastructure Security, Federal Energy Regulatory Commission

Mr. Michael Bardee, Director, Office of Electric Reliability, Federal Energy Regulatory

Mr. David Morenoff, Acting General Counsel, Federal Energy Regulatory Commission Mr. Michael Goldenberg, Senior Attorney, Office of General Counsel, Federal Energy Regulatory Commission

Ms. Jamie L. Simler, Director, Office of Energy Policy and Innovation, Federal Energy Regulatory Commission



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April 18, 2013

Mr. Mason Emnett, Associate Director, Office of Energy Policy and Innovation, Federal Energy Regulatory Commission

Mr. Michael Desselle, Chairman and CEO, North American Energy Standards Board Mr. William P. Boswell, General Counsel, North American Energy Standards Board

Mr. Charles Berardesco, General Counsel, North American Electric Reliability Corporation

Mr. Mark Lauby, Vice President and Director of Standards, North American Electric Reliability Corporation



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UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Standards for Business Practices and)	Docket No. RM 05-5-000
Communication Protocols for)	
Public Utilities)	
Standards for Business Practices of)	Docket No. RM 96-1-000
Interstate Natural Gas Pipelines)	
-)	

REPORT OF THE NORTH AMERICAN ENERGY STANDARDS BOARD

On November 20, 2012, the North American Energy Standards Board ("NAESB") submitted a report to the Federal Energy Regulatory Commission ("FERC" or "Commission") in the above referenced dockets to clarify the NAESB Copyright Policy and the use of NAESB copyrighted standards in FERC compliance filings and tariffs. 1 This action was taken after NAESB was informed that NAESB's Copyright Policy may not have been fully understood by entities making filings with the Commission. In response to the November 20, 2012 report, several entities contacted NAESB seeking a limited copyright waiver for the use of copyright protected standards language that had been included in FERC Gas Tariffs filed with the Commission in compliance with FERC Order No. 587-V issued on July 19, 2012 in Docket No. RM96-1-037. Consistent with past practice, NAESB provided the requesting entities with a limited copyright waiver and asked that the entities give notice that the copyright protected language had been reproduced through the grant of a waiver by NAESB and that a citation to NAESB's copyright be provided in future regulatory filings. On January 31, 2013, in an effort to comply with the conditions of the copyright waiver, Spectra Energy pipelines filed a motion to amend Appendix A of their FERC Gas Tariffs to include the notice and citation required by NAESB.² On March 1, 2013 the Commission issued an order accepting the amendments of the Spectra Energy pipelines' FERC Gas Tariffs and "urge[d] NAESB to post on its website specific procedures for obtaining such waivers or licenses quickly, and we would further encourage it to develop a safe harbor covering "fair use" of its standards language to limit the burden of obtaining a waiver or license for each legitimate use."

¹ North American Energy Standards Board Report to the Federal Energy Regulatory Commission Regarding the NAESB Copyright Policy (Docket Nos. RM05-5-000 and RM96-1-000), *available at:* http://www.naesb.org/pdf4/ferc112012_naesb_copyright.pdf (submitted November 20, 2012).

 $^{^2 \} Spectra \ Energy \ Pipelines \ FERC \ Gas \ Tariff \ (Docket \ Nos. \ \underline{RP13-502-000}, \underline{RP13-503-000}, \underline{RP13-504-000}, \underline{RP13-505-000}, \underline{RP13-505-000}, \underline{RP13-505-000}, \underline{RP13-505-000}, \underline{RP13-505-000}, \underline{RP13-505-000}, \underline{RP13-513-000}, \underline{RP13-513-000$

NAESB Retail EC Meeting Materials, 5-1-13
Report of the North American Energy Standards Bord 324 of 358
The NAESB Copyright Waiver Procedure
April 18, 2013

In response to the March 1, 2013 Commission Order, the NAESB Board of Directors on April 4, 2013 adopted a procedure by which all members and non-member purchasers of NAESB standards³ are granted an irrevocable, self-executed, limited copyright waiver to reproduce copyright protected language under certain conditions. The purpose of the self-executing waiver is to allow members and non-members with valid access to publish copyright protected NAESB standards language in tariffs, compliance filings, other communications with regulatory agencies, and communications with customers or stakeholders in conducting day to day business when referencing a standard is insufficient for the needs of the member or non-member purchaser of the standard. The procedure and the accompanying waiver were developed and unanimously adopted by the NAESB Revenue Committee through two meetings held on March 21, 2013 and March 27, 2013 before unanimous approval at the April 4, 2013 Board of Directors meeting. Both the procedure and self-executing waiver can be found on the NAESB website through the following hyperlinks.

- NAESB Copyright Procedure Regarding Member and Purchaser Self-Executing Waiver: http://www.naesb.org/pdf4/self-executing_waiver_procedure.pdf
- Irrevocable, Self-Executing, Limited Waiver of NAESB Copyright for NAESB Members and Non-Member Purchasers of NAESB Standards: http://www.naesb.org/pdf4/self-executing_waiver.pdf

The action of the Board of Directors on April 4, 2013 to create the unilateral grant of the waiver did not alter NAESB's current practice of providing access to copyright protected material to non-members who have not purchased the material, nor does it limit any fair use of the material. Non-member entities that have not purchased copyright protected material may continue to request access for evaluative purposes through the use of the LockLizard software product. As previously addressed, requests for copyright waivers by non-member entities who have not purchased copyright protected material will be reviewed and approved on a case by case basis.

³ The list of the NAESB members and non-member purchasers of the NAESB standards can be found in the report "NAESB Copyright Policy and Companies with Access to NAESB Standards Under the Copyright Policy", posted on the NAESB web site at http://www.naesb.org/copyright.asp, and can be accessed from the following link: http://www.naesb.org/pdf2/copyright.pdf. The report is updated monthly.

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Coordination between Natural Gas and Electricity Markets

Docket No. AD12-12-000

NOTICE OF TECHNICAL CONFERENCE

(March 5, 2013)

Take notice that the Federal Energy Regulatory Commission (Commission) staff will hold a technical conference focused on natural gas and electric scheduling, and issues related to whether and how natural gas and electric industry schedules could be harmonized in order to achieve the most efficient scheduling systems for both industries. The technical conference will take place on April 25, 2013 beginning at 9:00am and ending at approximately 5:00pm. The conference will be held at the Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426. All interested persons are invited to attend the conference. Commission members may participate in the conference.

Following a series of regional technical conferences conducted in August 2012, the Commission issued an order directing further conferences and reports in the above captioned docket on November 15, 2012. In the November 15 Order, the Commission noted that while its current regulations and policies provide flexibility in the near-term for utilities to address coordinated scheduling issues on a regional basis and for pipelines to provide enhanced scheduling opportunities, there are broader questions regarding whether industry-wide changes to scheduling practices and capacity release rules would be necessary or appropriate to achieve long-term gas-electric harmonization, address seams issues across regional markets, or promote a more efficient utilization of existing pipeline capacity. The Commission also noted the questions raised relating to whether new flexible pipeline services and additional nomination opportunities as developed by industry will result in more efficient utilization of pipeline capacity.

 $^{^1}$ Coordination between Natural Gas and Electricity Markets, 141 FERC ¶ 61,125, at P 11 (2012) (November 15 Order).

The conference will explore whether and how to achieve more efficient scheduling practices for the two industries. The conference will consider whether changes should be made to provide additional scheduling flexibility, including suggestions raised by stakeholders such as whether to increase the number of nomination opportunities, eliminate or change the interruptible "no-bump" rule, and/or provide enhanced ability for customers to schedule real-time gas transfers/sales or intraday capacity release transactions. The conference also will explore coordination of gas and electric scheduling, including: whether the establishment of a single "energy day" is desired and would be beneficial and how the scheduling leading up to that day could be efficiently sequenced; how to manage difficulties scheduling gas in the evenings and for weekends and holidays; whether it is preferable for electric scheduling to be done before or after gas and transportation scheduling; and whether technological advances permit a reduction in the time between the electric bid or pipeline nomination and when they are scheduled. Lastly, the conference also will explore whether these suggestions or any other options would allow for more efficient use of existing infrastructure by both gas generators and other customers.

Those interested in speaking at the technical conference should notify the Commission by March 15, 2013 by completing the online form at the following webpage: https://www.ferc.gov/whats-new/registration/nat-gas-elec-mkts-speaker-form-04-25-13.asp. Due to time constraints, we may not be able to accommodate all those interested in speaking. A supplemental notice also will be issued prior to the technical conference to provide information about the agenda and organization of the technical conference. Those interested in attending the technical conference are encouraged, but not required, to register at the following webpage: https://www.ferc.gov/whats-new/registration/nat-gas-elec-mkts-form-04-25-13.asp.

The technical conference will not be transcribed. However, there will be a free webcast of the conference. The webcast will allow persons to listen to the technical conference, but not participate. Anyone with Internet access who wants to listen to the conference can do so by navigating to www.ferc.gov's Calendar of Events and locating the technical conference in the Calendar. The technical conference will contain a link to its webcast. The Capitol Connection provides technical support for the webcast and offers the option of listening to the meeting via phone-bridge for a fee. If you have any questions, visit www.CapitolConnection.org or call 703-993-3100.²

Notice is also hereby given that the discussions at the conference may address matters at issue in the following Commission proceeding(s) that are either pending or

² The webcast will continue to be available on the Calendar of Events on the Commission's website www.ferc.gov for three months after the conference.

within their rehearing period: ISO New England Inc., Docket No. ER13-895-000.

Information on the technical conference will also be posted on the website http://www.ferc.gov/industries/electric/indus-act/electric-coord.asp, as well as the Calendar of Events on the Commission's web site, http://www.ferc.gov, prior to the conference.

Commission conferences are accessible under section 508 of the Rehabilitation Act of 1973. For accessibility accommodations, please send an email to accessibility@ferc.gov or call toll free (866) 208-3372 (voice) or (202) 208-1659 (TTY), or send a FAX to (202) 208-2106 with the required accommodations.

For more information about the technical conference, please contact:

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Kimberly D. Bose, Secretary.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Harrisburg, PA. 17105-3265

Public Meeting held December 5, 2012

Commissioners Present:

Robert F. Powelson, Chairman John F. Coleman, Jr., Vice Chairman Wayne E. Gardner James H. Cawley Pamela A. Witmer

Smart Meter Procurement and Installation

Docket No. M-2009-2092655

FINAL ORDER

BY THE COMMISSION:

The Pennsylvania General Assembly (General Assembly), through Act 129 of 2008 (Act 129) has directed that electric distribution companies (EDCs) with more than 100,000 customers file smart meter technology procurement and installation plans with the Commission for approval. 66 Pa. C.S. § 2807(f). Furthermore, Act 129 requires these EDCs to make available to customers and their designated third parties, including electric generation suppliers (EGSs) and providers of conservation and load management services (CSPs), access to the meter and electronic meter data. 66 Pa. C.S. § 2807(f)(3). With this Final Order, the Commission requires the covered EDCs to implement electronic data interchange (EDI) and other standards consistent with the directives set forth in this Order.

The Commission recognizes that the smart meter technology required by Act 129 provides more information about a customer's electricity use than previous technology. The Commission also recognizes that while this information is intended to empower electricity customers, it can be used for other purposes that raise privacy and security concerns. In fact, the Commission has always been cognizant of customer privacy and security concerns and has promulgated regulations, such as 52 Pa Code §54.8 that restrict access to customer information. Specifically, Section 54.8 of the Code restricts an electric company or electric supplier may not release private customer information to a third party, including an affiliate of the electric company or electric supplier, unless the customer has been notified of the intent and has been given a convenient method of notifying the entity of the customer's desire to restrict the release of the private information. 52 Pa. Code § 54.8(a). Furthermore, electric generation suppliers are required to maintain the confidentiality of a consumer's personal information, including the customer's name, address, telephone number and historic payment information. See 52 Pa. Code § 54.43(d). In addition, the Commission has declared that all electric utility customers shall have the right to withhold all customer account and usage data from the Eligible Customer List that is made available to Commission-licensed Electric Generation Suppliers. See Interim Guidelines for Eligible Customer Lists, Final Order on Reconsideration, at Docket No. M-2010-2183412, entered November 15, 2011.

The Commission has also directed its staff and the electric utilities to participate in efforts by national standards groups to address and define business practices and technical requirements, such as data communications, that will preserve the integrity, reliability and security of the national grid, local distribution systems, meters and consumer data. Such groups include the National Institute of Standards and Technology (NIST), the North American Energy Standards Board (NAESB), and the Utility Communications Architecture International Users Group (UCAIUG). *See Smart Meter*

Procurement and installation Implementation Order at Docket No. M-2009-2092655, entered June 24, 2009, at 27.

By adopting this Order, the Commission is in no way revising, limiting or reducing the previously established Commission rules, regulations or precedent regarding the security, confidentiality or use of private customer information, to include the customers personal and electric usage information. The intent of this Order is to facilitate the establishment of a standard electronic format for providing customers and their designated third-party representatives with direct electronic access to the customer's electric usage and price data, with the customer's consent.

BACKGROUND

On June 18, 2009, the Commission adopted a *Smart Meter Procurement* and *Installation* Implementation Order¹ (Implementation Order) to establish the standards each smart meter technology procurement and installation plan must meet and to provide guidance on the procedures to be followed for submittal, review and approval of all aspects of filed plans. The Implementation Order also directed EDCs to work through the Electronic Data Exchange Working Group (EDEWG) process to develop EDI transactions to fully achieve the capabilities of smart meter technology.²

Specifically, the Commission directed that all covered EDCs must provide customers and their designated representatives access that fulfills the following requirements:³

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¹ This order was entered on June 24, 2009, at Docket No. M-2009-2092655.

²Implementation Order at 24-28.

 $^{^{3}}Id.$ at 24.

- 1. Non-discriminatory access for retail electric suppliers and third-parties, such as EGSs, and conservation and load management service providers;
- 2. Open, non-proprietary two-way access for electric suppliers and third-parties, such as EGSs, and conservation and load management service providers; and
- 3. Full electronic access to customers and their representatives to meter data upon customer consent.

Additionally, the Commission directed the EDCs to address standards and formats for electronic data communications with customers and third parties by implementing EDI enrollment of EGS customers who elect real-time (RT) or time-of-use (TOU) rate programs; develop a new EDI historical interval usage (HIU) transaction for 12-months of data that has been recorded at the meter; and develop and implement a new EDI transaction for monthly, bill-quality interval usage (IU) data recorded at the meter level.⁴ To achieve these requirements the Commission directed the EDCs to collaborate with the EDEWG to develop appropriate EDI capabilities.⁵

The EDCs obligated to deploy smart meter technology under Act 129 include the Duquesne Light Company (Duquesne); Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company, West Penn Power Company (collectively FirstEnergy); PECO Energy Company (PECO); and PPL Electric Utilities Corporation (PPL). All of these EDCs have filed a Smart Meter Technology Procurement and Installation Plan (smart meter plan) with the Commission for approval. All of these EDCs have received Commission approval of their respective smart meter plans. ⁶

⁴*Id*. at 25.

 $^{^{5}}Id$

⁶ The status of each EDC's Smart Meter Plan can be obtained by reviewing the proceedings at the following dockets: Duquesne – M-2009-2123948; FirstEnergy – M-2009-2123950 and M-2009-2123951 (West Penn Power Company); PECO – M-2009-2123944 and PPL – M-2009-2123945.

On December 7, 2009, EDEWG submitted a Preliminary Proposal for the Development of Smart Meter Data Exchange Standards (EDEWG Preliminary Proposal). The EDEWG Preliminary Proposal was developed by an EDEWG sub-team consisting of representatives from Duquesne, FirstEnergy, PECO and PPL. The initial draft version of the EDEWG Preliminary Proposal was published on the EDEWG List Serve for review by all EDEWG participants. The EDEWG Preliminary Proposal was then reviewed and discussed at the December 3, 2009, EDEWG meeting, after which the EDEWG Preliminary Proposal was submitted to the Commission on December 7, 2009.

On June 30, 2011, the Commission adopted a Tentative Order at this docket proposing further direction and clarification for the development of standards and formats for smart meters and access to meter data. Comments were due thirty (30) days from the date the Tentative Order was published in the *Pennsylvania Bulletin*, with reply comments due twenty (20) days thereafter. The following parties filed comments: the Demand Response and Smart Grid Coalition (DRSG); Duquesne; the Energy Association of Pennsylvania (EAP); the Electronic Data Exchange Working Group Leadership (EDEWG Leadership); FirstEnergy; PECO and PPL. The following parties filed reply comments: PECO and FirstEnergy Solutions Corporation (FirstEnergy Solutions). After consideration of the initial and reply comments, we are requiring EDCs to implement EDI and other standards consistent with the directives set forth in this Order.

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⁷See Smart Meter procurement and Installation, Tentative Order at Docket No. M-2009-2092655, entered on July 8, 2011.

⁸ The Tentative Order was published in the *Pennsylvania Bulletin* on July 23, 2011 at 41 Pa. Bull. 4066, thus comments were due August 22, 2011, with reply comments due September 12, 2011.

⁹ The Demand Response and Smart Grid Coalition filed its comments on September 29, 2011, along with a request that its comments be accepted as a late filing, noting that it has sent its comments to Commission staff via email on August 22, 2011. We will grant the request of the Demand Response and Smart Grid Coalition and will accept and consider its comments as part of the record in this proceeding. ¹⁰ EDEWG Leadership includes EDC Co-Chair Susan Scheetz (PPL), EGS Co-Chair Matthew Sigg (Constellation NewEnergy, Inc.), and EDI Change Control Manager Brandon Siegel (ISTA North America).

DISCUSSION

The Tentative Order proposed requirements and provided additional clarification to address the following three topics presented in the EDEWG Preliminary Proposal: (1)data exchange standards for currentbusiness processes; (2) data exchange standards for new business processes; and (3) a smart meter standards development process. We will discuss each topic below.

Data Exchange Standards for Current Business Processes

1. Real-Time and Time-of-Use Prices

The EDEWG Preliminary Proposal maintains that changes to existing EDI transactions are not required to establish customers in new rate programs, including RT or TOU programs. Specifically, the EDEWG Preliminary Proposal explains that existing transactions for current business processes, such as enrollment using the EDI 814 E (EDI enrollment transaction) and billing using the EDI 810 (EDI billing transaction), are capable of supporting EGSs' customers under RT/TOU programs and can be satisfied under three billing scenarios currently approved by the Commission:(1) EDC Consolidated Billing/Rate-Ready (Rate-Ready); (2) EDC Consolidated Billing/Bill-Ready (Bill-Ready); and (3) Dual Billing. "Rate-Ready" refers to the practice in which the non-billing party provides rate information to the billing party sufficient to calculate the non-billing party's charges. "Bill-Ready" is a billing practice in which the billing party receives the calculated charge amount(s) directly from the non-billing party in lieu of the billing party calculating it directly from the rate; and "Dual Billing" is the billing

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¹¹Preliminary Proposal at 1.

option in which the EDC and EGS render separate customer bills for the products and services each provides."¹²

As proposed in the EDEWG Preliminary Proposal, if a customer elects service on a RT or TOU rate, under Rate-Ready the EGS would specify on the EDI enrollment transaction a Rate-Ready rate code associated with the elected RT or TOU program — a process that assumes that the EDC is capable of billing these complex rates on behalf of the supplier in order to produce a single bill. Under Bill-Ready the EGS would specify on the EDI enrollment transaction that it will calculate its own charges to be consolidated with the bill produced by the EDC and provide the EDC with a Bill-Ready EDI billing transaction. Under Dual Billing the EDC and the EGS each would calculate their own charges and separately bill the customer, hence no special coding is needed on the EDI enrollment transaction and use of the EDI billing transaction is eliminated.

In the Tentative Order the Commission concurred with the use of these existing EDI transactions for enrollment and billing of EGS customers that elect to participate in an RT or TOU program. The Commission, however, proposed an additional requirement for an EDC to submit any appropriate EDI change control request within 30 days of the entry of a Final Order in this proceeding. To clarify, the purpose of this additional requirement was to address the possibility that under the Rate-Ready scenario, an EDC may not currently be able to accept and process an EGS's special rate code on the existing EDI enrollment transaction.

DRSG comments that it does not recommend any changes to current business processes unless the new standards are more cost-effective or otherwise

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¹² Glossary of EDEWG and EDI Terms, "Electronic Data Exchange Standards for Electric Deregulation in The Commonwealth of Pennsylvania," at 18-19, approved by Tentative Order entered December 8, 2008 at Docket No. M-00960890, F0015.

¹³Tentative Order at 5.

beneficial. DSRG notes that it is aware of standards under development for exchanging pricing and usage information by the NAESB Energy Services Provider Interface (ESPI) Task Force (NAESB standards). In addition, DSRG notes that the NIST has published in its Smart Grid Standards Catalog a data model for use with electric usage and pricing data known as Priority Action Plan 10 (PAP10) (NIST standards). DRSG suggests the ESPI and PAP10 standards be among those considered for use in Pennsylvania. ¹⁴

Duquesne supports approval of Bill-Ready and Dual Billing processes set forth in the Tentative Order, provided that Duquesne may continue its current practice of providing Rate-Ready billing utilizing the appropriate Rate-Ready rate code. Duquesne, however, disagrees with the proposed 30-day deadline to submit an EDI change control request and recommends that any deadline be incorporated into each EDC's smart meter plan. FirstEnergy explains that it is currently programmed to function under the Bill-Ready and Dual Billing options and that there is no reason for them to submit an EDI transaction change request. EAP agrees with and incorporates by reference the concerns and solutions voiced by its EDC members to that portion of the Tentative Order under the Data Exchange Standards for Current Business Processes heading. 17

With regard to current EDI business processes in general, EDEWG Leadership comments that data exchange standards for existing business processes are already defined and that only a small adjustment would be required. EDEWG Leadership asks the Commission to provide further clarification for the Tentative Order directives relating to EDEWG's expanded role, which historically has been to create and maintain EDI for EDCs and EGSs and not for data exchanges between EDCs and their customers, and EDEWG's integration with the separate EDC smart meter plans. ¹⁸

¹⁴ DRSG Comments at 1-2.

¹⁵Duquesne Comments at 5.

¹⁶FirstEnergy Comments at 3.

¹⁷EAP Comments at 4.

¹⁸EDEWG Leadership Comments at 1 and 2.

PECO supports Bill-Ready billing, which it believes would eliminate the need for EGS notification of any rate or pricing option that may be selected by the customer. PECO adds that if an EGS wants bill quality interval data and the EGS configures the existing EDI enrollment transaction with a flag, the transaction requires no modification. PECO asserts that EDEWG, not the EDC, should determine the extent that the EDI enrollment transaction must be modified and suggests that EDEWG be given 90 days to develop any required modifications. PECO emphasizes the need for implementation timelines to reflect scheduled deployments under an EDC's smart meter plan to avoid the creation of uncertainty regarding the implementation of those plans. PECO also asks the Commission to clarify that approved EDC smart meter plans are not subject to revision by EDEWG. 20

PPL comments that the existing practice for Bill-Ready and Dual Billing scenarios should be approved to support EGS customer participation RT or TOU pricing programs. PPL states that it does not currently offer Rate-Ready for RT or TOU pricing programs, which it asserts would require significant changes to its customer information and billing systems. PPL maintains that even if it were to offer this billing option in the future, no changes would be required of any EDI transaction.²¹

Of relative importance are PPL's comments relating to bill quality interval usage. PPL states that advanced metering technologies are being provided by EDCs and not the marketplace and that the company knows of no current complex pricing programs that employ meter level data that would justify an accelerated schedule. PPL recommends that any modifications undertaken be incorporated into each EDC's smart meter plan.²²

¹⁹PECO Comments at 3 and 4.

²⁰PECO Reply Comments at 1.

²¹PPL Comments at 5 and 6.

²²PPL Comments at 9.

FirstEnergy Solutions agrees that the EDI enrollment transaction allows an EGS to enroll a customer who chooses RT or TOU service, regardless of whether that customer is under Bill-Ready or Dual Billing. FirstEnergy Solutions also agrees with PPL's statement that no change is required of any EDI transaction for this purpose.²³

After review of each of the parties' comments the Commission is convinced that Bill Ready and Dual Billing capabilities present the best option for attaining TOU and RT pricing capabilities for EDC's covered by the smart meter mandate. The Commission acknowledges that Rate Ready systems can provide a solution that can support RT and TOU pricing. However, since almost all EDC's subject to the smart meter provisions already offer Bill Ready and Dual Billing, we believe it would be best to promote uniformity and direct that all EDCs subject to the smart meter provisions propose Bill Ready and Dual Billing functionalities as part of their smart meter plans. If an EDC has already filed its' completed smart meter plan, that EDC shall make a filing within 120 days explaining how and when it will incorporate this requirement into its smart meter plan. This directive does not preclude an EDC from creating or maintaining a Rate Ready system with RT and TOU rate functionality. Additionally, this directive does not preclude EDCs from researching and implementing potential non-EDI data sharing platforms at their own discretion as long as Bill Ready and Dual Billing systems are also offered.

2. Historical Interval Usage

In the Tentative Order we proposed that alternatives to the use of the existing EDI 867 Historical Interval Usage (EDI 867 HIU) transaction be explored for communicating 12 months of interval data that is recorded at the meter level. We further

 $^{^{23}\}mbox{FirstEnergy Solutions}$ Reply Comments at 1 and 2.

proposed that EDEWG and the covered EDCs should work together to identify a solution that can be implemented within 180 days of the entry date of this Final Order.²⁴

DRSG comments that if new standards are to be considered for any new business processes, the NAESB ESPI and NIST PAP10 standards should be among those considered for use in Pennsylvania. Duquesne does not object to exploring alternate solutions for the provision of historic interval usage data at the meter level, adding that a viable solution pursued by EDEWG or any other group should be via the web in a standardized environment and that implementation should be based upon an EDC's smart meter plan. EAP comments that 180 days is not an adequate period of time to allow for EDEWG to conduct an analysis of complex customer information and billing system modifications and have EDCs implement the agreed upon solutions. EDEWG Leadership states that EDEWG has not developed or maintained standards for communication of customer data directly to EDC customers and notes that this is outside the traditional scope of EDEWG.

FirstEnergy comments that the use of an alternative to the EDI 867 HIU is practical due to the sheer volume of data for 12 months of 15-minute interval meter reads. To address this need FirstEnergy has placed hourly interval usage data on a secured section of its supplier services website as an efficient short-term solutionthat it believes is prudent in light of the on-going activities at the NIST. FirstEnergy recommends that a customer portal may be a viable long-term solution and that implementation of such a portal would likely extend beyond 180 days of the Final Order. In addition, FirstEnergy questions if EDEWG is the appropriate organization to explore alternative solutions. ²⁹ PPL concurs that an alternative means of transmitting large volumes of historical interval

²⁴Tentative Order at 5.

²⁵DRSG Comments at 1 and 2.

²⁶Duquesne Comments at 5 and 6.

²⁷EAP Comments at 5.

²⁸EDEWG LeadershipComments at 2.

²⁹ FirstEnergy Comments at 3-5.

usage data is appropriate, but it believes it is inappropriate to require EDCs to install complex customer information and billing system modifications within a 180-day window.³⁰

PECO supports the proposal to explore alternative solutions for the provision of 12 months of historical interval usage at the meter level. PECO agrees that the use of national standards development organizations such as the NAESB should be leveraged to the extent possible. In particular, PECO suggests that an appropriate role for EDEWG would be to develop implementation level guidelines based on a national standard rather than to create an entirely new standard solely for Pennsylvania. PECO asks the Commission to seek ways to engage additional stakeholders who are not actively involved with EDEWG. PECO believes 180 days may not be adequate to develop and implement this standard. PECO also points out that no EGS commented on the appropriate method or timeline for making historical interval usage data available at the meter level. PECO adds that meter level data may not be as helpful for large end-use customers where multiple meters are linked to a single account, asserting that it may be prudent to offer this data only upon request by customers and EGSs. 32

FirstEnergy Solutions agrees with the comments of EDCs that the current EDI 867 HIU transaction is not useful. FirstEnergy Solutions believes that alternatives, such as a web-based solution, would facilitate interactions among customers, EDCs and EGSs. FirstEnergy Solutions believes that it is of the utmost importance that EGSs be consulted in developing potential alternative solutions to ensure functionality and practicality from a supplier and customer choice standpoint.³³

³⁰PPL Comments at 7.

³¹PECO Comments at 5.

³²PECO Reply Comments at 2.

³³ FirstEnergy Solutions Reply Comments at 2-4.

In resolving this issue we will address pre-smart mater and post-smart meter implementation separately. Concerning pre-smart meter implementation, the Commission understands the challenges presented by data volume associated with historical interval usage data sharing via EDI. However, we believe the present capabilities of a number of EDCs to share 12-months of historical interval data is a significant asset to the market. Consequently, the Commission directs all EDCs covered by the smart meter mandates to install the capability to share a minimum of 12 months of historical interval account level or meter level usage via EDI. These EDCs are directed to file within 120 days under its respective smart meter plan docket, a supplement outlining the EDC's current capability to provide a minimum of 12-months of historical account level or meter level usage data via EDI or which details the EDC's plan to provide this capability within one year.

Concerning post-smart meter implementation, we have determined that the use of a standardized, secure web-based portal will enable interactions among all parties for communicating 12-months of historical interval data on the meter and account level and provide meter or account level data as requested by the customer or the customer's third-party representative. We agree with DSRG, Duquesne, FirstEnergy and PECO that the efforts of national standards organizations should be leveraged to ensure broad industry participation over the long-term. Additionally, the Commission believes that a secure web-based portal presents a viable long-term solution for the sharing of bill quality interval usage data within 24 to 48 hours after daily meter reads.

As such, we direct that the EDEWG to initiate a web-portal working group of all EDCs covered by the smart meter mandate and any other interested stakeholders to develop a standardized solution for acquisition of interval usage data via a secure web-portal. The Commission expects the shorter-term solution will be a system that offers 12-

months of HIU data via a secure web platform. The Commission expects the longer-term solution will be a system that provides billing quality interval data within 24 to 48 hours of daily meter reads. We further direct the EDEWG working group to leverage any appropriate NIST and NAESB standards in the development of this secure web-portal. The EDEWG working group shall complete its development standards for the HIU solution by March 1, 2014, after which the EDEWG working group shall have till no later than March 1, 2015 to complete its development standards for the bill quality IU solution. The EDCs shall propose the solutions formed within these EDEWG working groups as part of their smart meter implementation plans.

We note that these directives shall not preclude EDCs from continuing any presently operating or planned website or other non-EDI functionality that permits authorized entities and customers to access historical interval usage data or interval usage data. In fact, the Commission encourages EDEWG to leverage any such EDC initiatives, to the extent possible, within the EDEWG web-portal working group. However, EDCs shall continue to offer such data via EDI as an interim solution until a long-term solution based on national standards is implemented.

3. Bill Quality Interval Usage

In the Tentative Order we proposed the use of a modified EDI 867 Interval Usage (EDI 867 IU) transaction to provide monthly bill-quality interval usage data at the meter level. In addition, we proposed that the deadline for deployment be 12 months in advance of the expiration of the EDCs' 30-month grace period.³⁴

Duquesne comments that it currently provides data at the account level and not at the meter level. Duquesne states that the company is in the process of enhancing

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³⁴Tentative Order at 6.

its customer care and billing system and asks that the proposed deadline for implementing a modified EDI 867 IU be rolled out as part of its smart meter plan with an expected date of completion of 2013.³⁵

DRSG comments that it does not recommend any changes to current business processes unless new standards are more cost-effective or otherwise beneficial. DRSG suggests that if new standards are to be considered for any new business processes, the ESPI and PAP10 standards should be among those considered for use in Pennsylvania. ³⁶

EAP comments that the timeframe for implementing a modified version of the existing EDI 867 IU transaction is problematic. With the exception of West Penn Power Company, EAP states that all EDC grace periods expire in October 2012. EAP recommends that, at a minimum, implementation should be set for a date that aligns with the expiration of individual EDC grace periods.³⁷

FirstEnergy comments that the EDI 867 IU transaction is already designed to communicate monthly bill-quality interval usage that was recorded at the meter. FirstEnergy points out, however, that the provision of meter level detail is optional using this transaction. FirstEnergy adds that for its companies, the account level and meter level are generally the same, except in rare meter installations where multiple meters are totaled for billing all charges in accordance with its tariff. In these rare instances, FirstEnergy asks the Commission to consider the totalized meter data to be meter level data. ³⁸

³⁵Duquesne Comments at 6 and 7.

³⁶DRSG Comments at 1 and 2.

³⁷EAP Comments at 5 and 6.

³⁸FirstEnergy Comments at 6 and 7.

PECO notes that the term "bill quality" was not clearly defined and submits that the data that was sourced from an EDC's meter data management system and that has completed the VEE process (has been verified, estimated and edited) associated with such systems should be considered bill quality data. Additionally, PECO recommends that the Commission allow at least six months after the close of the 30-month grace period for implementation of this requirement. PECO notes that this time will be needed for EDCs and EGSs to perform extensive testing of the modified systems before they can become operational. PECO believes that additional input from EGSs is critical, as some EGSs may prefer to continue to receive data at the account level to simplify their data processing. PECO emphasizes that it would be prudent to offer bill quality interval data at the meter level only upon request by the EGS. PECO agrees with other EDCs regarding the need to extend implementation timeframes for providing interval data solutions and to coordinate with each EDC's smart meter technology deployment schedules. FirstEnergy Solutions supports PECO's suggestion for additional input from EGSs to determine whether certain functionalities are even desired. At

PPL supports the EDEWG Preliminary Proposal for EDEWG to act to make meter level detail a requirement with an apparent effective date that coincides with an EDC's smart meter plan and 30-month grace period. Nevertheless, PPL recommends that any required system modifications be incorporated into each EDC's smart meter plan to assure coordination with other smart meter projects and cost recovery. 42

Initially, we note that we will adopt PECO's definition for the term "bill quality," in so far as it is in agreement with the use of this term by NAESB and NIST. We will adopt PECO's definition of "bill quality data" and shall define "bill quality data" as data that is sourced from an EDC's meter data management system that has completed

³⁹ PECO Comments at 6-8.

⁴⁰PECO Reply Comments at 2.

⁴¹FirstEnergy Solutions Reply Comments at 4.

⁴²PPL Comments at 8 and 9.

the process of being verified, estimated and edited, in association with such systems. Furthermore, we will accept the concept of totalized meter data for meter-level data, as requested by FirstEnergy, for IU transactions occurring during the pre-smart meter implementation period.

We also agree with the EDEWG Preliminary Proposal recommendation to make meter level IU data a requirement for the EDCs. In addition, we agree with PPL's proposal to have this requirement incorporated into each EDC's smart meter plan. Furthermore, such meter level data shall only be provided upon request by a customer or the customer's chosen third-party. Consequently, the Commission directs all EDCs to incorporate meter level IU data capabilities within their respective smart meter plan. If an EDC has already filed its completed smart meter plan, that EDC shall make a filing within 120 days explaining how and when it will incorporate this requirement into its smart meter plan.

We stress that this requirement shall not prevent an EDC from providing customers and their designated agents with bill quality interval data more frequently than on a monthly basis. In particular, the Commission continues to endorse the capability to share such information within 24 to 48 hours of daily meter reads, as we did in the Implementation Order. We reiterate our expectation that the EDEWG web-portal working group will develop a standardized platform for incorporation into EDC smart meter plans which will provide bill quality IU data within 24 to 48 hours of daily meter reads.

⁴³See Smart Meter Procurement and Installation Implementation Order at Docket No. M-2009-2092655, entered June 24, 2009, at 23.

Data Exchange Standards for New Business Processes

In the Tentative Order we proposed that the identification and development of new standards and formats to support Act 129 smart meter statutory requirements, along with the ongoing maintenance of existing standards and processes for this purpose, be developed by EDEWG and presented to the Commission for review. We further proposed that the development and ongoing maintenance of these standards and processes be done in a manner that includes all EDEWG participants, specifically, all EDCs, licensed EGSs, registered CSPs, and all other interested parties.⁴⁴

Duquesne commits to being an active participant in this analysis and believes it is prudent to follow the standards set forth by NAESB, which is currently examining standardization for third-party access. ⁴⁵ As noted with respect to their comments on current business processes, DRSG also suggests that the NAESB and NIST standards be among those considered relative to new business processes as well. ⁴⁶

EAP commends the Commission for adopting that portion of the EDEWG Preliminary Proposal which recommends that, moving forward, EDEWG should include EDCs and other third parties such as EGSs and CSPs to develop any new system data capabilities that are recognized as necessary and justifiable by EDCs in their respective smart meter plans. The EAP asks the Commission to encourage EDEWG to adopt existing national standards where appropriate and provide any necessary Pennsylvania implementation guidelines rather than develop new standards specific to Pennsylvania. 48

⁴⁴ Tentative Order at 6-8.

⁴⁵Duquesne Comments at 7.

⁴⁶DRSG Comments at 2.

⁴⁷Tentative Order at 6 and 7.

⁴⁸EAP Comments at 6 and 7.

EDEWG Leadership seeks clarification with regard to integrating the expanded technological scope of the EDEWG with the separate EDC smart meter plans. EDEWG Leadership believes such guidance will be helpful for eliminating barriers previously encountered in the EDEWG sub-team, when EDC representatives eager to move smart meter data access forward were unable to reach consensus as a result of conflicts with their approved smart meter plans. ⁴⁹

PECO agrees that EDEWG should adopt smart meter standards being developed by national organizations such as NAESB rather than writing Pennsylvania-specific standards. PECO notes that EDEWG already set a precedent for adapting national standards when it adopted the Gas Industry Standards Board (a precursor to NAESB) standard for Internet EDI, modifying certain language to comport with Commission orders rather than rewrite the standard. PECO also names three NAESB standards either completed or, nearing completion, that may be useful in the context of Pennsylvania's smart meter implementation. PECO suggests that EDEWG consider inviting experts from the relevant national standards development teams to provide guidance on how the standards were developed and how they can be used. PECO asserts that the initial comments reflect substantial consensus among EDCs including the importance of avoiding the creation of uncertainty associated with implementation of smart meter plans and the inherent problems in the scope of work proposed for EDEWG.

PPL reiterates conclusions presented in the EDEWG Preliminary Proposal, including that it is not possible for EDEWG to develop data exchange standards for undefined business processes. PPL believes that the Tentative Order appears to accept

⁴⁹EDEWG Leadership Comments at 3.

⁵⁰PECO Comments at 8 and 9.

⁵¹PECO Reply Comments at 1.

the approach described in the EDEWG Preliminary Proposal, but asks that the Final Order makes clear what is to be delivered by EDEWG.⁵²

FirstEnergy Solutions reiterates its previous statement that it is absolutely critical that input and communication from the EGS community be given serious consideration when discussing smart meter implementation. FirstEnergy Solutions also emphasizes that any sub-teams or groups that may be established should include EGS representatives when considering or discussing possible smart meter processes that relate to customers or retail choice in general. FirstEnergy Solutions agrees with EAP's suggestion that EDEWG should include EDCs and other third parties such as EGSs and CSPs to develop any new system data capabilities that are recognized as necessary and justifiable by EDCs in their respective smart meter plans.⁵³

We agree that national standards being developed for smart meters should be considered where applicable. As such, we direct the EDCs to propose appropriate NAESB and NIST standards in coordination with their respective smart meter plans. We encourage covered EDCs to actively participate in the ongoing development of applicable national standards, including those being addressed by the ESPI Task Force of NAESB. We further encourage covered EDCs to investigate other NAESB and NIST standards, including web-based meter data access initiatives such as NAESB/ESPI PAP20⁵⁴ for sharing with the EDEWG and potential implementation within their smart meter plans. The Commission believes that active participation by EDCs in the appropriate national standards development organizations will inform the EDCs of any significant impacts that these national standards will have upon the successful deployment of smart meter technology.

⁵²PPL Comments at 10 and 11.

⁵³FirstEnergy Solutions Reply Comments at 4 and 5.

⁵⁴ Green Button is an example of a web-based, end-user meter data access application that is based upon the NAESB/ESPI standards.

In response to comments about the need to clarify the Commission's expectations of EDEWG, we agree with the recommendations of EAP and PECO that it is appropriate for EDEWG to prepare and update statewide implementation guidelines as necessary for the deployment of national standards by EDCs in accordance with their respective Commission approved smart meter plans.

Smart Meter Data Standards Development Process

The EDEWG Preliminary Proposal included a timeline for the development of smart meter data exchange standards that comports with the smart meter 30-month grace period established for covered EDCs in the Implementation Order. The Tentative Order provided clarification of our expectations of the EDEWG Sub-Team that is working on smart meter interaction with customers and authorized third parties.

In the Tentative Order we proposed to specifically task the EDEWG team to review each EDC's respective smart meter plan and identify how customers were to be provided the Act 129 required functionality. Specifically, we proposed that EDEWG report on how the EDCs plan to provide customers with direct access to hourly usage and price information, provide support for automatic control of a customer's electric consumption by the customer, the utility or a customer's agent and provide direct meter access and electronic access to customer meter data by third parties with customer consent. Furthermore, we proposed that EDEWG provide detailed descriptions of any proposed statewide standardized transactions or protocols, if any, for each of the EDCs for providing the required functionality. EDEWG was also to provide estimated system and operational costs, both total and annual, for each utility to provide the required functionality, as well as the ability for a statewide solution with associated costs to provide such required functionality.⁵⁵

⁵⁵Tentative Order at 9.

Finally, in the Tentative Order we proposed that this review and analysis be completed with a report to the Commission within 90 days of the entry of a final order. Additionally, to ensure continued EGS engagement in EDC system upgrades and installations, we proposed that EDEWG incorporate these required smart meter functionalities within its current documentation, to include its Implementation Guidelines, Testing and Certification Plans, Revised Plan, Annual Plans, Change Control Request forms and other documentation as deemed necessary by EDEWG. ⁵⁶

Duquesne comments that it needs to progress with its own analysis and developing solutions to propose to the Commission for adoption. Duquesne submits that as statewide or EDEWG solutions become available, Duquesne will decide, with Commission input if needed or advisable, whether it should alter its plan and adopt different options.⁵⁷

DRSG agrees with the proposal to include all EDEWG participants in the development and ongoing maintenance of new standards and formats to support Act 129 requirements. Regarding standardization efforts, DRSG suggests that ESPI and PAP 10 standards be among those considered and further suggests that a review of other jurisdictions and markets may offer useful examples or lessons learned. DRSG explains that smart meter data is being exchanged among multiple entities today in Texas and Ontario, Canada, with California directing its utilities to implement data exchange with third parties with authorization by consumers. ⁵⁸

DRSG comments that "direct access" should mean access by a device in a home or business to information directly from the meter through short-range wireless, power line carrier, or other local communications link. DRSG further comments that

⁵⁶Tentative Order at 9 and 10.

⁵⁷Duquesne Comments at 8.

⁵⁸DRSG Comments at 2.

"electronic access" is understood to mean access to data that was backhauled to the EDC data center, then exchanged via an Internet connection between the EDC and a third party. Regarding automatic control, DRSG presents two primary communications options that are in use in pilot and commercial implementations, a Home Area Network (HAN) and the Internet. DRSG suggests that private wireless or power line carrier networks are other options. ⁵⁹

EAP questions the proposed review of EDC plans by EDEWG, which it believes introduces risk and uncertainty into plans now underway. EAP contends that EDEWG members are technical analysts not policy or cost-benefit analysts and should not be directed to identify data requirements that support identified current and new business processes. EAP expresses concern about tasking a volunteer working group with a 90-day deadline to suggest modifications to smart meter plans. ⁶⁰

EDEWG Leadership asks if it is the Commission's intent to expand the purview of EDEWG to create and maintain new smart meter standards between EDCs and their customers, which to date the sub-group was unable to establish since this is beyond the traditional scope of the EDEWG. EDEWG Leadership comments that standards cannot be defined or fully known until pilot programs are completed or for some EDCs, until their 30-month grace period has expired, since selected technology is being tested during those periods. EDEWG Leadership further comments that EDEWG is confident it can provide descriptions and data exchange standards for newly defined business processes; however, a financial analysis would be beyond the expertise and resources of the volunteers at EDEWG.⁶¹

⁵⁹DRSG Comments at 3.

⁶⁰ EAP Comments at 6-9.

⁶¹EDEWG Leadership Comments at 1-3.

FirstEnergy expresses concern as to whether EDEWG is the appropriate forum for developing smart meter systems or solutions. FirstEnergy suggests that a strategic planning group, such as the collaborative formed at Docket No. I-2011-2237952, relating to the investigation of Pennsylvania's Retail Electricity Market, or a joint venture by EDCs to cover cost sharing, project management, third-party vendor selection and dispute resolution would be better suited for this task. FirstEnergy submits that whatever forum is assigned the task, 90 days is insufficient time for producing a report. ⁶²

PECO lists examples of platforms being developed to address direct access information. PECO notes it has invested substantial resources in the implementation of its smart meter plan and to avoid uncertainty among its vendors, contractors and customers, asks that the plan not be subject to revision by EDEWG.⁶³ PECO requests that the Commission clarify whether the Commission is seeking a uniform statewide IT solution or statewide business rules that are more uniform. Even if the request is the analysis of IT aspects of a statewide solution, PECO maintains that 90 days is unrealistic for EDEWG to sort through the differences among the EDCs' internal processes and provide a report. PECO notes that EDEWG lacks the expertise to perform a cost-benefit analysis on the various options and that additional resources or expertise is critical to a meaningful analysis of a statewide solution.⁶⁴ PECO agrees with the comments of PPL that any new data exchange or access requirements should be incorporated into each EDC's plan and asks that this be accomplished through a focused amendment proceeding that will not subject entire smart meter plans to review and revision.⁶⁵

PPL is concerned that the activities and timeline proposed by in the Tentative Order are inconsistent with its smart meter plan. PPL believes that only the

⁶²FirstEnergy Comments at 8-10.

⁶³PECO Comments at 9 and 10.

⁶⁴PECO Comments at 11 and 12.

⁶⁵PECO Reply Comments at 3 and 4.

proposed task relating to standardized transactions and protocols is appropriate for EDEWG and that EDEWG is unable to perform the second task relating to the estimation of PPL's system and operation costs for providing the required functionalities. PPL believes that any effort to develop standards must be driven by the completion of pilots, demonstration of favorable cost-benefit and a decision to proceed with broader implementation in the context of the approved smart meter plans. ⁶⁶

FirstEnergy Solutions asserts that it is imperative to include EGS participation when developing the implementation of smart meter procurement and installation plans. FirstEnergy Solutions supports the implementation of smart meter technology so long as the process takes into account the interests of all stakeholders in the Pennsylvania retail electricity markets.⁶⁷

After careful consideration of all comments, we find three issues are raised by the parties, the role of EDEWG, the identification of new standards, and the modification of EDCs' smart meter plans. Regarding the role of EDEWG, we believe we sufficiently address this issue and resolve it in the discussions in the preceding section of this Order. We also address and identify potential new standards to be considered for statewide implementation. Specifically, we encourage covered EDCs to engage in the development of NAESB and NIST standards and to incorporate these standards into their respective smart meter plans.

We also strongly encourage EGSs, CSPs and other interested parties to participate in the national standards-setting organizations that are drafting models and standards for direct access and electronic access to smart meters and data for retail markets. Specifically, we encourage EDCs, EGSs, CSPs and other interested parties to actively participate in the NAESB Retail Electric Quadrant Executive Committee's Smart

⁶⁶PPL Comments at 11-15.

⁶⁷FirstEnergy Solutions Reply Comments at 5.

Grid Standards Development Subcommittee, the Smart Grid Standards Subcommittee on Priority Action Plan 10, the Energy Services Provider Interface Task Force, and the joint retail electric/gas Information Requirements and Technical Electronic Implementation Subcommittee (IR/TEIS).⁶⁸

As PECO comments and others suggest, NAESB has already completed or nearly completed standards that may be useful in the context of Pennsylvania's smart meter implementation. ⁶⁹ The work on the standardized information model for energy usage known as PAP 10 was completed and continues to evolve awaiting technical specifications from the NAESB Retail Energy Quadrant Executive Committee's Information Requirements and Technical Electronic Implementation Subcommittee. In addition, the NAESB\ESPI Task Force is engaged in the standardization of the Open ADE specification, which describes communications between utilities, customers and third-party service providers. The NAESB/ESPI effort is closely coordinated with numerous entities, and the Office of Science and Technology Policy has expressed interest in the standard and has encouraged major utilities to consider it in their implementation efforts. ⁷⁰

We also endorse the Green Button⁷¹ initiative and encourage covered EDCs to respond to this endorsement by creating a similar application on their websites.⁷² Green Button is an industry-led effort based on a common technical standard developed in collaboration with a public-private partnership supported by the NIST.⁷³ Green Button is designed around an open data standard to provide secure customer access to electronic

⁶⁸For information on the various NAESB smart grid activities visit: http://www.naesb.org/req/default.asp. For information on how to participate in NAESB visit: www.naesb.org.

⁶⁹PECO Comments at 8.

⁷⁰ NAESB Bulletin Volume 4, Issue 3 (September-December 2011) at 2.

⁷¹ For information on the Green Button initiative visit: http://www.greenbuttondata.org/greenabout.html.

⁷² PUC Chairman, Commissioner Encourage Electric Utilities to Participate in Federal 'Green Button' Initiative, Pa. PUC Press Office (April 12, 2012).

⁷³ Peter Behr, E&E reporter, "Grid: Downloading energy usage could be one 'green' click away," ClimateWire (January 18, 2012).

energy usage information.⁷⁴ It was reported that 20 utilities and major electricity suppliers across the United States and Canada have signed onto this initiative, providing meter data access capability to more than 27 million households secure access to their energy data with a click of an online Green Button.⁷⁵

Finally, the third issue relates to modifications to EDCs' smart meter plans. The Commission agrees with EAP, PECO and PPL that it is disconcerting to have invested time, money and resources to implement an approved smart meter plan and then have those plans subject to changes and subsequent risks and costs. The Implementation Order provides guidelines and a blueprint for our expectations regarding compliance with Act 129 and the EDCs' smart meter plans. The Implementation Order directed EDCs to work with EDEWG and incorporate identified EDI capabilities in the proposed smart meter plans EDCs would file with the Commission for review. We agree with the comments of EDEWG Leadership and the EDCs, that the approved EDCs' smart meter plans are works-in-progress. Consequently, we will retract our recommendation to have EDEWG review each EDC's smart meter plan for compliance with meeting the required functionalities. We believe that is an issue that should be analyzed by the stakeholders within the context of each EDCs smart meter proceedings. Further, we will retract our recommendation to have EDEWG provide an estimate on the costs incurred by utilities to provide said functionalities.

CONCLUSION

All smart meter plans were reviewed and approved based upon one or more references by EDCs that they will work with EDEWG on standardization of system capabilities that would be tested or implemented within the 30-month grace period. We

⁷⁴ Green Button How To at http://www.greenbuttondata.org/greenabout.html.

⁷⁵"Administration Announces New Tools to Help Consumers," Smartgrid.gov, U. S. Department of Energy news.

look forward to the EDCs providing detailed plans on how they intend to meet all of the Act 129 requirements, including providing customers and their designated third-party representatives with direct electronic access to the customer's electric usage and price data.

THEREFORE,

IT IS ORDERED:

- 1. That electric distribution companies required to submit smart meter technology and implementation plans propose, as part of those plans, Bill Ready and Dual Billing functionalities. If an electric distribution company has already filed its completed smart meter plan, that electric distribution company is directed to file within 120 days under its respective smart meter technology and implementation plan docket a supplement outlining how and when it will incorporate Bill Ready and Dual Billing functionalities into its smart meter implementation.
- 2. That electric distribution companies required to submit smart meter technology and implementation plans file within 120 days under its respective smart meter technology and implementation plan docket a supplement outlining the EDC's current capability to provide a minimum of 12-months of historical account or meter level usage data via electronic data interchange or which details the EDC's plan to provide this capability within one year.

- 3. That the Electronic Data Exchange Working Group shall convene a web-portal working group including all electric distribution companies required to submit smart meter technology and implementation plans and other interested stakeholders to develop a standardized solution for the acquisition of historical interval usage and billing quality interval usage data via a secure web-portal, as specifically detailed within this Order, for incorporation within each electric distribution company's smart meter technology and implementation plan.
- 4. That electric distribution companies required to submit smart meter technology and implementation plans propose, as part of those plans, meter level interval usage data capabilities. If an electric distribution company has already filed its completed smart meter plan, that electric distribution company is directed to file within 120 days under its respective smart meter technology and implementation plan docket a supplement outlining how and when it will incorporate meter level interval usage data capabilities into its smart meter implementation.
- 5. That any directive, requirement, disposition or the like contained in the body of this Final Order that is not the subject of an individual Ordering Paragraph, shall have the full force and effect as if it was fully contained in this part.

6. That this Order shall be published in the *Pennsylvania Bulletin* and served upon the Office of Consumer Advocate, the Office of Small Business Advocate, the Bureau of Investigation and Enforcement, all jurisdictional electric distribution companies, all licensed electric generation suppliers, the Electronic Data Exchange Working Group leadership, and all parties who participated in proceedings at Docket Nos. M-2009-2123944, M-2009-2123945, M-2009-2123948, M-2009-2123950 and M-2009-2123951.

BY THE COMMISSION

Rosemary Chiavetta

Secretary

(SEAL)

ORDER ADOPTED: December 5, 2012

ORDER ENTERED: December 6, 2012



North American Energy Standards Board

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Host Dominion, Richmond, VA

October 19, 2012

TO: NAESB Board of Directors and Executive Committee

FROM: Rae McQuade

RE: Schedule of 2013 Meetings

Below is the schedule of 2013 meetings for the Board of Directors, Advisory Council and Executive Committee.

2013 Calendar of Board and Advisory Council Meetings		
Date	Meeting	Location
February 2	Advisory Council Meeting	Washington D.C. – Renaissance Washington Hotel (in conjunction with NARUC Winter Meeting)
April 4	Board of Directors	Houston, TX – Four Seasons Downtown Hotel
September 5	Board of Directors, Meeting of the Members and Strategic Session	Houston, TX – Four Seasons Downtown Hotel
December 12	Board of Directors	Houston, TX – Four Seasons Downtown Hotel
	2013 Calendar of Executive Committee Me	eetings
Date	Meeting	Location
February 19-21	Executive Committee (WEQ, Retail, WGQ)	Host Salt River Project, Phoenix, AZ
April 30 - May 2	Executive Committee (WEQ, Retail, WGQ)	Host Aces Power, Carmel, IN
August 20-22	Executive Committee (WEQ, Retail, WGQ)	Houston, TX – Four Seasons Downtown Hotel

Notes:

October 22-24

1. The Retail Executive Committee meetings will be held by conference call and web cast unless otherwise determined by the retail leadership.

Executive Committee (WEQ, Retail, WGQ)

2. For each of the Board meetings, a dinner will be held the night before at the Petroleum Club in the Exxon Building, 800 Bell Street, 43rd Floor.