North American Energy Standards Board
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NORTH AMERICAN ENERGY STANDARDS BOARD
RETAIL GAS & ELECTRIC QUADRANTS EXECUTIVE COMMITTEE MEETING MATERIALS

Wednesday, February 20, 2013 -- 10:00 am to 4:00 pm MT

PERA Club/Mesquite Hall, Tempe, AZ

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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
RETAIL QUADRANTS DRAFT AGENDA
Wednesday, February 20, 2013 – 10:00 am to 4:00 pm MT
PERA Club/Mesquite Hall (first floor of Clubhouse), Tempe, AZ

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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
RETAIL QUADRANTS DRAFT AGENDA
Wednesday, February 20, 2013 – 10:00 am to 4:00 pm MT
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#	Agenda Item	Page
	subsequent notational ballot	
	• Recommendation should be available for review prior to EC meeting	
7.	Subcommittee / Development Updates (meeting materials for updates will be provided by leadership as they are available):	
	• Triage Subcommittee: http://www.naesb.org/pdf4/tr011813agenda_revised.docx (January 18 Agenda)	169
	• Business Practices Subcommittee (BPS)	
	• BPS Texas Task Force	
	• Information Requirements & TEIS Subcommittee	
	• Glossary Efforts	
	• Smart Grid Standards Development Subcommittee Task Forces: http://www.naesb.org/pdf4/r13001.doc	170
8.	Publication Schedule Review	
	• WGQ Publication Schedule (Version 2.1): http://www.naesb.org/misc/wgq_publication_schedule_ver2_1.doc	174
	• WEQ Publication Schedule (Version 3.1): http://www.naesb.org/misc/weq_publication_schedule_ver3_1.doc	190
	• Retail Publication Schedule (Version 2.1): http://www.naesb.org/misc/retail_publication_schedule_ver2_1.doc	192
9.	Board of Directors, Board Committee and Regulatory Updates:	
	• Board Meeting December 6, 2012: http://www.naesb.org/pdf4/bd120612dm.docx	194
	• Membership Update: http://www.naesb.org/misc/membership_report_011813.doc (Membership Report)	206
	• Board Revenue Efforts	
	• Managing Committee: http://www.naesb.org/pdf4/managing112912_10am_notes.docx (November 29 am Notes); http://www.naesb.org/pdf4/managing112912_2pm_notes.docx (November 29 pm Notes)	216
	• Regulatory Updates:	220
	◦ November 30, 2012 – NAESB Status Report to the FERC Regarding Public Key Infrastructure Effort (Docket Nos. RM05-5-000, RM05-5-022), http://www.naesb.org/pdf4/ferc113012_naesb_pki.pdf	
	◦ December 20, 2012 – NAESB Report to the FERC Regarding Errata to WEQ Version 003 (Docket Nos. RM05-5-000, RM05-5-022), http://www.naesb.org/pdf4/ferc122012_weq_version003_errata.pdf	
	◦ January 29, 2013 – NAESB Report to the FERC Regarding Public Key Infrastructure Standards (Docket Nos. RM05-5-000, RM05-5-022), http://www.naesb.org/pdf4/ferc012913_pki_standards_report.pdf	
10.	Other Business	321
	• ANSI Energy Efficiency Standardization Coordination Collaborative	
	• Pennsylvania PUC Order : Electronic Data Exchange Working Group: http://www.naesb.org/pdf4/retail_ec022013w1.doc	
	• Advisory Council: http://www.naesb.org/pdf4/advisory020213notes.docx	
	• Meeting Schedule 2013: http://www.naesb.org/pdf4/2013_schedule.pdf	
11.	Adjourn	

Attire – Business Casual

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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.

Participants recording any portion of a NAESB meeting or conference call are reminded that federal and state statutes mandate various disclosure and consent requirements. It is NAESB's policy that participants comply with all applicable state and federal statutes related to the recording of conversations. As a courtesy to the meeting attendees, anyone taping a meeting should announce that they are doing so in the meeting before beginning the recording.

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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 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		
V A C A N C Y		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 Electric Quadrant

SERVICE PROVIDERS/SUPPLIERS SEGMENT		**TERM END:**
Bill Barkas	Manager of Retail State Government Relations, Dominion Retail, Inc.	12-31-2013
Jim Minneman	Controller, PPL Solutions, LLC	12-31-2013
Wendell Miyaji	Vice President – Energy Sciences, Comverge, Inc.	12-31-2014
V A C A N C Y		12-31-2014
UTILITIES SEGMENT		
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
Judy Ray	Industrial Segment Manager – Contract Administrator, Alabama Power Company	12-31-2014
V A C A N C Y		12-31-2014
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
Christine Wright	Senior Policy Analyst, Public Utility Commission of Texas	12-31-2014
Susan Munson	Retail Market Liaison, Electric Reliability Council of Texas (ERCOT)	12-31-2014

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

TRANSMISSION SEGMENT		**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 SEGMENT			
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.
V A C A N C Y		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
V A C A N C Y		12-31-2013	at large
MARKETERS/BROKERS 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.
V A C A N C Y		12-31-2014	at large
V A C A N C Y		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
V A C A N C Y		12-31-2013	at large

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DISTRIBUTION/LOAD SERVING ENTITIES (LSE) SEGMENT		TERM END:	SUBSEGMENT:
Ray Phillips	Manager of Compliance and Special Projects, Alabama Municipal Electric Authority	12-31-2014	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
V A C A N C Y		12-31-2013	at large
V A C A N C Y		12-31-2014	at large
Richard Gillman	Manager – Policy Development & Analysis, Bonneville Power Administration	12-31-2013	Other
David Taylor	Director of Standards Regulatory Compliance, North American Electric Reliability Corporation (NERC)	12-31-2013	At-Large
END USERS SEGMENT			
V A C A N C Y		12-31-2013	at large
V A C A N C Y		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
V A C A N C Y		12-31-2013	at large
Paul Sorenson	Vice President - Central Markets Strategy, Open Access Technology International, Inc.	12-31-2013	At-Large
INDEPENDENT GRID OPERATORS/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
V A C A N C Y		12-31-2014
V A C A N C Y		12-31-2014
Rachel Bryan	Partner, Stryve Advisors, LLC	12-31-2013
TJ Ferreira	Director, Power Costs, Inc. (PCI)	12-31-2013
V A C A N C Y		12-31-2013

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

SERVICE PROVIDERS/SUPPLIERS SEGMENT		TERM END:
V A C A N C Y		12-31-2013
V A C A N C Y		12-31-2013
Richard Zollars	Director - Data and Billing, Dominion Retail, Inc.	12-31-2014
V A C A N C Y		12-31-2014
DISTRIBUTORS SEGMENT		
Dan Jones	Senior Account Manager – Customer Choice, Duke Energy	12-31-2013
V A C A N C Y		12-31-2013
V A C A N C Y		12-31-2014
V A C A N C Y		12-31-2014
END USERS/PUBLIC AGENCIES SEGMENT		
V A C A N C Y		12-31-2014
V A C A N C Y		12-31-2014
V A C A N C Y		12-31-2013
V A C A N C Y		12-31-2013

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2013 EXECUTIVE COMMITTEE ALTERNATES[1] – 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 COMPANY (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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2013 EXECUTIVE COMMITTEE ALTERNATES – Retail Electric Quadrant

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
UTILITIES SEGMENT		**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
END USERS/PUBLIC AGENCIES SEGMENT		**DESIGNATION DATE**
Eric Winkler	Project Manager – Demand Resource Qualification, Resource Analysis and Integration, ISO New England	06-15-2012

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

TRANSMISSION SEGMENT		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

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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
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
END USERS SEGMENT		**SUB-SEGMENT**	**DESIGNATION DATE**
Mark W. Hackney	Regional Director – Transmission, Open Access Technology International, Inc.	At-Large	06-29-2010

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INDEPENDENT GRID OPERATORS/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
Frank Koza	Executive Director – Operations Support, PJM Interconnection, LLC		02-21-2012
Dave Francis	Principal Advisor – Standards Compliance and Strategy, Midwest ISO		02-24-2012

TECHNOLOGY AND SERVICES	SUB-SEGMENT	DESIGNATION DATE

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

SERVICE PROVIDERS/SUPPLIERS SEGMENT		DESIGNATION DATE
Paul Cherevka	Project Manager Data Warehouse, Dominion Retail	06-28-2005

DISTRIBUTORS SEGMENT		DESIGNATION DATE
Joe Stengel	Manager, Federal Regulatory Affairs, Philadelphia Gas Works (American Public Gas Association (APGA))	01-01-2002

END USERS/PUBLIC AGENCIES SEGMENT	DESIGNATION DATE

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January 29, 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 and Draft Agendas with links to Meeting Materials Highlighted with Additional Materials an Agenda Updates

NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETINGS
Hosted by Salt River Project in Phoenix, AZ

First, let me thank Salt River Project and Lori-Lynn Pennock 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: PERA Club - 1 E. Continental Drive, Tempe, AZ 85281-1053

Contact: Veronica Thomason, 713-356-0060

When: Tuesday, February 19 -- 10:00 a.m. to 1:00 p.m. Mountain – Wholesale Electric Quadrant[1]

Wednesday, February 20 -- 10:00 a.m. to 4:00 p.m. Mountain – Retail Quadrants

Thursday, February 21 -- 9:00 a.m. to 3:00 p.m. Mountain – Wholesale Gas Quadrant
**Please note that WGQ EC meeting will be held at the Power Operations Building (POB) - 6504 E. Thomas Road, Scottsdale, AZ 85251 location. Lunch for the WGQ EC will be provided at the POB

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.[2] 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.

[1] *Please note that the meeting has been shortened to provide additional time for subcommittee activities.*
[2] *If you will require WIFI access while in the meeting at the PERA Club, please contact Lori-Lynn Pennock (lori-lynn.pennock@srpnet.com or 602-236-4360) with your name, company, and email address no later than February 11 to avoid connection delays. Access will be granted after individual user IDs and passwords are created.*

North American Energy Standards Board

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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
Mon February 18	11:00 am to 11:30 am MT	Retail Glossary Meeting Room: PERA Club/Centennial Conference Center (labeled "Board Room" west of Clubhouse) Conference Call Number: 866-740-1260 Access Code: 7133560 Security Code: 1221 Web Cast: http://www.readytalk.com (please use same codes)
Mon February 18	11:30 am to 3 pm MT	Day 1 of Retail BPS Meeting Room: PERA Club/Centennial Conference Center (labeled "Board Room" west of Clubhouse) Conference Call Number: 866-740-1260 Access Code: 7133560 Security Code: 1221 Web Cast: http://www.readytalk.com (please use same codes)
Tues February 19	9 am to 3 pm MT	Day 2 of Retail BPS Meeting Room: PERA Club/Centennial Conference Center (labeled "Board Room" west of Clubhouse) 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 1 pm MT	WEQ EC Meeting Room: PERA Club/Mesquite Hall (first floor of Clubhouse) Conference Call Number: 866-740-1260 Access Code: 7133562 Security Code: 8251 Web Cast: http://www.readytalk.com (please use same codes)

Date	Time	Meeting/Location
	9 am to 4 pm MT	Day 1 of WGQ Joint IR & Technical Subcommittees Meeting Room: PERA Club/Big Horn Terrace (labeled "BHT" south of Clubhouse) Conference Call Number: 866-740-1260 Access Code: 3560063 Security Code: 7342
Wed February 20	10 am to 4 pm MT	Retail EC Meeting by phone/web cast – for in person attendance, please join NAESB staff at following location Room: PERA Club/Mesquite Hall (first floor of Clubhouse) 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 MT	Day 2 of WGQ Joint IR & Technical Subcommittees Meeting Room: PERA Club/Big Horn Terrace (labeled "BHT" south of Clubhouse) Conference Call Number: 866-740-1260 Access Code: 3560063 Security Code: 7342
	8 am to 3 pm MT	Day 1 of WEQ OASIS Subcommittee Meeting Room: PERA Club/Centennial Conference Center (labeled "Board Room" west of Clubhouse) Conference Call Number: 866-740-1260 Access Code: 7133560 Security Code: 2253 Web Cast: http://www.readytalk.com (please use same codes)
Thu February 21	9 am to 3 pm MT	WGQ EC Meeting Room: Power Operations Building/6504 E. Thomas Rd., Scottsdale, AZ 85251/Mesquite Conference Room Conference Call Number: 866-740-1260 Access Code: 7133562 Security Code: 3825 Web Cast: http://www.readytalk.com (please use same codes)
	8 am to 12 pm MT	Day 2 of WEQ OASIS Subcommittee Room: PERA Club/Centennial Conference Center (labeled "Board Room" west of Clubhouse) Conference Call Number: 866-740-1260 Access Code: 7133560 Security Code: 2253 Web Cast: http://www.readytalk.com (please use same codes)

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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/wgq/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

FEBRUARY 19-21, 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, February 19, 2013 – 10:00 am to 1:00 pm MT
PERA Club/Mesquite Hall (first floor of Clubhouse), Tempe, AZ

#	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/alt_ec_members.pdf (EC Alt)

2. Consent Agenda (simple majority to approve)

- Adoption of Agenda: http://www.naesb.org/pdf4/ec021913a.docx
- Adoption of the EC Meeting Minutes from October 23, 2012: http://www.naesb.org/pdf4/weq_ec102312dm.docx; (*Supplemental material may be available prior to the meeting which would include redlines to the draft minutes)*

3. Adoption of changes to the 2013 WEQ Annual Plan to be proposed to the Board of Directors: http://www.naesb.org/pdf4/weq_2013_annual_plan.docx; (Revised and redlined by Ed Skiba) http://www.naesb.org/pdf4/weq_ec021913w1.docx

4. Review and consider for vote WEQ 2012 Annual Plan Item 6.a – Develop standard to support PAP 10, Energy Usage Information Model, Phase 2, Harmonization with CIM and SEP 2.0 (super majority vote)

- Recommendation: http://www.naesb.org/pdf4/weq_2012_api_6a_rec.docx
- Request for Formal Comments: http://www.naesb.org/pdf4/weq_120312_reqcom.doc - *comment period ended on January 3, 2013*
- Comments Submitted by the WEQ Standards Review Subcommittee: http://www.naesb.org/pdf4/weq_120312_weq_srs.doc

5. Update on Next Steps for the EIR, Status of the EIR Business Practice Standards Development and e-Tag Functional Specification Update (*Supplemental material may be available prior to the meeting which would include a presentation)*

6. Update on Status of the OASIS Preemption Recommendation (*Supplemental material may be available prior to the meeting which would include a presentation)*

7. Update on Status of the Parallel Flow Visualization Effort(*Supplemental material may be available prior to the meeting which would include a presentation)*

8. Subcommittee / Development Updates

- Triage Subcommittee: http://www.naesb.org/pdf4/tr011813agenda_revised.docx (January 18 Agenda)
- Business Practices Subcommittee (BPS) (may be covered in agenda item 7)
- Smart Grid Standards Development Subcommittee and Task Forces
- OASIS Subcommittee (may be covered in agenda item 6)
- Joint Electric Scheduling Subcommittee (JESS) (may be covered in agenda item 5)
- Standards Review Subcommittee (SRS)
- Public Key Infrastructure (PKI) Subcommittee

9. Publication Schedule Review

- WGQ Publication Schedule (Version 2.1): http://www.naesb.org/misc/wgq_publication_schedule_ver2_1.doc

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

Tuesday, February 19, 2013 – 10:00 am to 1:00 pm MT
PERA Club/Mesquite Hall (first floor of Clubhouse), Tempe, AZ

#	Agenda Item

- 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

10. Board of Directors, Board Committee and Regulatory Updates:

- Board Meeting December 6, 2012: http://www.naesb.org/pdf4/bd120612dm.docx
- Membership Update: http://www.naesb.org/misc/membership_report_011813.doc (Membership Report)
- Board Revenue Efforts
- Board Retail Structure Review Committee: http://www.naesb.org/pdf4/bd120612a4.docx (December 6 Report); http://www.naesb.org/pdf4/rsrc011013mn.doc (January 10 Notes); http://www.naesb.org/pdf4/rsrc012413mn.docx (January 24 Notes); http://www.naesb.org/pdf4/rsrc012413w1.docx (January 24 Report)
- Managing Committee: http://www.naesb.org/pdf4/managing112912_10am_notes.docx (November 29 am Notes); http://www.naesb.org/pdf4/managing112912_2pm_notes.docx (November 29 pm Notes)
- Regulatory Updates:
  - November 30, 2012 – NAESB Status Report to the FERC Regarding Public Key Infrastructure Effort (Docket Nos. RM05-5-000, RM05-5-022), http://www.naesb.org/pdf4/ferc113012_naesb_pki.pdf
  - December 20, 2012 – NAESB Report to the FERC Regarding Errata to WEQ Version 003 (Docket Nos. RM05-5-000, RM05-5-022), http://www.naesb.org/pdf4/ferc122012_weq_version003_errata.pdf
  - January 29, 2013 – NAESB Report to the FERC Regarding Public Key Infrastructure Standards (Docket Nos. RM05-5-000, RM05-5-022), http://www.naesb.org/pdf4/ferc012913_pki_standards_report.pdf

11. Other Business

- ANSI Energy Efficiency Standardization Coordination Collaborative
- Advisory Council: http://www.naesb.org/pdf4/advisory020213notes.docx
- Meeting Schedule 2013**:** http://www.naesb.org/pdf4/2013_schedule.pdf

12. Adjourn

Attire – Business Casual

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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
RETAIL QUADRANTS DRAFT AGENDA
Wednesday, February 20, 2013 – 10:00 am to 4:00 pm MT
PERA Club/Mesquite Hall (first floor of Clubhouse), Tempe, AZ

#	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/alt_ec_members.pdf (EC Alt)
2. Consent Agenda (simple majority to approve)
   - Adoption of Agenda: http://www.naesb.org/pdf4/ec021913a.docx
   - Adoption of the EC Meeting Minutes from October 24, 2012: http://www.naesb.org/pdf4/retail_ec102412dm.docx
   - Adoption of changes to the 2013 Retail Annual Plan to be proposed to the Board of Directors: http://www.naesb.org/pdf4/retail_2013_annual_plan.docx
3. Discussion on the progress of the Board Retail Structure Review Subcommittee: http://www.naesb.org/pdf4/bd120612a4.docx (December 6 Report); http://www.naesb.org/pdf4/rsrc011013mn.doc (January 10 Notes); http://www.naesb.org/pdf4/rsrc012413mn.docx (January 24 Notes); http://www.naesb.org/pdf4/rsrc012413w1.docx (January 24 Report)
4. Review and Consider for Vote 2012 Retail Annual Plan Item No. 10.b – Retail Customer Authorization Form (super majority voted)
   - Recommendation: http://www.naesb.org/pdf4/retail_2012_api_10b_rec.doc
     - Attachment: http://www.naesb.org/pdf4/retail_2012_api_10b_rec_attach.doc
   - Request for Formal Comment: http://www.naesb.org/pdf4/retail_120412_reqcom.doc - *comment period ended on January 4, 2013*
     - Comments Submitted by Xcel Energy: http://www.naesb.org/pdf4/retail_120412_xcel_energy.pdf
     - Comments Submitted by Integrys Energy: http://www.naesb.org/pdf4/retail_120412_integrys_energy.docx
     - Comments Submitted by Direct Energy: http://www.naesb.org/pdf4/retail_120412_direct_energy.docx
     - Comments Submitted by Exelon/Constellation: http://www.naesb.org/pdf4/retail_120412_exelon.docx
     - Late Comments Submitted by Retail BPS, DSM/EE and Data Privacy Task Force: http://www.naesb.org/pdf4/retail_120412_retail_bps_late.doc
5. Review and consider for vote Retail 2012 Annual Plan Item 7.b.i – Develop standard to support PAP 10, Energy Usage Information Model, Phase 2, Harmonization with CIM and SEP 2.0 (super majority vote)
   - Recommendation: http://www.naesb.org/pdf4/retail_2012_api_7bi_rec.docx
   - Request for Formal Comments: http://www.naesb.org/pdf4/req_120312_reqcom.doc - *comment period ended on January 3, 2013*
     - Comments Submitted by Balch & Bingham: http://www.naesb.org/pdf4/req_120312_balch_bingham.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 – for consideration and vote through subsequent notational ballot
   - Recommendation should be available for review prior to EC meeting

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RETAIL QUADRANTS DRAFT AGENDA
Wednesday, February 20, 2013 – 10:00 am to 4:00 pm MT
PERA Club/Mesquite Hall (first floor of Clubhouse), Tempe, AZ

#	Agenda Item
7.	Subcommittee / Development Updates (meeting materials for updates will be provided by leadership as they are available):

- Triage Subcommittee: http://www.naesb.org/pdf4/tr011813agenda_revised.docx (January 18 Agenda)
- Business Practices Subcommittee (BPS)
- BPS Texas Task Force
- Information Requirements & TEIS Subcommittee
- Glossary Efforts
- Smart Grid Standards Development Subcommittee Task Forces: http://www.naesb.org/pdf4/r13001.doc

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 December 6, 2012: http://www.naesb.org/pdf4/bd120612dm.docx
- Membership Update: http://www.naesb.org/misc/membership_report_011813.doc (Membership Report)
- Board Revenue Efforts
- Managing Committee: http://www.naesb.org/pdf4/managing112912_10am_notes.docx (November 29 am Notes); http://www.naesb.org/pdf4/managing112912_2pm_notes.docx (November 29 pm Notes)
- Regulatory Updates:
  - November 30, 2012 – NAESB Status Report to the FERC Regarding Public Key Infrastructure Effort (Docket Nos. RM05-5-000, RM05-5-022), http://www.naesb.org/pdf4/ferc113012_naesb_pki.pdf
  - December 20, 2012 – NAESB Report to the FERC Regarding Errata to WEQ Version 003 (Docket Nos. RM05-5-000, RM05-5-022), http://www.naesb.org/pdf4/ferc122012_weq_version003_errata.pdf
  - January 29, 2013 – NAESB Report to the FERC Regarding Public Key Infrastructure Standards (Docket Nos. RM05-5-000, RM05-5-022), http://www.naesb.org/pdf4/ferc012913_pki_standards_report.pdf

10. Other Business

- ANSI Energy Efficiency Standardization Coordination Collaborative
- Pennsylvania PUC Order : Electronic Data Exchange Working Group: http://www.naesb.org/pdf4/retail_ec022013w1.doc
- Advisory Council: http://www.naesb.org/pdf4/advisory020213notes.docx
- 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
WHOLESALE GAS QUADRANT DRAFT AGENDA
Thursday, February 21, 2013 – 9:00 am to 3:00 pm MT
SRP Power Operations Building (POB) – 6504 E. Thomas Road, Scottsdale, AZ 85251

#	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 WGQ EC Members and Alternates: http://www.naesb.org/pdf4/ec_terms.pdf (EC) and http://www.naesb.org/pdf4/alt_ec_members.pdf (EC Alt)
2.	Consent Agenda (simple majority to approve) • Adoption of Agenda: http://www.naesb.org/pdf4/ec021913a.docx • Adoption of the EC Meeting Minutes from October 25, 2012: http://www.naesb.org/pdf4/wgq_ec102512dm.docx; *(Supplemental material may be available prior to the meeting which would include redlines to the draft minutes).* • Adoption of changes to the 2013 WGQ Annual Plan to be proposed to the Board of Directors: http://www.naesb.org/pdf4/wgq_2013_annual_plan.docx
3.	Consideration and Possible vote on 2012 WGQ Annual Plan Item 1 – Investigate how to make standards referencing, which may include reorganization, more user friend for implementation (Reorganize Standards Requests) (simple majority vote) • Recommendation: http://www.naesb.org/pdf4/wgq_2012_ap_1_rec_010413.doc • Request for Comments: http://www.naesb.org/pdf4/wgq_011513reqcom.doc – *comment period ends on February 13, 2013*
4.	Consideration and Possible vote on Request R12003/Request R12004 – Add contact detail data elements to Imbalance Trade datasets/Add contact data elements to Withdrawal of Request for Imbalance (super majority vote) • Recommendation: http://www.naesb.org/pdf4/wgq_r12003_r12004_rec_010413.doc • Request for Comments: http://www.naesb.org/pdf4/wgq_011513reqcom.doc – *comment period ends on February 13, 2013* • Comments submitted by Williams Gas Pipeline: http://www.naesb.org/pdf4/wgq_011513_R12003_R12004_williams.docx
5.	Consideration and Possible vote on Request R12007 – Modify NAESB WGQ Standard No. 5.3.70 to allow the use of Notice Type as an alternative to the Notice Type Abbreviation (super majority vote) • Recommendation: http://www.naesb.org/pdf4/wgq_r12007_rec_010413.doc • Request for Comments: http://www.naesb.org/pdf4/wgq_011513reqcom.doc – *comment period ends on February 13, 2013* • Comments submitted by Williams Gas Pipeline and Dominion Transmission: http://www.naesb.org/pdf4/wgq_011513_R12007_williams_dominion.docx
6.	Consideration and Possible vote on 2012 WGQ Annual Plan Item 14.a – FERC Order No. 587-V issues and implications to NAESB Standards – Address issues other than design capacity and modify standards as needed (super majority vote) • Recommendation: http://www.naesb.org/pdf4/wgq_2012_ap_14a_rec_112712.doc • Request for Comments: http://www.naesb.org/pdf4/wgq_011513reqcom.doc – *comment period ends on February 13, 2013*

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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
WHOLESALE GAS QUADRANT DRAFT AGENDA
Thursday, February 21, 2013 – 9:00 am to 3:00 pm MT
SRP Power Operations Building (POB) – 6504 E. Thomas Road, Scottsdale, AZ 85251

#	Agenda Item

- Comments submitted by American Gas Association: http://www.naesb.org/pdf4/wgq_011513_2012api14a_aga.pdf

7. Consideration and Possible vote on Request R12009 – Add two Sender's Option Data Elements to NAESB WGQ Standard No. 5.4.22 – Transactional Reporting – Interruptible Transportation (super majority vote)

   - Recommendation: http://www.naesb.org/pdf4/wgq_r12009_rec_112712.doc
   - Request for Comments: http://www.naesb.org/pdf4/wgq_011513reqcom.doc – *comment period ends on February 13, 2013*

8. Consideration and Possible vote on Request R12005 – Add data element to Service Requester Level Charge/Allowance Invoice to NAESB WGQ Standard No. 3.4.4 (super majority vote)

   - Recommendation: http://www.naesb.org/pdf4/wgq_r12005_rec_112712.doc
   - Request for Comments: http://www.naesb.org/pdf4/wgq_011513reqcom.doc – *comment period ends on February 13, 2013*

9. Consideration and Possible vote on 2012 Annual Plan Item 14.b – Address design capacity issues present in paragraph 30 of FERC Order No. 587-V (super majority vote)

   - Recommendation: http://www.naesb.org/pdf4/wgq_2012_ap_14b_rec.doc
   - Request for Comments: http://www.naesb.org/pdf4/wgq_011813reqcom.doc – *comment period ends on February 18, 2013*
   - Comments Submitted by Williams Gas Pipeline: http://www.naesb.org/pdf4/wgq_011813_williams.docx

10. Consideration and Possible vote on Request R11012 – Add the data elements Up Activity Code, Down Activity Code, Up Transaction Type, Down Transaction Type to the Nominations (NAESB WGQ Standard No. 1.4.1) and Schedule Quantity (NAESB WGQ Standard No. 1.4.5) Data Sets (super majority vote)

    - Recommendation: http://www.naesb.org/pdf4/wgq_r11012_rec_112712.doc
    - Request for Comments: http://www.naesb.org/pdf4/wgq_011513reqcom.doc – *comment period ends on February 13, 2013*

11. Consideration and Possible Vote on Minor Corrections (simple majority to approve) – please note that if the linked document is a request, it is under consideration by the Information Requirements/Technical Subcommittees and is not yet prepared for an EC vote, but it may be presented for vote should the IR/Tech Subcommittees prepare the recommendations prior to February 21

    For the minor corrections in request form and not available for vote until the recommendation is prepared, they are indicated by an asterisk (*). The minor corrections are separated into those to be applied to Versions 1.9, 2.0 and the final actions for 2.1, and those to be applied to the final actions that will compose Version 2.1.

    Version 2.1 application:

    - *MC12007 – For NAESB Version 2.1, Request is for new Nomination Quick Response Validation Codes – To the Nomination Quick Response document (1.4.2), add new Nominations Quick Response Validation Codes (Sub-detail). Minor Correction Request: http://www.naesb.org/pdf4/wgq_mc12007.doc
    - MC12047 – For NAESB Version 2.1, Request proposes the deletion of NAESB WGQ Standard No. 7.3.38 to coordinate with the deletion of the related standard in Request R10005. Minor Correction Recommendation: http://www.naesb.org/pdf4/wgq_mc12047_rec_012213.doc – *for WGQ EC consideration February 21, 2013*
    - MC12048 – For NAESB Version 2.1, Request proposes to add nine code values for data element Charge Type in Transportation / Sales Invoice – NAESB WGQ Standard No. 3.4.1. Minor Correction:

NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
WHOLESALE GAS QUADRANT DRAFT AGENDA
Thursday, February 21, 2013 – 9:00 am to 3:00 pm MT
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http://www.naesb.org/pdf4/wgq_mc12048_rec_011813.doc – *for WGQ EC consideration February 21, 2013*

- MC12049 – For NAESB Version 2.1, Request proposes to correct the applicable LQ Segments (Detail and Sub-detail), 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. Minor Correction: http://www.naesb.org/pdf4/wgq_mc12049_rec_011813.doc – *for WGQ EC consideration February 21, 2013*
- MC12051 – For NAESB Version 2.1, Request proposes the addition of 2 code values for the data element "Transaction Type" in the following datasets for the next available NAESB WGQ Version release: NAESBWGQ Standard 1.4.5 – Scheduled Quantity and NAESB WGQ Standard 3.4.1 – Transportation / Sales Invoice. Minor Correction: http://www.naesb.org/pdf4/wgq_mc12051_rec_011813.doc – *for WGQ EC consideration February 21, 2013*
- *MC12052 – For NAESB Version 2.1, Request proposes to modify the code value description for one of the existing codes for the data element "Cycle Indicator" in the following datasets - Operational Capacity – NAESB WGQ Standard 0.4.2, Nomination – NAESB WGQ Standard 1.4.1, Request for Confirmation – NAESB WGQ Standard 1.4.3, Confirmation Response – NAESB WGQ Standard 1.4.4, Scheduled Quantity – NAESB WGQ Standard 1.4.5 Scheduled Quantity for Operator – NAESB WGQ Standard 1.4.6, Offer – NAESB WGQ Standard 5.4.24, Bid – NAESB WGQ Standard 5.4.25 and Award Download – NAESB WGQ Standard 5.4.26. Minor Correction Request: http://www.naesb.org/pdf4/wgq_mc12052.doc
- *MC13001 – For NAESB Version 2.1, Request proposes to 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 (-). Minor Correction Request: http://www.naesb.org/pdf4/wgq_mc13001.doc
- *MC13002 - For NAESB Version 2.1, Request proposes to correct R10004 – Sample Paper for Transactional Reporting – Capacity Release - NAESB WGQ Standard No. 5.4.20. Minor Correction Request: http://www.naesb.org/pdf4/wgq_mc13002.doc
- *MC13003 – For NAESB Version 2.1, Request proposes to modify NAESB WGQ Standard No. 0.3.z7 developed in response to 2011 Annual Plan Item 7/ 2012 Annual Plan Item 8 to extend the length of time inactive location codes should be reported. Minor Correction Request: http://www.naesb.org/pdf4/wgq_mc13003.doc

Version 2.0 application

- MC12031 – For NAESB Version 2.0, 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. Minor Correction: http://www.naesb.org/pdf4/wgq_mc12031_rec_112712.doc – *for WGQ EC consideration February 21, 2013*
- *MC12042 – For NAESB Version 2.0, Standard No. 2.49 – Minor correction requests that code value "Yes" and "No" be added for Authorization Indicator. Minor Correction Request: http://www.naesb.org/pdf4/wgq_mc12042.doc
- MC12043/MC12046 – For NAESB Version 2.0, Standard Nos. 0.4.2, 0.4.3, 5.4.20, 5.4.21 and 5.4.22 - Minor Correction request to correct the data element usage and condition for the data element Location Purpose/Location Purpose Description. Minor Correction: http://www.naesb.org/pdf4/wgq_mc12043_mc12046_rec_010413.doc – *for WGQ EC consideration February 21, 2013*
- *MC12044 – For NAESB Version 2.0, This request proposes the addition of a code values "Due To Svc Req" and "Due FROM SVC Req" for Imbalance Direction Indicator. Minor Correction Request: http://www.naesb.org/pdf4/wgq_mc12044.doc

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NORTH AMERICAN ENERGY STANDARDS BOARD EXECUTIVE COMMITTEE MEETING
WHOLESALE GAS QUADRANT DRAFT AGENDA
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- MC12045 – For NAESB Version 2.0, This request proposes the addition of 4 code values for the data element "Flow Indicator" in the NAESB WGQ Standard 0.4.2 – Operational Capacity and to modify the corresponding Transaction Set Table for LQ Segment (Detail). Minor Correction: http://www.naesb.org/pdf4/wgq_mc12045_rec_010413.doc - *for WGQ EC consideration February 21, 2013*

12. Subcommittee Updates (meeting materials for updates will be provided by leadership as they are available):
    - Triage Subcommittee: http://www.naesb.org/pdf4/tr011813agenda_revised.docx (January 18 Agenda)
    - Business Practices Subcommittee (BPS)
    - Electronic Delivery Mechanisms Subcommittee (EDM)
    - Information Requirements Subcommittee (IR)/Technical Subcommittee
    - Interpretations Subcommittee
    - Contracts Subcommittee
13. 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
14. Board of Directors, Board Committee and Regulatory Updates:
    - Board Meeting December 6, 2012: http://www.naesb.org/pdf4/bd120612dm.docx
    - Membership Update: http://www.naesb.org/misc/membership_report_011813.doc (Membership Report)
    - Board Revenue Efforts
    - Board Retail Structure Review Committee: http://www.naesb.org/pdf4/bd120612a4.docx (December 6 Report); http://www.naesb.org/pdf4/rsrc011013mn.doc (January 10 Notes); http://www.naesb.org/pdf4/rsrc012413mn.docx (January 24 Notes); http://www.naesb.org/pdf4/rsrc012413w1.docx (January 24 Report)
    - Managing Committee: http://www.naesb.org/pdf4/managing112912_10am_notes.docx (November 29 am Notes); http://www.naesb.org/pdf4/managing112912_2pm_notes.docx (November 29 pm Notes)
    - Regulatory Updates:
        - November 30, 2012 – NAESB Status Report to the FERC Regarding Public Key Infrastructure Effort (Docket Nos. RM05-5-000, RM05-5-022), http://www.naesb.org/pdf4/ferc113012_naesb_pki.pdf
        - December 20, 2012 – NAESB Report to the FERC Regarding Errata to WEQ Version 003 (Docket Nos. RM05-5-000, RM05-5-022), http://www.naesb.org/pdf4/ferc122012_weq_version003_errata.pdf
        - January 29, 2013 – NAESB Report to the FERC Regarding Public Key Infrastructure Standards (Docket Nos. RM05-5-000, RM05-5-022) http://www.naesb.org/pdf4/ferc012913_pki_standards_report.pdf
15. Other Business
    - Advisory Council: http://www.naesb.org/pdf4/advisory020213notes.docx
    - Meeting Schedule 2013**:** http://www.naesb.org/pdf4/2013_schedule.pdf
16. Adjourn

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Attire – Business Casual

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November 26, 2012

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, October 24, 2012 – 10:00 am to 4:00 pm Eastern
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 Mr. Oberski, Mr. Tomlinson, Ms. Hogge, and the Dominion Offices for hosting the meeting. Ms. Trum reminded the participants that the NAESB antitrust guidelines and other meeting policies were in effect and called the roll of the RGQ and REQ EC members and alternates. Quorum was established for both quadrants.

Mr. Precht thanked the resigning EC member and alternate, Ms. Compton Pellizzi and Ms. Lunt, for their service and support of NAESB.

2. Consent Agenda

Mr. Precht reviewed the consent agenda with the participants, which included the adoption of the agenda, the approval of the draft meeting minutes from the August 22, 2012EC meeting and the adoption of changes to the 2012 RXQ Annual Plan to be proposed to the Board of Directors. Mr. Miyaji, seconded by Mr. Barkas, moved to adopt the consent agenda. There were no objections. The motion passed by a simple majority.

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

Ms. McKeever provided an update on the actions of the Board Retail Structure Review Subcommittee towards the development of a proposal to be presented to the Board in December. The subcommittee has met once since the last EC meeting to analyze the membership of both quadrants and discuss ideas for the restructuring of the quadrants. The subcommittee began development on a proposal that will collapse the RGQ EC into the REQ EC and create a new REQ segment for Retail Gas. The subcommittee will meet on October 31, 2012 to discuss the detail of the proposal, including EC voting, and whether the proposal will require changes to the NAESB bylaws.

Mr. Miyaji asked which bylaw requirements the Retail Quadrants were not meeting that necessitated the need for restructuring. Mr. Booe responded that the bylaws require each quadrant to have forty voting members with a minimum of four segments and five voting members per segment. The REQ currently has twenty-six voting members while the RGQ only has eighteen. Mr. Booe encouraged members of both quadrants to participate in the subcommittee meeting on October 31, 2012.

4. 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 Business Practice Subcommittee (BPS) has completed the work on updating the process flows and is now reviewing the written procedures for the development of REQ and RGQ model business practices to determine if any revisions need to be made. The BPS has a meeting scheduled for December 10, 2012 and plans to vote out a recommendation for both the process flows and the written procedures at that time. The recommendation should be presented to the EC during the February meeting. Once approved by the EC, the process flows and revised written procedure will be presented to the Parliamentary Committee for review and approval. As

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the process flow and written procedures are not considered standards, neither will be subject to membership ratification.

5. Review 2012 Retail Annual Plan Item No. 10.b – Develop a New Standardized Form to Obtain the Retail Customer's Authorization for the Release of Their Information to a Third Party

Mr. Precht stated that Annual Plan Item No. 10.b was a joint effort between the BPS, the Demand Side Management and Energy Efficiency Subcommittee, and the Smart Grid Standards Data Privacy Task Force. Work on the recommendation was completed during the joint meeting on October 22, 2012. The form is wide in scope and allows retail customers to give third parties authorization to access to customer specific information held by the distribution company. Mr. Precht will forward the approved recommendation to the NAESB office to circulate for a thirty-day industry comment period, and the recommendation will be presented to the EC for consideration during the February meeting.

Mr. Booe stated two NAESB Retail Standards, the Energy Service Provider Interface Standard and the Data Privacy Standard, are currently being considered by the Smart Grid Interoperability Pane (SGIP) for inclusion in their catalogue of standards, a list of standards endorsed by the organization for utilities to consider when implementing Smart Grid applications. He suggested contacting the SGIP to determine if the organization would be interested in considering the authorization form for inclusion in the catalogue as well. The meeting participants agreed with Mr. Booe's suggestion.

6. Subcommittee Updates

Triage Subcommittee

Mr. Booe presented the update from the Triage Subcommittee. Since the last meeting, there have been two triage (August 14, 2012 and October 23, 2012) dispositions of five requests. There was one request within the WEQ assigned to the OASIS Subcommittee. There were three requests within the WGQ, all assigned to the Business Practice Subcommittee. The final request, R12008, was submitted to the REQ on behalf of the SGIP Cyber Security Work Group. The request was assigned to the Smart Grid Data Privacy Task Force.

Business Practice Subcommittee (BPS) and Texas Task Force

Mr. Jones provided the update of the BPS. The subcommittee last met on October 22 – 23, 2012. During that meeting, the subcommittee worked on the recommendation for 2012 Retail Annual Plan Item 5.a as well as revisions to Book 3 – Billing and Payments. The revisions to Book 3 represent an effort by the BPS to update all the Retail model business practices, as needed. Specifically in Book 3, the subcommittee will be standardizing how electronic transactions are to happen and what information needs to be included in each transaction. The subcommittee will also be updating the twenty-two page process flow associated with Book 3.

As the BPS was working on joint efforts to draft a recommendation for 2012 Retail Annual Plan Item 10.b , the co-chairs of the BPS realized that Book 8 – Retail Customer Information, does not address how suppliers and third parties access customer information . As a result, the subcommittee will work to make modifications to Book 8 so that the requirements synch with the Retail Customer Authorization Form, approved as part of the recommendation for 2012 Retail Annual Plan Item 10.b.

Ms. McKeever provided the update of the activities of the Texas Task Force. The task force meets as needed to discuss, review, and evaluate NAESB Electronic Delivery Mechanism (EDM) standards for use within the ERCOT market. Currently, ERCOT requires the use of NAESB EDM version 1.6. The task force will be meeting on October 30, 2012 to have a technical discussion regarding the versions of the EDM standard released since ERCOT implemented 1.6 and evaluate the benefit of requiring a newer version of the EDM standard for the ERCOT market. The task force will present the analysis to the ERCOT Texas Data Transport Working Group.

Mr. Booe thanked Ms. Munson and Ms. McKeever for identifying this effort by ERCOT to review its EDM requirements as an item with which NAESB could assist. This type of effort helps bring awareness to NAESB as an organization and broadens the organization to people who may be unfamiliar with NAESB.

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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 every three weeks and held its first face-to-face meeting on October 22, 2012. The subcommittee is working to complete efforts to update the technical implementation of Book 3 – Billing and Payments and Book 10 – Customer Enrollment, Drop, and Account Information Change.

Ms. Ray stated that while the subcommittee still struggles with participation problems, there has been improvement, especially with the face-to-face meeting.

Glossary Efforts

Mr. Eynon provided the update on the activities of the Glossary Subcommittee. The subcommittee has met twice since the last EC meeting to approve sixteen new terms and update one term, all associated with Book 3- Billing and Payments. The subcommittee has one meeting scheduled before year's end on December 11, 2012.

Smart Grid Efforts

Mr. Booe provided the update on the Smart Grid efforts. The Data Privacy Task Force is being reactivated to handle Request R12008 and will hold a meeting in the upcoming weeks. NAESB is also expecting a standards request to be submitted sometime before the end of the year seeking to modify the Energy Service Providers Interface standards. The PAP10 Subcommittee will meet on November 1, 2012 to vote on a recommendation modifying the Energy Usage Information Model. The changes to the model were necessitated by changes to the standards upon which the information model is based.

7. Publication Schedule Review

Mr. Booe provided the update on the NAESB publication schedule. The WGQ published Version 2.0 on November 30, 2010 and will publish Version 2.1 sometime in the first quarter of 2013. FERC incorporated by reference, with a few exceptions, Version 2.0 on July 19, 2012 with Order No. 587-V. WEQ Version 3.0 was published on July 31, 2012 and filed with the Commission on September 18, 2012. Version 3.1 is currently scheduled to be published at the end of the second quarter of 2013. In the interim, at the request of the Managing Committee and through discussions with FERC staff, NAESB intends to file the PKI related standards before year end. The Retail Quadrants last published with Version 2.0 on April 30, 2012 with Version 2.1 publication scheduled for June 2013.

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

Board Meeting – September 20, 2012

Mr. Booe provided the update from the last NAESB Board meeting, held on September 20, 2012. During the meeting, the Chairman, Mr. Desselle noted that the Board Resources Committee and the Board Revenue Committee would likely be merged going forward as the work of the committees is somewhat duplicative and a combined committee would be a more efficient use of resources. The Board also decided it would be more efficient to meet three times a year instead of four. Starting next year, the Board will meet in April, September, and December. The April meeting will be used to review the budget and decisions made during the previous year. The September meeting will serve as the strategic session, and the December meeting will be used to approve the next year's budget and annual plan. These changes will save both time and cost for NAESB as well as Board members. Additional Board meetings can be scheduled as needed to address any time-sensitive issues that may arise in between these three meetings.

Mr. Desselle also announced that during Board meetings, there would no longer be individual subcommittee updates. Instead, updates will be provided from a member of each quadrant's Leadership Committee to detail quadrant and subcommittee activity since the last Board meeting. This change will allow for augmented time for more robust and detailed discussions during Board meetings.

During the meeting, the Board ratified the recent activities of the Revenue Committee as well as a new policy developed by the Managing Committee concerning communications with the media and press. The Revenue Committee used feedback from discussions regarding the non-member participation fee at the June Board and

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Leadership meetings to develop an updated fee structure presented at the September Board meeting. The Board ratified a non-member individual yearly participation fee of $1,000 that will allow an individual to participate in the activities of a single subcommittee for an entire year. The Board also ratified an increase in the certification fee for non-member WGQ certifiers, from $1,000 to $8,000, with the fee remaining $1,000 for members and instated an identical cost structure for WEQ Authorized Certificate Authorities. In addition, the Board authorized a $500 increase in membership dues for 2013.

Additionally, the Board approved modifications made to the Authorized Certificate Authority Process by the Board Certification Committee in response to the previously approved modifications to the WEQ-012 Business Practice Standards and the NAESB Accreditation Requirements for Authorized Certificate Authorities document adopted by the WEQ EC in August.

The Retail Structure Review Committee requested that the Board delay consideration of the membership thresholds waiver and proposed changes until the committee could have further discussions. A recommendation will be presented to the Board during the December meeting.

The Gas-Electric Harmonization Committee presented its report and recommendation to the Board. The Board unanimously approved the recommendation that listed three areas for potential standards development: market timelines and coordination of scheduling, flexibility in scheduling, and provision of information. These items were added as provisional annual plan items for the 2013 WEQ and WGQ Annual Plans.

Membership Update

Mr. Booe provided the NAESB membership update. NAESB currently has 286 members. Since the end of September, NAESB has had five members resign and three new members join. Of the resigning members, two were from the WEQ, Duke Energy Commercial Asset Management and Southwestern Power Administration. Of the new members, one was in the WEQ, White and Case, LLC, which joined in the Technology and Service Segment.

Board Revenue Efforts

Mr. Booe provided the update on the efforts of the Board Revenue Committee. The Board Revenue Committee met on September 14, 2012 to discuss further ways to delineate the member benefits, such as the yearly non-member participation fee and the increase in cost for non-member certification. All action taken by the committee during that meeting was ratified by the Board in September. The notes from the meeting are included in the meeting material.

On October 19, 2012, the committee met to discuss a recommendation during the Board meeting to consider an assessment to pay down the organization's negative retained earnings. The committee decided that the assessment was not needed at this time and that further discussions should be postponed until the other Board activities have one into effect.

NAESB is in the process of testing a new member and non-member website. NAESB plans to make available a guidance document detailing the changes before the transition is made.

Managing Committee

The Managing Committee update was provided by Mr. Booe. Since the last meeting, the committee has met several times to discuss and develop policies concerning communication with the press and media, the format of Board meetings going forward if the Board were to meet three times a year instead of four, and the discontinuation of EC level updates during Board meetings. These changes were all presented and approved by the Board during the September meeting.

Gas-Electric Harmonization Committee

Mr. Booe provided the update for the Gas-Electric Harmonization Committee. The NAESB effort began when the National Petroleum Council issued a report in September of 2011 regarding Gas-Electric Harmonization and specifically mentioning NAESB. The NAESB Board formed the Gas-Electronic Harmonization Committee and between January and August 2012, the committee met seventeen times in an effort to identify the issues that affect

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the coordinated operations of the two different industries. Committee members created a list of observations about harmonization that were grouped into four categories – scheduling, capacity, curtailment, and communications. The committee employed a survey to subdivide the observations into four categories: standards issues, policy issues, commercial issues, and general comments. The results of the survey formed the foundation of the report prepared by the committee.

The report contains details of the standards development considerations and the policy and commercial practice considerations which should be taken into account. The report recommends three potential areas of standard development by NAESB: market timelines and coordination of scheduling, flexibility in scheduling, and provision of information. However, the report cautions that NAESB should not move forward in the development of any standards until further policy guidance has been provided by regulators or other appropriate public bodies.

A final copy of the report was distributed to every sitting FERC Commissioner as well as the president of NARUC and all the trade associations. Additionally, NAESB distributed a press release concerning the report. The meeting material includes a link to the finalized report and the press release.

Regulatory Updates

Mr. Booe provided the regulatory update. Since the last EC meeting, NAESB has only made one filing and that was on September 18, 2012 for WEQ Version 3.0. NAESB is also following up with the compliance filings submitted to the FERC in response to FERC Order No. 587-V related to the WGQ Version 2.0 standards to make sure that the companies have valid access to the standards.

9. Review and Possible Vote to Adopt 2013 Annual Plan

Mr. Precht reviewed the proposed 2013 Retail Annual Plan and asked for comments on the plan. Ms. Ray stated that Item Nos. 1.a and 1.c from the 2012 Retail Annual Plan would need to be carried over to the 2012 Retail Annual Plan as Items 1.a and 1.b as neither of the items would be completed by the IR/TEIS Subcommittee in 2012. Mr. Jones suggested updating the scheduled completion dates for the sub-items of 2013 Retail Annual Plan Item 5 and adding Book 3 as the new Item 5.a under Item 5 as the BPS would not complete its assigned work on Book 3 in 2012.

Mr. Precht stated that in 2013, the WGQ has an annual plan item to review and update the Base Contract for the Supply of Natural Gas. He stated that based on the changes made to the contract by the WGQ, the Retail Quadrants may also need to review the retail Base Contract and suggested that a provisional annual plan item for 2013 be added. Mr. Jones suggested a provisional item be added to the 2013 Annual Plan to develop business practice standards to support the use of customer authorization software applications.

Mr. Minneman, seconded by Mr. Miyaji, moved to adopt the Retail 2013 Annual Plan as modified during the meeting. There was no discussion or questions on the motion. The motion passed a simple majority vote.

10. Other Business

Mr. Precht asked to discuss the changes made to the voting procedure for EC members. Mr. Booe stated that in March, NAESB asked each segment to provide a procedure for choosing alternates in the event of an EC member's absence or abstention. As to date, voting procedures have not been submitted by any segment of either Retail Quadrant, meaning the default procedure will be used in case of an abstention. The default order is based on alternate seniority. To put an alternate procedure in place, each segment needs to obtain consensus from segment members and submit the procedure to the NAESB office.

Mr. Precht reviewed the 2013 Board, EC and Advisory Council meeting schedule.

Mr. Eynon reviewed Minor Correction MC12040. The minor correction seeks to correct an error in the definition for the term Inquiry. The recommendation that was ratified by membership contained an error not present in the definition of the term as voted on and approved at the subcommittee level. Mr. Eynon, seconded by Mr. Minneman, moved to adopt the minor correction as written. There was no discussion on the motion. The motion passed by a simple majority.

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11. Adjourn

The meeting adjourned at 11:44 AM Eastern on a motion by Mr. Minneman, seconded by Mr. Jesensky.

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12. Attendance

SERVICE PROVIDERS/SUPPLIERS SEGMENT		ATTENDANCE
Bill Barkas	Manager of Retail State Government Relations, Dominion Retail, Inc.	In Person
Jim Minneman	Controller, PPL Solutions, LLC	By Phone
Wendell Miyaji	Vice President – Energy Sciences, Comverge, Inc.	In Person
Susan Munson	ERCOT Retail Market Liaison, Electric Reliability Council of Texas (ERCOT)	By Phone
UTILITIES SEGMENT		
Phil Precht	Management Consultant - Pricing and Regulatory Services Department, Baltimore Gas & Electric Company	In Person
Patrick Eynon	Supervisor – Retail Access, Ameren Services	By Phone
Judy Ray	Industrial Segment Manager – Contract Administrator, Alabama Power Company	In Person
Michael J. Jesensky	Director, Demand–Side Analysis, Dominion Resources Services, Inc. (representing Dominion Virginia Power)	By Phone
END USERS/PUBLIC AGENCIES SEGMENT		
James Bradford Ramsay	General Counsel – Supervisor/Director – NARUC Policy Department, NARUC	
Dennis Robinson	Director – Market & Resource Administration, ISO New England	
Pam Stonier	Utilities Analyst, Vermont Public Service Board	
RETAIL GAS QUADRANT		
SERVICE PROVIDERS/SUPPLIERS SEGMENT		
Richard Zollars	Director – Data and Billing, Dominion Retail, Inc.	By Phone
END USERS SEGMENT		
Dan Jones	Supervisor – Certified Supplier Business Center, Duke Energy	In Person
END USERS/PUBLIC AGENCIES SEGMENT		

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Other Participant Attendance

Participant	Organization	Attendance
Jonathan Booe	NAESB	In Person
Debbie McKeever	Oncor	By Phone
Veronica Thomason	NAESB	In Person
Caroline Trum	NAESB	In Person
Jill Vaughn	Court Reporter	In Person
William Welzant	Baltimore Gas and Electric	In Person
Eric Winkler	ISO New England	By Phone

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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 December 6, 2012

	Item Number & Description[1]	Completion[2]	Assignment[3][4]
1.	Develop Technical Electronic Implementation Standards and Data Dictionaries		
	a. Book 10: Retail Customer Enrollment, Drop and Account Information Change Status: Underway	1st Q, 2013	IR/TEIS
	b. Review and update the technical implementation of Book 3 – Billing and Payment. Status: Underway	1st Q, 2013	IR/TEIS
2.	Additional 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. Status: Underway	2013	Retail Electric part of the BPS/Retail Electric Texas Task Force
3	Develop Smart Grid Wholesale and Retail Electric Standards		
	a. Harmonize Smart Grid glossary with Retail Glossary Status: Ongoing	Ongoing	REQ/RGQ Glossary Subcommittee
4.	Customer Information - Develop Model Business Practices and Process Flows to enable a Retail Customer, or a third party acting on behalf of the Retail Customer, to obtain the Retail Customer's energy usage information on an on-going basis outside of a Smart Grid environment Status: Not Started, this development is tied to the development for item 5(b)	2013, date may be dependent on item 5(b).	BPS
5.	Update Existing Model Business Practices – Review and update all existing Model Business Practices, filling in any gaps that may exist and making the language consistent throughout all Books.[5]		
	a. Book 3 – Billing and Payments Status: Underway	1st Q, 2013	BPS
	b. Book 8 – Customer Information Status: Not Started	2nd Q, 2013	BPS
	c. Book 9 – Customer Billing and Payment Notification via Uniform Electronic Transactions Status: Not Started	4th Q, 2013	BPS
	d. Book 10 – Customer Enrollment, Drop, and Account Information Change Status: Not Started	2014	BPS

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Item Number & Description[1]			Completion[2]	Assignment[3][4]
	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
	o.	Book 24 – Enrollment, Drop, Account Information Change in Demand Response Programs[8] Status: Not Started	2015	BPS
6.		Create common interfaces and data structures necessary for enrolling DR sites into a DR 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: Underway	1st Q, 2013	REQ BPS, REQ DSM-EE Subcommittee, REQ Smart Grid PAP 10 Subcommittee Data Privacy Task Force
7.		Session 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**)	1st Q, 2013	IR/TEIS

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	Item Number & Description[1]	Completion[2]	Assignment[3][4]
	Status: Underway		
b.	Modify or develop standards as needed to apply the analysis of the above item (7(a))	1st 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)	2013	REQ Data Privacy Task Force
	Status: Underway		

Program of Standards Maintenance & Fully Staffed Standards Work[7]

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.

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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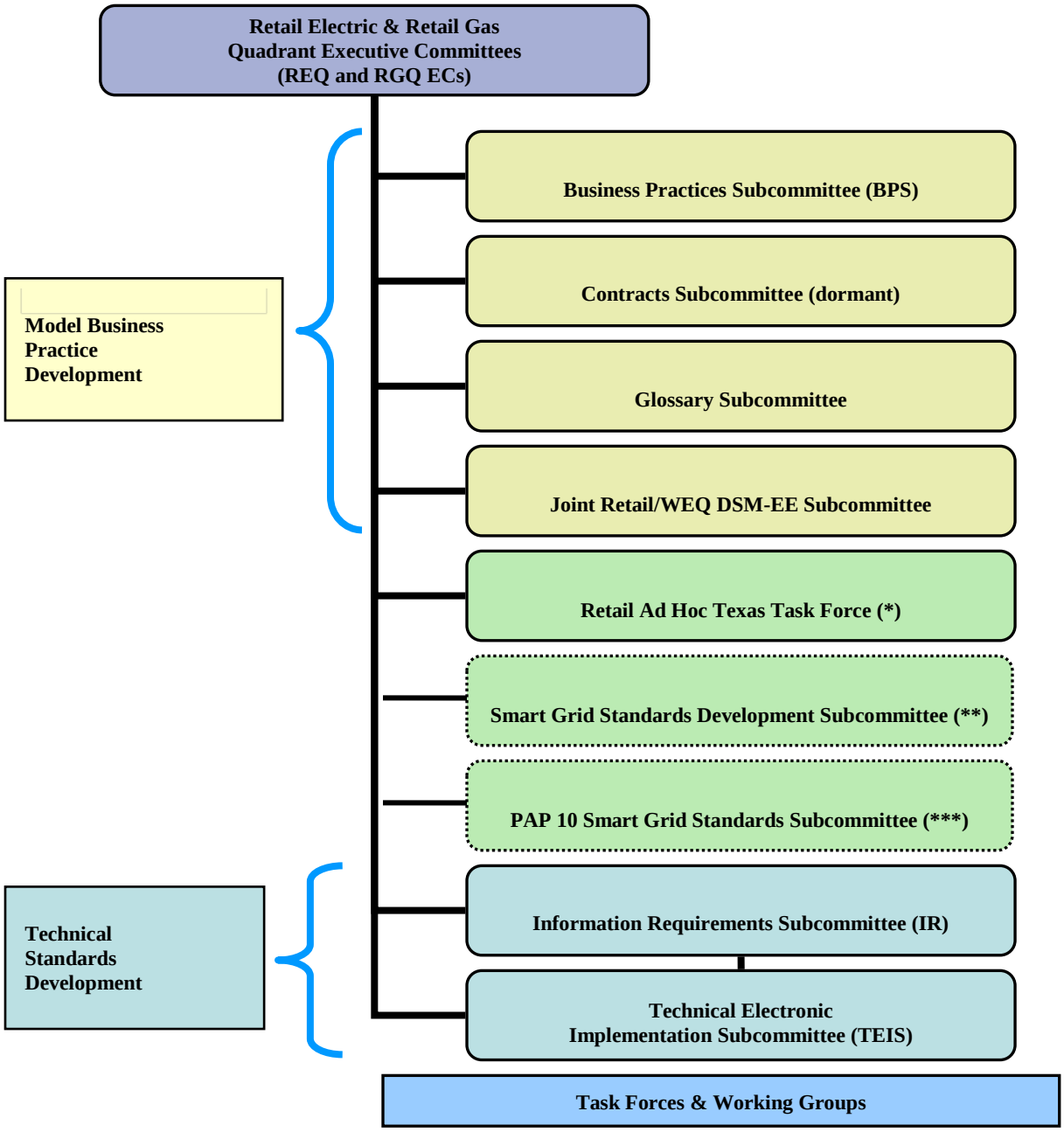

NAESB Retail Subcommittee Leadership: [8]

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) 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.

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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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via posting & email

TO: NAESB Board of Directors

cc: NAESB Retail Structure Review Committee (RSRC)

RE: Report from the NAESB RSRC Approved by the NAESB Board of Directors on December 6, 2012

DATE: December 6, 2012

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 one of a two -part report. THe second part will be presented to the Board of Directors at its April 2013 meeting fo approval. THe Board of Directros 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

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.

In April 2013, the RSRC will ask 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 will also reconfirm 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.

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

Approved by the NAESB Board of Directors on December 6, 2012

Report Components:

Appendices:

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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 this recommendation to the board for its consideration on December 6, 2012.

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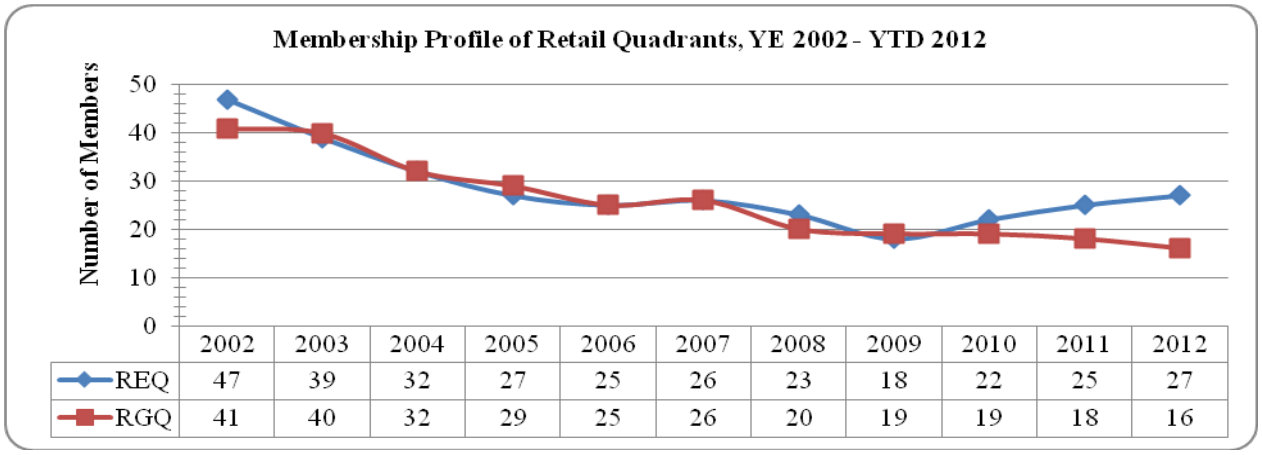
MEMBERSHIP PROFILE AND WORK PRODUCTS:

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 below.



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
REQ	47	39	32	27	25	26	23	18	22	25	27
RGQ	41	40	32	29	25	26	20	19	19	18	16

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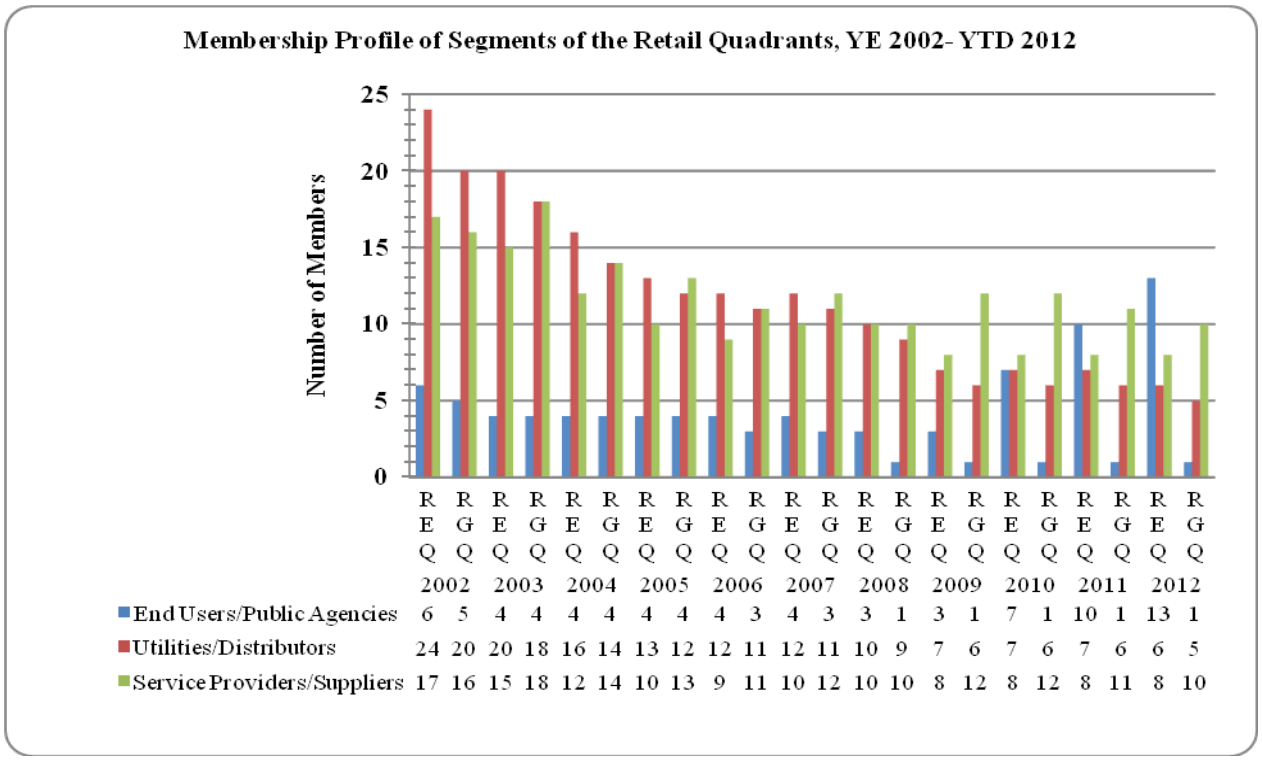

This decline in membership in the retail quadrants should not be seen as a disinterest in the benefit of using energy industry best practices or uniform telecommunication protocols at the state level. There are other groups and trade associations that have developed practices and guidelines, many under 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

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Retail Electric Quadrant		Retail Gas Quadrant	
Reference	**Description**	**Reference**	**Description**
RXQ.5	Quadrant-Specific Electronic Delivery Mechanism MBPs	RXQ.5	Quadrant-Specific Electronic Delivery Mechanism MBPs
RXQ.6	Contracts Related MBPs RXQ.6.1 - Electronic Data Interchange Trading Partner Agreement (TPA) RXQ.6.2 - Outline of a Non-Disclosure Agreement RXQ.6.3 - Distribution Company-Supplier Service Agreement Outline 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 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 REQ.6.9 - Load Serving Entity Application for Registering with Registration Agent	RXQ.6	Contracts Related MBPs RXQ.6.1 - Electronic Data Interchange Trading Partner Agreement (TPA) RXQ.6.2 - Outline of a Non-Disclosure Agreement RXQ.6.3 - Distribution Company-Supplier Service Agreement Outline 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.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		

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Retail Electric Quadrant		Retail Gas Quadrant	
Reference	**Description**	**Reference**	**Description**
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

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. 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.

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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.

OPTIONS DISCUSSED FOR RETAIL QUADRANTS STRUCTURE:

Four options were discussed as recommendations for a structure for the retail quadrants:

1) Merge Retail Executive Committees and adjust segments such that there are at least four segments with at least five members each in the segments, and take into consideration preserving existing membership and leaders. The board structure for the retail quadrants would remain the same, and the two quadrants would remain active. A waiver on the membership thresholds from the board would be required to support this option.

   In implementing this approach, the negative optics of the membership in the RGQ Executive Committee would be resolved without the disruptions of introducing changes to the Board or to the membership itself. However, this approach would not in the short term resolve any of the membership threshold issues and will continue to require waivers from the board. In the long term, depending on the industry interest in retail standards development, there may be the need for further action. This is essential a status quo action.

   As such, we do not recommend this approach.

2) Merge the retail quadrants and adjust segments such that there are at least four segments with at least five members each in the segments, and take into consideration preserving existing membership and leaders. This would entail changes to the board and executive committees' structures, and there would only be one quadrant combining the interests of both retail gas and retail electric markets.

   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. However, the primarily 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. Combination companies may decide that only one membership is necessary, resulting in a possible loss of membership – probably in retail gas quadrant as more projects are underway in the retail electric quadrant. However, this loss would be minimal 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. 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 option maintains that strong and cohesive working relationship.

   The committee recognizes that under this option, 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.

   This is the recommendation that the committee supports pursuing.

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3) Adjust the retail electric quadrant for 4 segments and make the retail gas quadrant dormant until there are development issues that would require that the retail gas quadrant become active – issues that would enable meeting the membership thresholds.

   In implementing this approach, the thresholds established in the bylaws would be met and the existing members of retail quadrants could have their membership remain intact depending on the restructure of the segments. There are three fairly significant concerns with this approach. While there is a clear path to development and maintenance of the retail electric standards and work products, the path for maintenance of the retail gas standards is not so clear and the development of retail gas standards would not occur. Also, should states determine to rely upon the work of the retail electric quadrant, they may choose to apply that work to the retail gas market, as for customer choice states, the standards are commodity-neutral. This would impose standards developed for retail electric interests on retail gas interests without procedures provided for a direct voice in NAESB from the retail gas interests. Lastly, if the retail gas quadrant is considered dormant, and we later determine to reactivate the retail gas quadrant through additional restructuring, we will probably experience a lag from the time of our decision to reactivate to the public awareness that would provide us with a base of participants to contribute to our work products.

   As such, we do not recommend this approach.

4) Adjust quadrant and segment membership thresholds to support the existing membership of the retail quadrants through an amendment to the bylaws.

   This approach would have the least impact on the organization by lowering thresholds. However, in doing so, our organization would tacitly agree that a very small supportive membership, even though it may attract non-member participation, would credibly speak for the industry. The organization would also tacitly agree that the membership dues collected from the members of the wholesale markets would subsidize the work of the retail markets.

   For these reasons, the committee does not recommend this approach.

RECOMMENDATION:

This is actually a two part recommendation. We would request first an approval on the direction as outlined in option 2 above, and then in April 2013, we will ask for approval from the board on the implementation. For the first part of the recommendation, we would ask that the board approve:

1) the RSRC to begin the process of merging the quadrants and adjusting the segments such that the merged retail quadrants meets 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) we add that for the implementation, the change be put in place through a motion of the board for a period of two years, after which we would ask the board to review its success and determine if this interim solution should be codified in the NAESB Operating Practices, Bylaws and Certificate.

In April 2013, we will ask 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. We will also reconfirm with the board that the implementation be considered an interim step for two years, to provide time to determine if the structure in place is supportive of the requirements of the bylaws.

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We suggest that this recommendation and the resulting structural changes, if approved by the board, be considered as an interim measure, with updates provided at each board and retail leadership meeting. After a period of time, at a minimum two years, the board could determine whether actions should be put in place to make the interim structure permanent, with the corresponding changes to the governance documents, and if other structural changes are in order based on the experience provided.

ACTIONS TO BE TAKEN AND CONSIDERATIONS:

If the recommendation is approved by the board, the following actions should be taken by the committee and completed in time for consideration at the April 2013 board meeting:

- Define the segments of the retail quadrant
- Ensure that the existing membership is accounted for in the restructured quadrant and segments
- Draft the motion for board consideration

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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
September 18, 2012	Meeting Notes: http://www.naesb.org/pdf4/rsrc091812mn.doc
October 31, 2012	Meeting Notes: http://www.naesb.org/pdf4/rsrc103112mn.doc
November 6, 2012	Meeting Notes: http://www.naesb.org/pdf4/rsrc110612mn.doc
November 15, 2012	Meeting Notes: http://www.naesb.org/pdf4/rsrc111512mn.doc
November 30, 2012	Meeting Notes: http://www.naesb.org/pdf4/rsrc113012mn.doc

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Appendix C – RSRC May 2009 Report

RSRC May 2009 Report submitted to the NAESB Board of Directors for approval.

TO: NAESB Board of Directors

FROM: Retail Structure Review Committee

RE: Restructuring of the Retail Quadrants

Recommendation of the Retail Structure Review Committee

The Retail Structure Review Committee submits this recommendation to the NAESB Board of Directors in regards to the restructuring of the Retail Gas and Retail Electric Quadrants. It is the position of the Retail Structure Review Committee that modifications to the current segment structure are necessary for the continued existence of the Retail Quadrants. When the Retail Quadrants were originally created, they were designed to support the market participants in the retail gas and electric markets for support of customer choice programs, and were defined with the expectation that there would be enough interest in membership in each of the segments to represent the segments nationally. This assumption was made based upon the state and federal policies supporting customer choice programs. Due to the loss of emphasis by the states on customer choice, the focus has expanded to demand side management, energy efficiency, and programs where aggregation provides large retailers such as JC Penney and Home Depot with cost saving efficiencies in both retail gas and retail electric markets. As such, the need for segments that describe specific functions has been reduced allowing for an opportunity to combine upstream, downstream, and non-utility interests. Maintaining separation between utilities and other market participants will be necessary as they will clearly have a different interest than the other non-regulated market participants.

Based upon discussions held at the January 15, January 29, and February 4, 2009 conference calls, the Retail Structure Review Committee proposes that both the Retail Gas and Retail Electric Quadrants be restructured as follows:

1. The Quadrants are divided into three segments; 1) the Suppliers/Service Providers Segment, 2) the Utilities Segment, and 3) the End Users/Public Agencies Segment.
2. The number of Board member and Executive Committee seats in both Quadrants is set at four per segment.
3. The minimum number of members is reduced from 40 to 20 as required in section 2.3 of the NAESB bylaws http://www.naesb.org/pdf/naesbbylaws.pdf

Items 1 and 2 can be addressed by the quadrant membership with approval from the NAESB General Counsel. Item 3 would require either a Board resolution or a Board approved modification to the bylaws. If item 3 is approved by the NAESB Board of Directors, we recommend the above structural changes become effective by the end of the 3rd quarter, 2009. It is expected that the required minimum number of members will be achieved by the end of 4th quarter, 2010.

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NORTH AMERICAN ENERGY STANDARDS BOARD
2009 EXECUTIVE COMMITTEE TERMS – Retail Electric Quadrant

SUPPLIERS/SERVICE PROVIDERS SEGMENT

UTILITIES SEGMENT

END USERS/PUBLIC AGENCIES SEGMENT

NORTH AMERICAN ENERGY STANDARDS BOARD

2009 EXECUTIVE COMMITTEE TERMS – Retail Gas Quadrant

SUPPLIERS/SERVICE PROVIDERS SEGMENT

UTILITIES SEGMENT

END USERS/PUBLIC AGENCIES SEGMENT

NORTH AMERICAN ENERGY STANDARDS BOARD

2009 BOARD TERMS – Retail Electric Quadrant

SUPPLIERS/SERVICE PROVIDERS SEGMENT

UTILITIES SEGMENT

END USERS/PUBLIC AGENCIES SEGMENT

NORTH AMERICAN ENERGY STANDARDS BOARD

2009 BOARD TERMS – Retail Gas Quadrant

SUPPLIERS/SERVICE PROVIDERS SEGMENT

UTILITIES SEGMENT

END USERS/PUBLIC AGENCIES SEGMENT

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RSRC May 2009 Report approved by the NAESB Board of Directors

Current Quadrant Membership – Proposed Segment Structure Modifications

The purpose of this work paper is to facilitate discussions concerning modifications to the current segment structure of the Retail Quadrants. Two proposed segment structures for the Retail Quadrants were considered by the Retail Structure Review Committee. The scenario that garnered the most support is presented below. It was developed in response to the discussions held by the Retail Structure Review Committee during the January 15, 2009 and January 29, 2009 conference calls.

It is the position of the Retail Structure Review Committee that modifications to the current segment structure are necessary for the continued existence of the Retail Quadrants. When the Retail Quadrants were originally created, they were designed to support the market participants in the retail gas and electric markets for support of customer choice programs, and were defined with the expectation that there would be enough interest in membership in each of the segments to represent the segments nationally. This assumption was made based upon the state and federal policies supporting customer choice programs. Due to the loss of emphasis by the states on customer choice, the focus has shifted to demand side management and programs where aggregation provides large retailers such as JC Penney and Home Depot with cost saving efficiencies in both retail gas and retail electric markets. As such, the need for segments that describe specific functions has been reduced allowing for an opportunity to combine upstream, downstream, and non-distributor interests. Maintaining separation between distributors and other market participants will be necessary as they will clearly have a different interest than the other non-regulated market participants.

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SCENARIO 1

- Suppliers/Service Providers Segment
- End Users/Regulatory Segment
- Distributors/Utilities Segment
- 4 seats for each Board and Executive Committee Segment
- Effective Date: June to 3rd Quarter, 2009
- 20 member minimum with that number achieved by the end of 2010

NORTH AMERICAN ENERGY STANDARDS BOARD
2009 EXECUTIVE COMMITTEE TERMS – Retail Electric Quadrant

SUPPLIERS/SERVICE PROVIDERS SEGMENT		**TERM END:**
Bill Barkas	Manager of Retail State Government Relations, Dominion Retail, Inc.	12-31-2009
Jansen Pollock	Manager of Regulatory Affairs, Constellation NewEnergy	12-31-2010
Jim Minneman	Controller, PPL Solutions LLC	12-31-2009
Jennifer Teel	Director – Business Solutions, EC Power	12-31-2009
Susan Munson	ERCOT Retail Market Liaison, Electric Reliability Council of Texas (ERCOT)	12-31-2010
UTILITIES SEGMENT		
Ruth Kiselewich	Director, Demand Side Management Programs, Baltimore Gas & Electric Company (MAAC NERC Region)	12-31-2009
Patrick Eynon	Supervisor – Retail Access, Ameren Services	12-31-2009
Judy Ray	Industrial Segment Manager – Contract Administrator, Alabama Power Company (SERC NERC Region)	12-31-2010
Mary Edwards	Senior Customer Choice Analyst – Regulation and Competition, Dominion Virginia Power (SERC NERC Region)	12-31-2010

END USERS/PUBLIC AGENCIES SEGMENT
VACANT

NORTH AMERICAN ENERGY STANDARDS BOARD
2009 EXECUTIVE COMMITTEE TERMS – Retail Gas Quadrant

SUPPLIERS/SERVICE PROVIDERS SEGMENT		**TERM END:**
Richard Zollars	Director, Data Billing, Dominion Retail, Inc.	12-31-2009
UTILITIES SEGMENT		
Dan Jones	Supervisor, Certified Supplier Business Center, Duke Energy	12-31-2009
Leslie H. Nishida	Manager Gas Regulatory Services, Wisconsin Public Service Corporation	12-31-2009
Michael Novak	Assistant General Manager, National Fuel Gas Distribution Corporation	12-31-2010
Phil Precht	Management Consultant, Pricing & Regulatory Services Department, Baltimore Gas and Electric Company	12-31-2010

END USERS/PUBLIC AGENCIES SEGMENT
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NORTH AMERICAN ENERGY STANDARDS BOARD
2009 BOARD TERMS – Retail Electric Quadrant

SUPPLIERS/SERVICE PROVIDERS SEGMENT		**TERM END:**
Robert K. Koger	President, North Carolina Advanced Energy Corporation	12-31-2009
Jim Minneman	Controller, PPL Solutions LLC	12-31-2009
David Pickles	Vice President, ICF International	12-31-2009
J Cade Burks	President, EC Power	12-31-2010
UTILITIES SEGMENT		
David Koogler	Director – State Regulation, Dominion Virginia Power (SERC NERC Region)	12-31-2009
Dennis Derricks	Director Regulatory Policy and Analysis, Wisconsin Public Service Corporation	12-31-2009
Ruth Kiselewich	Director, Demand Side Management Programs, Baltimore Gas & Electric Company (MAAC NERC Region)	12-31-2010
Debbie McKeever	Market Advocate, Oncor	12-31-2010
END USERS/PUBLIC AGENCIES SEGMENT		
Sonny Popowsky	Consumer Advocate, Pennsylvania Office of Consumer Advocate	12-31-2009

NORTH AMERICAN ENERGY STANDARDS BOARD
2009 BOARD TERMS – Retail Gas Quadrant

SUPPLIERS/SERVICE PROVIDERS SEGMENT		**TERM END:**
Leigh Spangler	President, Latitude Technologies Inc.	12-31-2010
Dave Darnell	President & CEO, Systrends USA	12-31-2009
Greg Lander	President, Capacity Center	12-31-2009
UTILITIES SEGMENT		
Alonzo Weaver	Vice President of Engineering and Operations, Memphis Light, Gas & Water Division (APGA)	12-31-2009
Ralph Cleveland	Senior Vice President – Engineering and Operations, AGL Resources, Inc.	12-31-2009
END USERS/PUBLIC AGENCIES SEGMENT		
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Appendix D – Current NAESB Membership Profile

NAESB Membership Statistics – Changes by Quadrant for 2012 as of November 20, 2012

NAESB Membership Report - Quadrant/Segment Membership Analysis		Number of Members
WGQ Segments	**TOTAL**	**114**
	End Users	14
	Distributors	17
	Pipelines	42
	Producers	12
	Services	29
REQ Segments	**TOTAL**	**28**
	End Users/Public Agencies	13
	Utilities	6
	Service Providers/Suppliers	9
RGQ Segments	**TOTAL**	**16**
	End Users/Public Agencies	1
	Distributors	5
	Service Providers/Suppliers	10
WEQ Segments	**TOTAL**	**129**
	End Users	7
	Distributors	19
	Transmission	41
	Generation	22
	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- Public Utility District No. 2 of Grant County, Washington (Marketers/Brokers, Muni/Coop); 2- Associated Electric Cooperative, Inc. (Transmission, Muni/Coop); 3- Missouri River Energy Services (Distributors, Muni/Coop); 4- Maine Public Utilities Commission (End Users, Regulator); 5- New Jersey Board of Public Utilities (Generation, Fed/State/Prov); 6- GMO GlobalSign, Inc. (End User, At Large); 7-Snohomish County PUD No.1 (Distributors, Muni/Coop); 8- White & Case LLP (Technology/Services)	**8**
	Member Resignations: 1- PPL Electric Utilities Corporation (Transmission, IOU); 2- PHI Power Delivery (Transmission/IOU); 3- Missouri River Energy Service (Distributors, Muni/Coop); 4- Energy Curtailment Specialists, Inc. (End Users, End Use); 5- Utility Integration Solutions, Inc. (Technology/Services); 6- Southern California Edison (Transmission, IOU); 7- Consumers Energy Company (Distributors, IOU); 8- Comprehensive Energy Services (End Users, End Use); 9- Duke Energy Commercial Asset Management, Inc. (Generation, IOU); 10- Southwestern Power Administration (Transmission, Fed/State/Prov)	10
WGQ	New Members: 1- Williams Energy Resources, LLC (Services); 2- American Gas Association; 3- National Grid (LDC); 4- New Mexico Gas Company, Inc. (LDC); 5- Vectren Corporation (LDC); 6- Blackstone Technology Group (Services)	**6**
	Member Resignations: 1- Cenovus Energy, Inc. (Services); 2- Ameren Corporation (LDC); 3- Caerus Energy (Services); 4- Washington Gas Light Co. (LDC); 5- Marathon Petroleum Company LP (End User); 6- PECO Energy Co. (LDC); 7- Lower Colorado River Authority (End User); 8- Energy Solutions International Inc. (Services); 9- Comprehensive Energy Services (End User)	9
REQ	New Members: 1- New Jersey Board of Public Utilities (End Users/Public Agencies); 2- ISO New England (End Users/Public Agencies); 3- Public Utility Commission of Texas (End Users/Public Agencies); 4- Big Data Energy Services (Service Providers/Suppliers)	**4**
	Member Resignations: 1- Exelon Energy Delivery (Utilities)	1
RGQ	New Members:	**0**
	Member Resignations: 1- Asgard Energy, LLC (Service Provider/Supplier); 2- Nicor Gas (Distribution)	2
TOTAL	New Members:	**18**
	Member Resignations:	22

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	Organization	Seg [1]	Contact	Sub-Seg [2]
Retail 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	
6	City of Houston	e	James P. Cargas	
7	Comverge, Inc.	s	Wendell Miyaji	
8	Dominion Retail	s	William Barkas	
9	Dominion Virginia Power	u	Brandon Stites	
10	Electric Reliability Council of Texas (ERCOT)	s	Susan Munson	
11	Energy Information Standards Alliance	e	Christopher Kotting	
12	Honeywell International, Inc.	e	Steve Gabel	
13	ISO New England	e	Dennis Robinson, Douglas Smith, Eric Winkler	
14	ista	s	Judy Bailey, Jennifer Teel	
15	Maryland Public Service Commission	e	Steven Theroux	
16	National Association of Regulatory Utility Commissioners	e	James Bradford Ramsay	
17	New Jersey Board of Public Utilities	e	Kristi Izzo	
18	Oncor	u	Larry Williford, Debbie McKeever	
19	Pennsylvania Office Of Consumer Advocate	e	Tanya J. McCloskey	
20	Pennsylvania Public Utility Commission	e	Annunciata E. Marino	
21	PPL Solutions, LLC	s	James M. Minneman, Kim Wall	
22	Public Utilities Commission of Ohio	e	Amanda Stallings	
23	Public Utility Commission of Texas	e	Christine Wright	
24	Southern Company Services	s	Chuck Darville	
25	SunGard Consulting Services, LLC	s	Austin Morris	
26	Vermont Public Service Board	e	Pam Stonier	
27	Wisconsin Public Service Corporation	u	Dennis Derricks, Ken Thiry	
28	ZigBee Alliance	e	Tobin Richardson	

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

[2] The sub-segment apply only to the WEQ and the abbreviations are – muni – municipal/cooperative, iou – investor owned utility, itc – independent transmission company, fed – federal/state/provincial facility/agency, lind – large industrial, sgen – self generation, end use – end user that may be represented in other segments, merc – merchant, N – no designation, reg – regulatory agency, niou – not investor owned utility. To get a full description of the subsegment, please reference the WEQ Procedures: http://www.naesb.org/pdf/weq_quadrant_procedures.doc

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	Organization	Seg [1]	Contact	Sub-Seg [2]
Wholesale Gas Quadrant Members:				
1	8760, Inc.	s	Jim Buccigross	
2	Accenture, LLP	s	Shelley Hurley	
3	AGL Resources Inc	l	Tim Sherwood	
4	Alliance Pipeline LP	pl	Cathie Legge, Brian Troicuk	
5	American Gas Association	l	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.	l	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	CenterPoint Energy Services, Inc.	s	Mickey Moon, Larry Kunkle	
22	CenterPoint Energy Gas Transmission Company	pl	Cindy Suarez, Larry Thomas	
23	CenterPoint Energy Mississippi River Transmission Corporation	pl	Cindy Suarez, Mike Stoll	
24	Cheniere Pipeline Company	pl	Whit Scott	
25	Chevron Natural Gas	pr	Charles (Chuck) Cook	
26	Chevron Pipe Line Company	pl	Mary Anne Collins, Deborah Plattsmier, Jeff Kirk	
27	Cimarex Energy Co.	pr	Charlotte Baker	
28	Citigroup Energy Inc.	s	Carrie Southard, Angela Davis	
29	Colorado Springs Utilities	l	Joe M. Holmes	
30	Columbia Gas Transmission	pl	Claire Burum	
31	ConocoPhillips Gas and Power	pr	Catherine R. Abercrombie, Pete Frost	
32	Consolidated Edison Company of NY	l	Scott Butler	
33	Constellation Energy Commodities Group Inc.	s	Lisa Simpkins, Joseph Kirwan, Andrea Kullman,	

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	Organization	Seg [1]	Contact	Sub-Seg [2]
			Jennifer Scott, Stephen C. Knapp	
34	Dauphin Island Gathering Partners	pl	Katie Rice	
35	DB Energy Trading	s	William Donnelly, Travis McCullough	
36	Defense Logistics Agency Energy	e	Veronica Jones, Kevin Ahern	
37	Department of Energy	e	Christopher Freitas	
38	Devon Energy Corporation	pr	Bill Green, Josephina Nguyen, Mike Dionisio	
39	Dominion Resources	l	Craig Colombo	
40	Dominion Transmission, Inc.	pl	Becky Miller, Ron Tomlinson	
41	DTE Energy Trading, Inc.	s	Gregory V. Staton, James Buck, Dena Crawford, Marcia L. Hissong, Ann Marie Jambor, Cynthia Klots, Shelley Greene	
42	Eastern Shore Natural Gas Company	pl	Elaine B. Bittner	
43	Enbridge (U.S.) Inc.	pl	Elise Cort	
44	Encana Marketing (USA) Inc.	s	Keith Sappenfield, Jeff Jarvis	
45	Encana Oil & Gas (USA) Inc.	pr	Keith Sappenfield, Jeff Jarvis	
46	Energy Transfer Partners, L.P.	pl	Josie Castrejana, Miki Kolobara	
47	Enogex Energy Resources LLC	s	Cary Metz	
48	Entergy Services, Inc.	e	Laura Berryman, Terry Shields	
49	Enterprise Products Partners L.P.	pl	Jeff Molinaro	
50	EP Energy E&P Company, L.P.	pr	Stephanie Karm	
51	Equitrans, LP	pl	Paul W. Diehl	
52	ExxonMobil Gas & Power Marketing Company a division of Exxon Mobil Corporation	pr	Randy E. Parker, John W. Poe	
53	Florida Power & Light Company	e	Tim Gerrish, Art Morris	
54	Gas Transmission Northwest Corp.	pl	Joseph Pollard	
55	Golden Pass Pipeline, LLC	pl	Vickie Long	
56	Great Lakes Gas Transmission	pl	Joseph Pollard	
57	Iberdrola USA Management Corporation	l	Mark Marini	
58	Imperial Irrigation District	e	Susie Carrillo	
59	Integrys Energy Group, Inc.	l	David E. Wear	
60	Iroquois Gas Transmission System	pl	Tom Gwilliam	
61	JP Morgan Ventures Energy Corp	S	Paul Tramonte	
62	Kern River Gas Transmission Co	pl	Brenda Martin	
63	Kinder Morgan Western Region Pipelines	pl	William Griffith	
64	Latitude Technologies	s	Leigh Spangler	
65	Louis Dreyfus Energy Services	s	Tara Liscombe	
66	Macquarie Energy LLC	s	Darlene Volker, Michele McLendon	
67	Marathon Oil Company	pr	Robin Perrine	

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	Organization	Seg [1]	Contact	Sub-Seg [2]
68	Mewbourne Oil Company	pr	Michael F. Shepard	
69	National Fuel Gas Supply Corp.	pl	Deborah Kupczyk	
70	Natural Gas Pipeline Co of America	pl	Paul Love, Gene Nowak	
71	National Grid	l	James A. Stanzione	
72	New Mexico Gas Company Inc.	l	Ericka DeCourcey	
73	Nexen Marketing	s	Deb Strang, Sharron Roberts	
74	NextEra Energy Power Marketing, LLC	e	Marty Jo Rogers	
75	NiSource, Inc.	l	Deepak Raval, Michael D. Watson	
76	Noble Americas Corp	pl	Joseph Limone, Marisa Scauzillo, Vanessa R. Mathieu	
77	Noble Energy, Inc.	pr	Richard Smith, Tammy M. Stevens	
78	Northern Border Pipeline Company	pl	Joseph Pollard	
79	Northern Natural Gas	pl	Nancy A. Hetrick	
80	Northwest Natural Gas Company	l	Randolph Friedman	
81	NOVA Gas Transmission Ltd.	pl	Sherry Hill, Bob Jones	
82	ONEOK	l	Larry Dykes	
83	ONEOK Partners GP, LLC	pl	Teri Tingler, Lisa Nishimuta	
84	PAA Natural Gas Storage, LLC	s	Eileen W. Kisluk	
85	Panhandle Eastern Pipe Line	pl	Michael Langston, Larry Biediger	
86	Peoples Gas System (A division of Tampa Electric Co)	l	Wraye Grimard	
87	Portland Natural Gas Transmission System	pl	Sherry Hill, Bob Jones	
88	PPL EnergyPlus, LLC	e	Anne Lovett	
89	QEP Resources, Inc.	pr	Steve Stanton	
90	Questar Pipeline Co.	pl	Jerry H. Gross	
91	Quorum Business Solutions Inc.	s	Cleve Hogarth, Seth Peters	
92	Salt River Project Agricultural Improvement & Power District	e	Lori-Lynn C. Pennock	
93	Sempra Energy - Southern California Gas Co.	l	Lee Stewart, Rodger Schwecke	
94	Sempra U.S. Gas & Power	pl	Bill Rapp, Elizabeth Peters	
95	Sequent Energy Management, L.P.	s	Pat Metteauer	
96	Shell Energy North America (US), L.P.	s	Eric Gillaspie	
97	SNL Financial	s	Katrina Sumey	
98	Southern California Edison Company	e	Roman Bakke, Rob Grimm	
99	Southern Company Services, Inc.	e	Alan Kilpatrick, Travis DeJuan Law	
100	Southern Star Central Gas Pipeline	pl	Philip Rullman, Doug Field	
101	Southwest Gas Corporation	l	Larry Black, Mark Anderson, Mark Litwin, John Olenick	
102	Spectra Energy Transmission	pl	Richard Kruse, Kathryn Burch	

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	Organization	Seg [1]	Contact	Sub-Seg [2]
103	SunGard	s	Sylvia Munson	
104	Tennessee Gas Pipeline Company	pl	Mark Gracey	
105	Tennessee Valley Authority	e	Valerie Crockett	
106	Tiger Natural Gas	s	R.F. (Bob) Smith	
107	TransCanada Pipelines	pl	Sherry Hill, Bob Jones	
108	Transwestern Pipeline Company, LLC	pl	Blair V. Lichtenwalter, Mary Draemer	
109	Vector Pipeline L.P.	pl	Amy Bruhn	
110	Vectren Corporation	l	Elizabeth Beck	
111	WBI Energy Transmission, Inc.	pl	Keith Tiggelaar, Gwen Schoepp, Kelly Brooks, Lori Myerchin	
112	Williams Energy Resources, LLC	s	Tina Still, Cindy Bottomley, Kelly Knopp	
113	Williams Gas Pipeline	pl	Dale Davis, Christopher Burden	
114	WPX Energy Marketing, LLC	s	Rich Ficken	
Wholesale Electric Quadrant Members:				
1	8760, Inc.	ts	Jim Buccigross	
2	ACES Power Marketing LLC	m	Roy J. True, Amadou Fall	muni
3	Alabama Municipal Electric Authority	d	Ray Phillips	muni
4	Alberta Electric System Operator	i	Diana Pommen	
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

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	Organization	Seg [1]	Contact	Sub-Seg [2]
24	Cleco Power, LLC	t	Cindy Guillot	iou
25	Consolidated Edison Company of New York, Inc.	t	Scott Butler	iou
26	Deseret Power Electric Co-op	g	Curt Winterfeld	muni
27	Dominion Energy Marketing, Inc.	g	Lou Oberski	iou
28	Duke Energy Corp.	d	Alan Pritchard	iou
29	Duke Energy Corp.	m	John Sturgeon	iou
30	Duke Energy Corp.	t	Jack Armstrong, Michael Anthony, Lee Schuster	iou
31	Dynegy Marketing and Trade, LLC	g	Contracts – Legal Department	merc
32	Edison Electric Institute	n	David Owens, Dave Dworzak, James P. Fama	n
33	Electric Reliability Council of Texas (ERCOT)	i	Bill Blevins, Paul Wattles, Joel Mickey	
34	Empire District Electric Company, The	t	Bary K. Warren	iou
35	Entergy Services, Inc.	t	Narinder Saini	iou
36	Exelon Generation - Power Team	m	Jack Crowley	iou
37	First Energy Service Company	d	Robert M. Martinko, Thomas C. Burgess	iou
38	Florida Municipal Power Agency	g	Frank Gaffney, Dan O'Hagan	muni
39	Florida Municipal Power Agency	d	Frank Gaffney, Dan O'Hagan	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	Glenn Sylvain	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	Lincoln Electric System	g	Douglas Bantam	muni
52	Los Angeles Department of Water and Power	t	Mohammed Johar Beshir	muni
53	Los Angeles Department of Water and Power	m	Bradford L. Packer, Joel F. Cordero	muni
54	Maine Public Utilities Commission	e	Denis Bergeron	reg
55	Manitoba Hydro	t	Tyler Young	fed
56	Manitoba Hydro	m	Shannon Jones	fed
57	Michigan Public Power Agency	d	Peter J. Schimpke	muni
58	MidAmerican Energy Company	m	Dennis Kimm	iou
59	Midwest Independent Transmission System Operator	i	William (Bill) Phillips, Ed Skiba	

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60	Midwest Reliability Organization	t	Dan Schoenecker	at large
61	Missouri River Energy Services	d	Thomas J. Heller	muni
62	Nalcor Energy	m	Brad Coady	fed
63	National Association of Regulatory Utility Commissioners	e	Lou Ann Westerfield	reg
64	National Grid	t	Edward M. Kremzier	iou
65	National Institute of Standards and Technology	ts	David A. Wollman	
66	National Rural Electric Cooperative Assoc.	d	Paul McCurley	muni
67	Nebraska Public Power District	t	Don Schmit	muni
68	New Jersey Board of Public Utilities	g	Kristi Izzo	fed
69	New York Independent System Operator (NYISO)	i	Rana Mukerji, Donna Pratt	
70	New York State Reliability Council	d	P. Donald Raymond	at large
71	North American Electric Reliability Corporation	d	David Taylor	at large
72	North Carolina Electric Membership Corporation	d	David Beam, Diane Huis, Richard McCall, James R. Manning	muni
73	Northeast Utilities Service Company	t	David Boguslawski, Calvin A. Bowie	iou
74	Northwestern Corporation	t	Mike Cashell	iou
75	NRG Energy, Inc.	g	Alan Johnson, Jennifer J. Vosburg, Elizabeth Killinger	merc
76	NV Energy	m	Sheryl Torrey	iou
77	NV Energy, Inc.	t	Patricia Englin	iou
78	Open Access Technology International, Inc.	e	Michehl Gent	at large
79	Open Access Technology International, Inc.	t	Paul R. Sorenson	at large
80	Organization for the Advancement of Structured Information Standards (OASIS)	ts	Laurent M. Liscia	
81	PacifiCorp	m	John Apperson	iou
82	PacifiCorp	t	Sarah E. Edmonds	iou
83	PJM Interconnection	i	Frank Koza, Cathy Wesley	
84	Portland General Electric	t	Frank Afranji, John Walker. Johnny Useldinger	iou
85	Power Costs, Inc. (PCI)	ts	TJ Ferreira	
86	Powerex Corp	m	Michael L McWilliams, Sharole Tylor	fed
87	PowerSouth Energy Cooperative	d	William Ronald Graham	muni
88	Public Service Company of New Mexico	m	Steven Maestas, Darren Wilkins, Patricia Merville, Roger Vaughn	iou
89	Public Utilities Commission of Ohio	e	Amanda Stallings	reg
90	Public Utility District No. 2 of Grant County, Washington	m	Casey Sprouse	muni
91	Puget Sound Energy, Inc.	t	George Marshall, Bob Harshbarger	iou
92	Sacramento Municipal Utility District	d	Steve Sorey	muni

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	Organization	Seg [1]	Contact	Sub-Seg [2]
93	Salt River Project Agricultural Improvement and Power District	t	Michael J. Pfeister	fed
94	Salt River Project Agricultural improvement and Power District	m	Richard Lehman	fed
95	San Diego Gas & Electric Company	t	Patricia vanMidde	iou
96	Santee Cooper	t	Tom Abrams	fed
97	Seattle City Light	d	Cathy Leone-Woods	muni
98	Seminole Electric Cooperative, Inc.	m	Steve Wallace	muni
99	Shell Energy America (US), L.P.	m	Robert Reilley, Paul Kerr	niou
100	Shift Systems	e	Jesse D. Hurley	at large
101	Snohomish County PUD No. 1	d	Kim Haugen	muni
102	South Carolina Electric & Gas Company	t	S. Porcher Stoney, James T. Starling, Jr. , Sonya Green-Sumpter, Matt Bullard, Kevin Spitzform	iou
103	Southern Company Services, Inc.	g	John Ciza	iou
104	Southern Company Services, Inc.	m	Joel Dison	iou
105	Southern Company Services, Inc.	t	Terry Coggins, JT Wood, James Y. Busbin, Corey Sellers, Antonio Grayson	iou
106	Southwest Power Pool	i	Carl Monroe, Michael Desselle, Charles Yeung	
107	Southwest Transmission Cooperative, Inc.	t	Shane Sanders, James Burson	muni
108	Stryve Advisors, LLC	ts	Bill Hunter	
109	SunGard	ts	Andrew Tritch	
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	Tri-State Generation and Transmission Association, Inc.	t	Doug Reese	muni
115	Tri-State G&T Association, Inc.	g	Janelle Marriott	muni
116	Tucson Electric Power Company	t	Raquel Aguilar, Ed Beck, Amy Welander	iou
117	United Illuminating Company, The	t	Jim Clemente, Laurie Lombardi	iou
118	Vermont Public Power Supply Authority	g	William J. Gallagher	muni
119	Vermont Public Service Board	e	Pam Stonier	reg
120	We Energies (Wisconsin Electric)	d	Linda Horn	iou
121	We Energies (Wisconsin Electric)	g	James R. Keller	iou
122	Westar Energy, Inc.	g	Grant Wilkerson	iou
123	Western Area Power Administration	t	JB Hite	fed
124	Western Area Power Administration	m	Jeffrey Ackerman	fed
125	Western Electricity Coordinating Council	t	Michelle Mizumori, Craig L. Williams	at large

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	Organization	Seg [1]	Contact	Sub-Seg [2]
126	White & Case LLP	ts	Richard Cousins	
127	Wisconsin Public Service Corporation	g	Christopher Plante, Charles W. Severance, Neal Balu	iou
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	Exelon Energy	s	Sheree M. Petrone	
7	Integrys Energy Group, Inc.	d	Tom Aridas, Ken Thiry	
8	Latitude Technologies	s	Leigh Spangler	
9	National Fuel Gas Distribution Corporation	d	Mike Novak	
10	Pennsylvania Office of Consumer Advocate	e	Tanya J. McCloskey	
11	SouthStar Energy Corp	s	Michael Braswell, Joseph C. Monroe	
12	Sprague Operating Resources LLC	s	Paul Scoff	
13	Systrends USA	s	Dave Darnell	
14	UGI Utilities, Inc.	d	Paul Szykman	
15	Vectren Retail, LLC	s	Tami Wilson	
16	World Alliance for Decentralized Energy	s	David Sweet	

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Appendix E – Retail 2013 Proposed 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

	Item Number & Description[i]	Completion[ii]	Assignment[iii iv]
1.	Develop Technical Electronic Implementation Standards and Data Dictionaries		
	a. Book 10: Retail Customer Enrollment, Drop and Account Information Change Status: Underway	1st Q, 2013	IR/TEIS
	b. Review and update the technical implementation of Book 3 – Billing and Payment. Status: Underway	1st Q, 2013	IR/TEIS
2.	Additional 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(f)	IR/TEIS
	b. Modify as needed the NAESB EDM Version 1.6 as the data transport mechanism for ERCOT TX SET EDI transactions. Status: Underway	2013	Retail Electric part of the BPS/Retail Electric Texas Task Force
3	Develop Smart Grid Wholesale and Retail Electric Standards		
	a. Harmonize Smart Grid glossary with Retail Glossary Status: Ongoing	Ongoing	REQ/RGQ Glossary Subcommittee
4.	Customer Information - Develop Model Business Practices and Process Flows to enable a Retail Customer, or a third party acting on behalf of the Retail Customer, to obtain the Retail Customer's energy usage information on an on-going basis outside of a Smart Grid environment Status: Not Started, this development is tied to the development for item 5(a)	2013, date may be dependent on item 5(a).	BPS
5.	Update Existing Model Business Practices – Review and update all existing Model Business Practices, filling in any gaps that may exist and making the language consistent throughout all Books.[v]		
	a. Book 3 – Billing and Payments Status: Underway	1st Q, 2013	BPS
	b. Book 8 – Customer Information Status: Not Started	2nd Q, 2013	BPS

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	Item Number & Description[i]	Completion[ii]	Assignment[iii iv]
c.	Book 9 – Customer Billing and Payment Notification via Uniform Electronic Transactions Status: Not Started	4th Q, 2013	BPS
d.	Book 10 – Customer Enrollment, Drop, and Account Information Change Status: Not Started	2014	BPS
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[vi] 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
o.	Book 24 – Enrollment, Drop, Account Information Change in Demand Response Programs[8] Status: Not Started	2015	BPS

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	Item Number & Description[i]	Completion[ii]	Assignment[iii iv]
6.	Create common interfaces and data structures necessary for enrolling DR sites into a DR 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: Underway	1st Q, 2013	REQ BPS, REQ DSM-EE Subcommittee, REQ Smart Grid PAP 10 Subcommittee Data Privacy Task Force
7.	Session 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)** Status: Underway	1st Q, 2013	IR/TEIS
	b. Modify or develop standards as needed to apply the analysis of the above item (7(a)) Status: Not Started	1st 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 Interoperability Panel Cyber Security Working Group (R12008) Status: Underway	2013	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.

3. Consider development of business practices to support use of mobile devices.

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As Adopted by the Retail EC on October 24, 2012

Item Number & Description[i]	Completion[ii]	Assignment[iii iv]
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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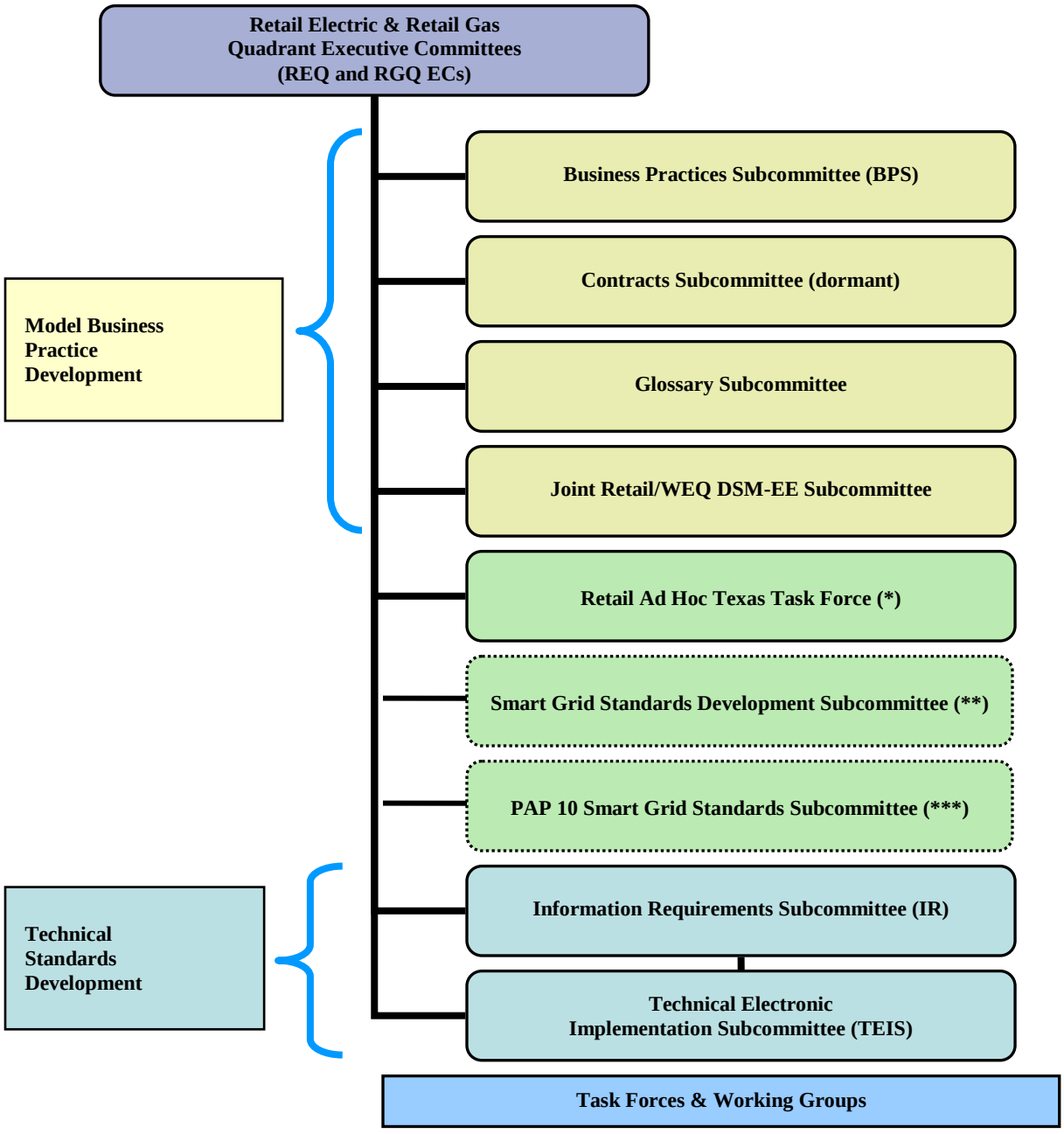

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NAESB Retail Subcommittee Leadership: [viii]

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 (REQ)
Glossary Subcommittee: Patrick Eynon (REQ)
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.

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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.

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TO: NAESB Board Retail Structure Review Committee Members

FROM: Jonathan Booe, NAESB Vice President

RE: Notes from the NAESB Board Retail Structure Review Committee Conference Call – January10, 2013

DATE: January 11, 2013

Dear Retail Structure Review Committee,

A Retail Structure Review Committee conference call was held on January 10, 2013 to continue discussions concerning the status of the retail quadrants and possible restructuring. Mr. Booe served as the counsel for the conference call and the notes below serve as the record.

Notes from the January 10, 2013 NAESB Board Retail Structure Review Committee Conference Call

Administrative

- Mr. Minneman welcomed the participants to the conference call and thanked them for their attendance. Mr. Booe provided the antitrust guidance and meeting policy reminder. The participants introduced themselves. Ms. McQuade reviewed the agenda with the participants. Mr. Burks moved to adopt the agenda as drafted and Mr. Minneman seconded the motion. The motion passed without opposition. Ms. Minneman reviewed the draft notes from the November 30, 2012 conference call with the participants. Mr. Burks, seconded by Ms. Ray, moved to adopt the notes as drafted. The motion passed without opposition.

Discussion

- Ms. McQuade reviewed the three proposals for merging the quadrants included in the agenda and noted the benefits and drawbacks she identified for each. The participants concluded that the limited number of participants that would be in the Utility and Distributor segments if proposal one or two were adopted would be a concern and may present the same issue with meeting the Bylaw requirement in the future. For this reason the participants supported pursuit of proposal three.
- Mr. Minneman noted that proposal three would actually only present one redundancy with the Pennsylvania Office of Consumer Advocate as the Dominion Retail memberships would continue to be held in the Retail Gas and Retail Electric segments. Ms. McQuade noted that if the End User/Public Agency segment was designated REQ only and the Retail Gas Service Providers/Suppliers segment served as a catchall for all gas participants that are not distributors, then the Pennsylvania Office of Consumer Advocate could continue with two memberships. The participants supported this direction.
- Mr. Minneman noted that the only concern with proposal three is that there may be an issue with including the REQ Utilities and RGQ Distributors in the same segment. The Committee agreed that the issue should be discussed further to determine if it would be a concern of the members in those segments. Ms. Ray stated that Southern Company does not have a concern with combining the segments but suggested continuing the discussion with other utilities and distribution companies. Ms. McQuade stated that there are a number of REQ only standards and annual plan items and that will need to be addressed and maintained in the future. Those companies that are only in the retail gas market will have to be comfortable voting on these items in the best interest of the market even though the actions may not affect their companies. Mr. Minneman noted that this is already done by a number of companies in the WEQ.
- Ms. McQuade stated that based upon the discussion she would put together a new work paper that would show how the membership would be organized under proposal three as modified. Ms. Crockett and Mr. Burks supported this direction. Mr. Minneman recommended that the Committee encourage the participation of utility and distribution company representatives during the next meeting so that the group can discuss the concern he raised. Ms. McQuade stated that she would add the item to the agenda

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Adjournment

- The meeting was adjourned at 10:44 am Central.

Attendance

Name	Organization
Jonathan Booe	NAESB
Cade Burks	Big Data
Valerie Crockett	TVA
Elizabeth Mallett	NAESB
Rae McQuade	NAESB
Jim Minneman	PPL Solutions
Judy Ray	Alabama Power Company
Keith Sappenfield	Encana

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TO: NAESB Board Retail Structure Review Committee Members

FROM: Jonathan Booe, NAESB Vice President

RE: Notes from the NAESB Board Retail Structure Review Committee Conference Call – January24, 2013

DATE: January 24, 2013

Dear Retail Structure Review Committee,

A Retail Structure Review Committee conference call was held on January 24, 2013 to continue discussions concerning the status of the retail quadrants and possible restructuring. Mr. Booe served as the counsel for the conference call and the notes below serve as the record.

Notes from the January 24, 2013 NAESB Board Retail Structure Review Committee Conference Call

Administrative

- Mr. Burks welcomed the participants to the conference call and thanked them for their attendance. Mr. Booe provided the antitrust guidance and meeting policy reminder. Ms. McQuade called the roll and Mr. Minneman reviewed the agenda with the participants. Mr. Jones moved to adopt the agenda as drafted and Mr. Sappenfield seconded the motion. The motion passed without opposition. Ms. Minneman reviewed the draft notes from the January 10, 2013 conference call with the participants. Mr. Burks, seconded by Mr. Sappenfield, moved to adopt the notes as drafted. The motion passed without opposition.

Discussion

- Mr. Minneman summarized the results of the last meeting and noted that the participants recommended that the Committee pursue proposal three described in the meeting materials. He noted that Ms. McQuade had a suggested modification to proposal three and asked her to present the recommendation to the group. Ms. McQuade noted that pursuing proposal three as discussed in the previous meeting would result in Rick Zollars sitting as the only EC member in the proposed "Retail Gas Members other than Distributors" segment. She also noted that the REQ Utility Segment had grown since the last meeting and has expectations for further growth. She suggested that the participants consider revising proposal 3 – such that the REQ Utility segment stands on its own and the RGQ distribution members join the other RGQ members in a single segment.
- Mr. Minneman stated that he was unaware that proposal three would result in the lack of EC participation and supported Ms. McQuade's solution, assuming the gas service providers and distributors would be comfortable working in the same segment. Ms. Zollars stated that most of the work in the Business Practice Subcommittee is applicable to both the gas and electric markets and that he does not see an issue with creating a single gas segment. Mr. Jones supported Mr. Zollars' statement. Mr. Boswell emphasized the need for a workable solution and reminded the participants that modifications to the interim actions could be made in the future if needed. Ms. McKeever recommended reviewing the status of the retail membership every year to determine if it is working.
- Ms. McQuade stated that she would redraft the proposal to reflect the discussion of the participants. She also noted that creating six Board of Directors and Executive Committee seats in each segment would maximize the participation of the current leadership within the REQ and RGQ. Mr. Minneman noted that there are currently twelve Board and Executive Committee seats in each quadrant and that creating six seats in each of the merged segments should not affect the participation of the current members. The participants supported the recommendation of providing six Board and Executive Committee seats in each new segment. Ms. McQuade stated that the American Gas Association has been made aware of the restructuring effort as had all Board members, and it would be further discussed at the Advisory Council meeting.
- Mr. Minneman noted that the retail gas EC members should vote in the best interest of the

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industry when electric only recommendations are presented for their consideration. Mr. Zollars and Mr. Jones confirmed. Ms. McQuade noted that representation on the Board and Executive Committee under the new proposal will not necessarily reflect the membership of the combined retail quadrants as one-third of the quadrant members would be gas participants and they would only hold one-fourth of the Board and Executive Committee seats. However, the number of Board and Executive Committee seats would be representative of the percentage of participation between the two quadrants. No opposition was raised concerning the discrepancy. Ms. McQuade reviewed the proposed outline of the report and stated that she would have draft available for editing during the following week. She also noted that the report would include information concerning the new Smart Grid Interoperability Panel focus on gas and the efforts of NAESB to support state commission staff efforts around standards development.

- The participants agreed that the scheduled February 8, 2013 conference call would be unnecessary.

Adjournment

- The meeting was adjourned at 10:50 am Central.

Attendance

Name	Organization
Jonathan Booe	NAESB
Bill Boswell	NAESB
Cade Burks	Big Data
Valerie Crockett	TVA
Dan Jones	Duke Energy
Elizabeth Mallett	NAESB
Debbie McKeever	Oncor
Rae McQuade	NAESB
Jim Minneman	PPL Solutions
Judy Ray	Alabama Power Company
Keith Sappenfield	Encana
Rick Zollars	Dominion

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TO:	NAESB Retail Structure Review Committee
FROM:	Rae McQuade, NAESB President and COO
RE:	Board and EC Analysis for Proposal 3 for Consideration at the January 24 Conference call and Web cast
DATE:	January 11, 2013

Dear All –

The second conference call of 2013 is scheduled for **Thursday, January 24 from 10 am to noon pm C**. You have already been sent the agenda and working documents. Attached please find an analysis for the EC and Board seats and relevant excerpts from the governing documents, for your consideration prior to our January 24 meeting. Rae

January 24 at 10:00 am C	• Call-in information for attendance by phone: Conference number: 866-740-1260, Access code: 7133560, Security code: 1022
Call-in & web cast information:	• Web cast: http:// www.readytalk.com, and use the same participant access code and security code above • Any interested party can attend, regardless of membership in the committee or membership in the NAESB organization.

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Analysis of Proposal 3

Proposal 3 Amended on 1-10-13:

There are four segments and all members but two are accounted for, with two segments representing both retail gas and electric interests, and then one segment each specific to retail gas interest and retail electric interest. The distribution and utility companies are in one segment, and there is more delineation in this proposal as compared to proposal 1. The board for the Utilities & Distributors segment, depending on the number of seats, may lose some existing leadership.

Proposal 3 -- Merged Quadrant		**TOTAL**	**43**
	Utilities & Distributors		11
	Retail Gas Members other than Distributors		10
	Retail Electric Service Providers/Suppliers		9
	Retail Electric End Users/Public Agencies		13

Members of the New Segments for Proposal 3:

Proposal 3 -- Merged Quadrant		**TOTAL**	**43**
Utilities & Distributors			11
REQ	Utility	Alabama Power	
REQ	Utility	Ameren Services Company	
RGQ	Distribution	American Public Gas Association (APGA)	
REQ	Utility	Baltimore Gas & Electric Co.	
REQ	Utility	Dominion Virginia Power	
RGQ	Distribution	Duke Energy Corp	
RGQ	Distribution	Integrys Energy Group, Inc.	
RGQ	Distribution	National Fuel Gas Distribution Corporation	
REQ	Utility	Oncor	
RGQ	Distribution	UGI Utilities, Inc.	
REQ	Utility	Wisconsin Public Service Corporation	
Retail Gas Members other than Distributors			10
RGQ	Services/Suppliers	Allegro Development	
RGQ	Services/Suppliers	Capacity Center	
RGQ	Services/Suppliers	Dominion Retail, Inc.	
RGQ	Services/Suppliers	Latitude Technologies	
RGQ	End User/Public Agencies	Pennsylvania Office of Consumer Advocate	
RGQ	Services/Suppliers	SouthStar Energy Corp	
RGQ	Services/Suppliers	Sprague Operating Resources LLC	
RGQ	Services/Suppliers	Systrends USA	
RGQ	Services/Suppliers	Vectren Retail, LLC	

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Analysis of Proposal 3

RGQ	Services/Suppliers	World Alliance for Decentralized Energy	
Retail Electric Service Providers/Suppliers			9
REQ	Services/Suppliers	ABB Ventyx	
REQ	Services/Suppliers	Big Data Energy Services	
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 Electric End Users/Public Agencies			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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Analysis of Proposal 3

Proposal 3 -- Merged Quadrant Board Seats

Utilities & Distributors			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	
RGQ	Alonzo Weaver	Vice President of Engineering and Operations, Memphis Light, Gas & Water Division (APGA)	
RGQ	Ralph Cleveland	Head of Global Customer Operations, AIG Property Casualty	
Retail Gas Members other than Distributors			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	
Retail Electric Service Providers/Suppliers			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 Electric End Users/Public Agencies			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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Analysis of Proposal 3

Proposal 3 -- Merged Quadrant Executive Committee Seats

Utilities & Distributors			5
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	
RGQ	Dan Jones	Senior Account Manager – Customer Choice, Duke Energy	
Retail Gas Members other than Distributors			1
RGQ	Richard Zollars	Director - Data and Billing, Dominion Retail, Inc.	
Retail Electric Service Providers/Suppliers			3
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 Electric End Users/Public Agencies			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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Analysis of Proposal 3

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.

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

Requesters: Joint REQ/RGQ BPS, REQ DSM-EE Subcommittee, REQ Smart Grid PAP 10 Subcommittee & Data Privacy Task Force
Request No.: 2012 Retail Annual Plan Item No. 10 b
Request Title: Retail Customer Authorization Form

1. RECOMMENDED ACTION:

X	Accept as requested
	Accept as modified below
	Decline

EFFECT OF EC VOTE TO ACCEPT RECOMMENDED ACTION:

X	Change to Existing Practice
	Status Quo

2. TYPE OF DEVELOPMENT/MAINTENANCE

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

3. RECOMMENDATION

SUMMARY:

The Joint REQ/RGQ Business Practices Subcommittee (BPS), REQ DSM-EE Subcommittee, REQ Smart Grid PAP 10 and Data Privacy Task Force submit this Recommendation for Retail 2012 Annual Plan Item No. 10 b. This Annual Plan Item is to develop a new standardized form to obtain the Retail Customer's Authorization for the release of their information to a third party. The Joint Subcommittees developed the attached form to be included in Book 6 – Contracts. Note that the form is designed to be printed double-sided on legal paper to minimize inconvenience to the Retail Customer.

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

Requesters: Joint REQ/RGQ BPS, REQ DSM-EE Subcommittee, REQ Smart Grid PAP 10 Subcommittee & Data Privacy Task Force
Request No.: 2012 Retail Annual Plan Item No. 10 b
Request Title: Retail Customer Authorization Form

RECOMMENDED STANDARDS:

RXQ.6.8 Retail Customer Authorization Form

The Retail Customer Authorization Form is used to obtain the Retail Customer's Authorization for the release of their information to a third party. The form is designed to be printed double-sided on legal paper to minimize inconvenience to the Retail Customer. It is also envisioned that an online version of this form could be submitted by the Retail Customer. There may also be other electronic means where a Retail Customer could provide Authorization for the release of particular information described on this form.

Attachment: http://www.naesb.org/pdf4/retail_2012_api_10b_rec_attach.doc

4. SUPPORTING DOCUMENTATION

a. Description of Request:

Retail 2012 Annual Plan Item No. 10 b is to develop a new standardized form to obtain the Retail Customer's Authorization for the release of their information to a third party

b. Description of Recommendation:

The Joint REQ/RGQ Business Practices Subcommittee (BPS), REQ DSM-EE Subcommittee, REQ Smart Grid PAP 10 and Data Privacy Task Force submit this Recommendation for Retail 2012 Annual Plan Item No. 10 b. This Annual Plan Item is to develop a new standardized form to obtain the Retail Customer's Authorization for the release of their information to a third party. The Joint Subcommittees developed the attached form to be included in Book 6 – Contracts. Note that the form is designed to be printed double-sided on legal paper to minimize inconvenience to the Retail Customer.

c. Business Purpose:

See above

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

Requesters: Joint REQ/RGQ BPS, REQ DSM-EE Subcommittee, REQ Smart Grid PAP 10 Subcommittee & Data Privacy Task Force
Request No.: 2012 Retail Annual Plan Item No. 10 b
Request Title: Retail Customer Authorization Form

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

The Joint REQ/RGQ Business Practices Subcommittee (BPS), REQ DSM-EE Subcommittee, REQ Smart Grid PAP 10 and Data Privacy Task Force discussed the development of the Retail Customer Authorization Form at/on the following face-to-face meetings and conference calls:

March 28, 2012	Conference Call
April 30, 2012	Face-to-Face Meeting
June 26, 2012	Conference Call
July 30, 2012	Conference Call
August 20, 2012	Face-to-Face Meeting
September 26, 2012	Conference Call
October 22, 2012	Face-to-Face Meeting

The Minutes of all meetings and conference calls are posted on the NAESB web pages of the REQ and RGQ BPS, REQ DSM-EE Subcommittee, REQ Smart Grid PAP 10 and Data Privacy Task Force.

At the October 22, 2012 Face-to-Face Meeting, the Joint Subcommittees voted this Recommendation out of Subcommittees by a vote of 12 In favor, 0 Opposed and 5 Abstentions.

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 Identifier used in the Registration Agent Model

This Authorization applies to Retail Customer-specific data held by or with the following Distribution Company:

_____
Distribution Company applicable to Retail Customer's Account

The service(s) supplied by the Distribution Company that this Authorization applies to is/are (initial or electronically check all that apply):

_____Retail Customer's Gas Service

_____Retail Customer's Electric Service

Date Range: The Distribution Company is authorized to provide to the third-party identified below the type(s) of data described below, if available or applicable, for the period beginning _____(Start Date) and ending _____(End Date) (Note: End Date cannot be later than the Expiration Date below). Existing data shall be provided within thirty (30) days of Distribution Company's receipt of this signed or electronically acknowledged Authorization, and data arising after such date shall be provided on or about _____ or at monthly intervals.

The format that the data is to be provided (Initial or electronically check one format):

Summary Data
_____Monthly billing data

Interval data for the following interval:
_____ Daily
_____ Hourly
_____ 30- minute
_____ 15-minute
_____Other (Describe :_____)

Specific data to be provided:
_____kWh
_____kW (if available)
_____kVa (if applicable)
_____kVarh (if applicable)
_____Gas Usage (Therms or Ccf as appropriate)
_____ _____ *(Insert other data type as appropriate*)
_____ _____ *(Insert other data type as appropriate*)
_____ _____ *(Insert other data type as appropriate*)

Definitions and/or additional descriptions of the above data terms are attached or available at _____.

(Note: Insert additional pages if needed)

RETAIL CUSTOMER'S AUTHORIZATION:

Retail Customer Name _____
Name of Record on Distribution Company Account

Retail Customer Mailing Address _____

_____

_____

Retail Customer's or authorized Retail Customer Representative's Signature

_____
(If not Electronically Acknowledged)

Printed Retail Customer's or Representative's Name

_____

Representative's Title _____

Telephone No. _____ Fax No. _____
(If Available)

E-Mail Address _____
(Optional for Residential Customers – Required for nonresidential Retail Customers)

Date Signed or Electronically Acknowledged _____ (mm/dd/yyyy).

Expiration Date: This Authorization expires on _____ (specific date mm/dd/yyyy).

THIRD-PARTY SEEKING THE RETAIL CUSTOMER'S AUTHORIZATION:
To be signed or electronically acknowledged by a duly authorized Representative.

Company Name: _____

Mailing Address: _____

_____

_____

Contact Information: Telephone _____

E-Mail Address _____

Representative's Signature: _____
(If not Electronically Acknowledged)

Printed Representative's Name: _____

Representative's Title: _____

Date Signed or Electronically Acknowledged:_____(mm/dd/yyyy).

The third-party confirms that the data provided will only be used for the following purposes in accordance with the stated privacy Model Business Practices in North American Energy Standards 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.

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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

414 Nicollet Mall
Minneapolis, MN 55401

1-800-895-4999
xcelenergy.com

January 2, 2013

In response to the December 4, 2012, invitation for industry comment, Xcel Energy respectfully submits the following suggestions for enhancing NAESB's proposed *Retail Customer Authorization For Release Of Retail Customer-Specific Data* form:

- It may be beneficial to indicate on the form whether the release authorization is for a *one-time* information release versus an *ongoing* information release (for the term of the release authorization).
- It may be useful to give the customer the option (or notice) of the *form of communication* to be used by the Distribution Company when it releases information to the Third-Party – i.e., electronic transmission versus hard copy (mail).
- To add clarity to the wording and process for a Customer to appoint and use an agent for their account (page two of the proposed form), we suggest a statement similar to the following: *"I _____ (Customer) do hereby appoint _____ (Representative's name and address) to act as my agent for the account(s) listed on page 1."* This statement should be followed closely by the signature of the Customer. The information release authorization order should then have a separate signature line, which either the Customer or the duly authorized agent would sign.
- The word "should" is used multiple times in the concluding paragraph of the proposed form. It may be preferable to use the word "must" or "shall," to make clear that the authorization request will only be honored if all of the required steps are properly completed.
- We suggest adding a 'limitation of liability' statement to the form, perhaps something like, *"The Customer hereby releases the Distribution Company, its employees, officers, and agents from any and all liability associated with the Third-Party's use and/or dissemination of account information that the Distribution Company provides in accordance with this release authorization."*

Sincerely,

Bruce G. Smith
Xcel Energy | Responsible By Nature
Program Manager, Information Governance
612.330.5730
bruce.g.smith@xcelenergy.com

From: Lauderdale, Melissa L – Integrys Energy Service
Sent: Friday, January 04, 2013 9:14 AM
To: naesb
Subject: comment on retail customer authorization form

Dear Ms. Trum,

Integrys Energy Service submits these comments on the NAESB Retail Request for Comments on the Retail Customer Authorization Form.

1. Not all utilities require that these types of forms be provided to the utility. In some cases, the retail supplier keeps the form and provides it to the Commission upon request, like New York. Consequently, we recommend that the directions about what to do with the form should be provided separately and not included on the form itself or two options should be provided. We consider it optimal for retail markets that licensed suppliers hold the forms and no submittal to the utility be required, so we do not recommend that the NAESB form assume the forms must be provided to the utility.

2. There should be an option to consent to provide all available data. Customers may not know what data is available and it may be confusing for them to determine what data is available and data suppliers need to accurately provide a price. Additionally, the proposed form does not include PLCs or capacity tags, which affect pricing. In some states data access is provided through the utility website and there is only access to data or no access; you cannot choose access to only some information. To resolve this issue, there should be an option to provide access to all available data.

Thank you for the opportunity to submit these comments.

Melissa

Melissa Lauderdale
Director of Government & Regulatory Affairs
549 Bluehaw Drive
Georgetown, Texas 78628

From: Vance, Andrew – Direct Energy
Sent: Friday, January 04, 2013 10:45 AM
To: naesb
Subject: Comment on Retail Customer Authorization Form

Dear Ms. Trum,

Direct Energy Services submits these comments on the NAESB Retail Request for Comments on the Retail Customer Authorization Form.

1. The LOA refers to specific time intervals requested for interval data (15 minutes, 30 minutes, 1 hr, etc). However, some customers are not aware of what data granularity is available for their individual accounts. In most circumstances, suppliers are interested in receiving the most detailed data available on the account from the LDC and would select 15 minute intervals. However, the concern is if a supplier selects 15 minute intervals on the LOA, but the account only captures 30 minute intervals, the LDC may reject the request and not send the data via the HU request due to the interval data mismatch. We would want to clarify that no matter what interval time is requested, the LDC would send the most granular data available for the account.

2. The LOA requires a maximum 30 day turn-around for the LDC to provide historical usage data. However, many states require HU data turn-around in a much shorter timeframe (3 days in Texas, etc). In addition, many EDI-enabled LDCs respond within 24 hours to HU requests. Since pricing some customers can be dynamic and strict enrollment lead-times exist, suppliers & customers prefer receiving the HU as quickly as possible. There are two options to resolve this situation:

- 1) Standardize HU request LTs across deregulated states (for instance, 3 days for EDI or 5 days in manual markets)
- 2) Create language similar to "LDC must provide response by either within 30 days or state level mandated HU response lead-time whichever is shorter"

Thank you for the opportunity to submit these comments.

Andy

Andy Vance
Utility Operations Manager
Direct Energy
1001 Liberty Avenue
Pittsburgh, PA 15222
www.directenergybusiness.com

From: Stephen Bennett – Exelon/Constellation
Sent: Friday, January 04, 2013 11:51 AM
To: naesb
Subject: Exelon/Constellation Comments on NAESB Retail Customer Authorization Form

Dear Ms. Trum

Exelon/Constellation submits these comments on the NAESB Retail Request for Comments on the Retail Customer Authorization Form. Generally, we find the NAESB LOA form to be well structured. However, our experience has shown that simplifying the form to the greatest extent possible lessens the occurrence of customer errors. As such, many of our comments focus on the length and requested detail on the form itself.

1. Not all utilities require that these types of forms be provided to the utility. In some cases, the retail supplier keeps the form and provides it to the Commission upon request, like New York. Consequently, we recommend that the directions about what to do with the form should be provided separately and not included on the form itself or two options should be provided. We consider it optimal for retail markets that licensed suppliers hold the forms and no submittal to the utility be required, so we do not recommend that the NAESB form assume the forms must be provided to the utility.

2. The verbiage should indicate that signing this form in no way binds the customer to purchase services from the supplier.
    - Ex. This authorization in no way binds me to the purchase of any service or product from the Company named herein and is to be used for the sole purpose of determining my offer price of electricity service or the provision of energy-related services.

3. Data Range – In the middle of the form the date range determines the date the LOA starts and expires. This should be moved below the expiration date. If an expiration date is not sufficient, then the customer will have the opportunity to specify when the LOA should start and expire. Ideally, we would prefer that the entire data range be removed and only provide the expiration date. This extends the possible life of the LOA.

4. Summary and Interval Usage Request – We recommend combining the two and also removing the option of selecting specific intervals. We do not believe that customers generally know how the utilities send interval usage to the supplier which may create confusion.

5. Specific Data to be Provided (kWh, kW, kVa, kVarh, and gas Usage) – To the best of our knowledge, we do not believe that this information is required by utilities. To minimize confusion we recommend removing this option completely.

Stephen Bennett
Director, State Government Affairs - East
Exelon Corporation

Exelon.

300 Exelon Way, Kennett Square, PA 19348

Late Comments Submitted by the Retail BPS, DSM/EE and Data Privacy Task Force

Retail Customer Authorization Form
Late Comments of Joint Retail Electric Business Practices Subcommittee, DSM-EE Subcommittee and the Data Privacy Task Force

Comments of Xcel Energy:

In response to the December 4, 2012, invitation for industry comment, Xcel Energy respectfully submits the following suggestions for enhancing NAESB's proposed *Retail Customer Authorization For Release Of Retail Customer-Specific Data* form:

- It may be beneficial to indicate on the form whether the release authorization is for a *one-time* information release versus an *on-going* information release (for the term of the release authorization),

Late Comments of Joint Subcommittees:

Concept already covered in date range paragraph. Last blank would indicate whether it would be a one-time data release.

- It may be useful to give the customer the option (or notice) of the *form of communication* to be used by the Distribution Company when it releases information to the Third-Party – i.e. electronic transmission versus hard copy (mail).

Late Comments of Joint Subcommittees:

Rejected. The form of communication would be by mutual agreement between the Distribution Company and the third party.

- To add clarity to the wording and process for a Customer to appoint and use an agent for their account (page two of the proposed form), we suggest a statement similar to the following: "*I _____ (Customer) do hereby appoint _____ (Representative's name and address) to act as my agent for the account(s) listed on page 1*". This information release authorization order should then have a separate signature line, which either the Customer or the duly authorized agent would sign.

Late Comments of Joint Subcommittees:

Rejected. A separate form/document should be used to appoint an agent. It is not the purpose of the Customer Authorization Form to appoint an agent. It is merely to be used for releasing energy usage information to third parties.

- The word "should" is used multiple times in the concluding paragraph of the proposed form. It may be preferable to use the word "must" or "shall", to make clear that the authorization request will only be honored if all the required steps are properly completed.

Late Comments of Joint Subcommittees:

The word "should" shall be used. These are Model Business Practices and not standards and should not be construed to imply policy.

- We suggest adding a "limitation of liability" statement to the form, perhaps something like, "The Customer hereby releases the Distribution Company, its employees, officers, and agents from any and all liability associated with the Third-Party's use and/or dissemination of account information that the Distribution Company provides in accordance with this release authorization".

Late Comments Submitted by the Retail BPS, DSM/EE and Data Privacy Task Force

Late Comments of Joint Subcommittees:
The joint subcommittees agree with the concept and unless alternate language is proposed prior to the EC meeting, the proposed language will be inserted at the end of the form.

Bruce G. Smith
Xcel Energy I Responsible By Nature
Program manager, Information Governance
612.330.5730
Bruce.g.smith@xcelenergy.com

Comments of Integrys Energy Service:

From: Lauderdale, Melissa L – Integrys Energy Service
Sent: Friday, January 04, 2013 9:14 AM
To: naesb

Subject: comment on retail customer authorization form

Dear Ms. Trum,

Integrys Energy Service submits these comments on the NAESB Retail Request for Comments on the Retail Customer Authorization Form.

1. Not all utilities require that these types of forms be provided to the utility. In some cases, the retail supplier keeps the form and provides it to the Commission upon request, like New York. Consequently, we recommend that the directions about what to do with the form should be provided separately and not included on the form itself or two options should be provided. We consider it optimal for retail markets that licensed suppliers hold the forms and no submittal to the utility be required, so we do not recommend that the NAESB form assume the forms must be provided to the utility.

Late Comments of Joint Subcommittees:
The joint subcommitttes propose to add in the third line of the last paragraph, "…third-party who ***unless otherwise directed in writing by the Distribution Company***, should provide..."

2. There should be an option to consent to provide all available data. Customers may not know what data is available and it may be confusing for them to determine what data is available and data suppliers need to accurately provide a price. Additionally, the proposed form does not include PLCs or capacity tags, which affect pricing. In some states data access is provided through the utility website and there is only access to data or no access; you cannot choose access to only some information. To resolve this issue, there should be an option to provide access to all available data.

Late Comments of Joint Subcommittees:
Rejected. The term "all available data" is too broad and undefined. Any specific data required by the third party (e.g, PLC, NSPL, etc.) can be included on the other data type blanks.

Thank you for the opportunity to submit these comments.

Late Comments Submitted by the Retail BPS, DSM/EE and Data Privacy Task Force

Melissa Lauderdale
Director of Government & Regulatory Affairs
549 Bluehaw Drive
Georgetown, Texas 78628

Comments of Direct Energy:

From: Vance, Andrew – Direct Energy
Sent: Friday, January 04, 2013 10:45 AM
To: naesb

Subject: Comment on Retail Customer Authorization Form

Dear Ms. Trum,

Direct Energy Services submits these comments on the NAESB Retail Request for Comments on the Retail Customer Authorization Form.

1. The LOA refers to specific time intervals requested for interval data (15 minutes, 30 minutes, 1 hr, etc). However, some customers are not aware of what data granularity is available for their individual accounts. In most circumstances, suppliers are interested in receiving the most detailed data available on the account from the LDC and would select 15 minute intervals. However, the concern is if a supplier selects 15 minute intervals on the LOA, but the account only captures 30 minute intervals, the LDC may reject the request and not send the data via the HU request due to the interval data mismatch. We would want to clarify that no matter what interval time is requested, the LDC would send the most granular data available for the account.

Late Comments of Joint Subcommittees:

The following parenthetical will be added:
Interval data for the following interval (***If the requested interval data is unavailable the next less granular interval data will be provided***):

2. The LOA requires a maximum 30 day turn-around for the LDC to provide historical usage data. However, many states require HU data turn-around in a much shorter timeframe (3 days in Texas, etc). In addition, many EDI-enabled LDCs respond within 24 hours to HU requests. Since pricing some customers can be dynamic and strict enrollment lead-times exist, suppliers & customers prefer receiving the HU as quickly as possible. – There are two options to resolve this situation:
   - 1) Standardize HU request LTs across deregulated states (for instance, 3 days for EDI or 5 days in manual markets)
   - 2) Create language similar to "LDC must provide response by either within 30 days or state level mandated HU response lead-time whichever is shorter"

Late Comments of Joint Subcommittees:

The following will be added to the fifth line of the date range paragraph:

"or as otherwise required by the Applicable Regulatory Authority."

Thank you for the opportunity to submit these comments.

Andy Vance
Utility Operations Manager

Late Comments Submitted by the Retail BPS, DSM/EE and Data Privacy Task Force

Direct Energy
1001 Liberty Avenue
Pittsburgh, PA 15222
www.directenergybusiness.com

Comments of Exelon / Constellation:

From: Stephen Bennett – Exelon/Constellation
Sent: Friday, January 04, 2013 11:51 AM
To: naesb

Subject: Exelon/Constellation Comments on NAESB Retail Customer Authorization Form

Dear Ms. Trum

Exelon/Constellation submits these comments on the NAESB Retail Request for Comments on the Retail Customer Authorization Form. Generally, we find the NAESB LOA form to be well structured. However, our experience has shown that simplifying the form to the greatest extent possible lessens the occurrence of customer errors. As such, many of our comments focus on the length and requested detail on the form itself.

1. Not all utilities require that these types of forms be provided to the utility. In some cases, the retail supplier keeps the form and provides it to the Commission upon request, like New York. Consequently, we recommend that the directions about what to do with the form should be provided separately and not included on the form itself or two options should be provided. We consider it optimal for retail markets that licensed suppliers hold the forms and no submittal to the utility be required, so we do not recommend that the NAESB form assume the forms must be provided to the utility.

Late Comments of Joint Subcommittees:

See resolution to first comment of Integrys Energy Service.

2. The ~~-~~verbiage should indicate that signing this form in no way binds the customer to purchase services from the supplier.
    - Ex. This authorization in no way binds me to the purchase of any service or product from the Company named herein and is to be used for the sole purpose of determining my offer price of electricity service or the provision of energy-related services.

Late Comments of Joint Subcommittees:

The use of the form is clearly indicated in the first paragraph. Additional language as proposed is not necessary.

3. Date~~a~~ Range – In the middle of the form the date range determines the date the LOA starts and expires. This should be moved below the expiration date. If an expiration date is not sufficient, then the customer will have the opportunity to specify when the LOA should start and expire. Ideally, we would prefer that the entire data range be removed and only provide the expiration date. This extends the possible life of the LOA.

Late Comments of Joint Subcommittees:

Late Comments Submitted by the Retail BPS, DSM/EE and Data Privacy Task Force

Rejected. The data being provided could be for a past period. Therefore, the date range and expiration date need to be stated separately.

4. Summary and Interval Usage Request – We recommend combining the two and also removing the option of selecting specific intervals. We do not believe that customers generally know how the utilities send interval usage to the supplier which may create confusion.

Late Comments of Joint Subcommittees:

The options are for either monthly data or interval data. If interval data is requested, then there are options for specific intervals. For data privacy purposes, the form should be as specific as possible.

5. Specific Data to be Provided (kWh, kW, kVa, kVarh, and gas Usage) – To the best of our knowledge, we do not believe that this information is required by utilities. To minimize confusion we recommend removing this option completely.

Late Comments of Joint Subcommittees:

For data privacy purposes, the form should be as specific as possible.

Stephen Bennett
Director, State Government Affairs – East
Exelon Corporation

300 Exelon Way, Kennett Square, PA 19348

<< *CustAuthFormLateComments-021113* >>

For Quadrant:	**Retail Electtric Quadrant**
Requesters:	
Request No.:	**2012 Retail Annual Plan Item 7.b.i**
Request Title:	**Develop standards to support PAP 10 – Standards Energy Usage Information, Phase 2, Harmonization with CIM and SEP 2.0**

1. RECOMMENDED ACTION:

____	Accept as requested
X	Accept as modified below
____	Decline

EFFECT OF EC VOTE TO ACCEPT RECOMMENDED ACTION:

X	Change to Existing Practice
____	Status Quo

2. TYPE OF DEVELOPMENT/MAINTENANCE

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

3. RECOMMENDATION

SUMMARY:

The following modifications to the Priority Action Plan 10 - Energy Usage Information Model are offered to harmonize the model with other smart grid standards including Smart Energy 2.0, the IEC Common Information Model, the NAESB REQ Energy Service Providers Interface and the ASHRAE standards under development in response to Priority Action Plan 17.

RECOMMENDED STANDARDS:

EXECUTIVE SUMMARY

This document establishes the Model Business Practices for Retail Customer energy usage information communication. Specifically, these Model Business Practices establish an information model for energy usage information. These Model Business Practices do not limit the form or function of the information model and is exemplary, but not exclusive, of the information that may be communicated in a consistent format among a variety of Entities, including, but not limited to, Distribution Companies, energy service providers, meter-reading entities, and Retail Customers. Such communication may occur via multiple systems and devices. Establishment of this energy usage information model will standardize a common data format which may be used when information is communicated between Distribution Companies, third

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parties and ~~energy use~~ Retail Customers which may aid Retail Customers in tracking and managing their energy use.

These Model Business Practices do not require that wholesale electricity markets administered by system operators adopt this energy usage information model since system operators generally do not maintain or have access to the system of record for individual Retail Customer energy usage information and load data or individual Retail Customer forecasted usage and load data. These Model Business Practices are not intended to replace applicable Governing Documents, and, in the event of a conflict, the latter documents shall have precedence over these Model Business Practices. Without limiting the foregoing, these Model Business Practices are only applicable to the extent the information covered by this energy usage information model is collected, managed or communicated pursuant to the applicable Governing Documents. Retail Customer energy usage information communication encompasses a variety of interactions between Distribution Companies, Retail Customers and energy services providers. In a business environment where best practices are voluntary, these Model Business Practices may be applied within the context of regulatory or other market requirements and agreements.

REQ.18.4 Energy Usage Information Model

The energy usage information model herein is organized consistent with several related models, including the IEC TC57 Common Information Model [IEC 61968 Part 9], and ZigBee Smart Energy Profile 2.0 [SEP2.0], that are defined by the Energy Information Standards Alliance [EIS Alliance] and Open Automated Data Exchange [OpenADE]. The energy usage information model, where possible, uses classes, information elements and attribute names drawn from the CIM and the cited references.

The starting point for the energy usage information model is the UsagePoint. UsagePoints identify key references for the information set optionally including identification of the Retail Customer, the location, and the physical asset. UsagePoint is associated in turn with zero or more MeterReadings. A MeterReading composes information about a particular measurement such as kWh or kW. A MeterReading has a ReadingType which describes the nature of the measurement including its units of measure, and zero or more IntervalReadings or Readings and associated quality information. UsagePoint may also be associated with summary information on load and usage, and optionally, power quality. For applications requiring third party access to this information, additional classes are identified to facilitate associating Retail Customer and Retail Customer agreement information with the measurements available at a UsagePoint.

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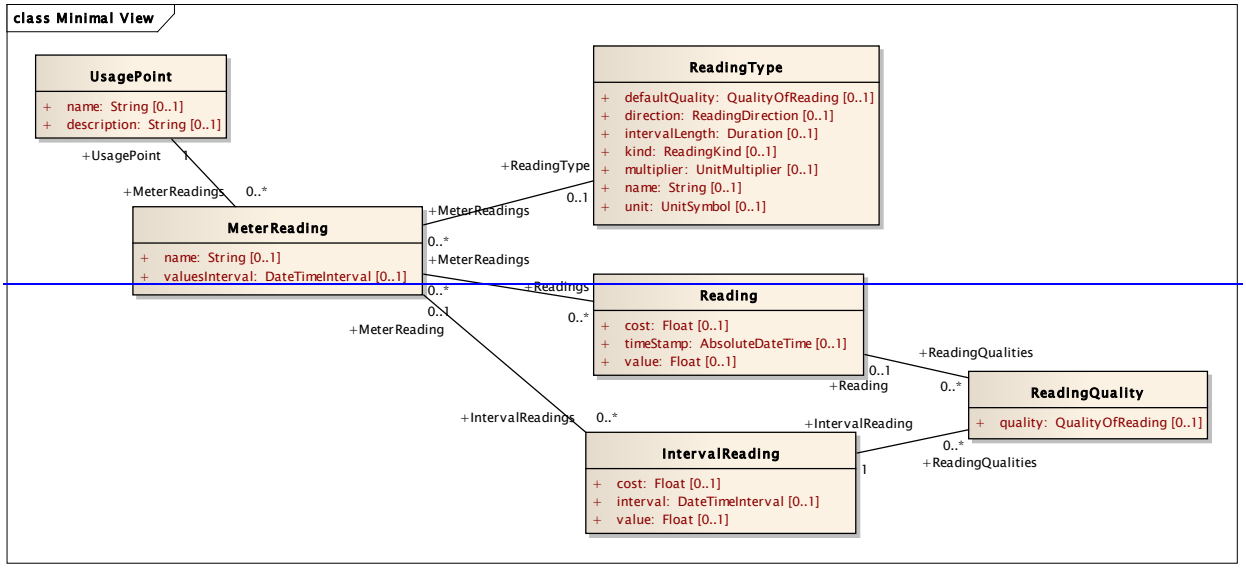
To find the usage or load in a particular interval, identify the appropriate UsagePoint, select the MeterReading of interest (measurement) and then select the IntervalReading or Reading associated with the given interval.

The energy usage information model includes many optional components. The complete set of information ~~expressable~~expressible using the energy usage information model satisfies a wide range of applicability requirements identified by the industry. Users of these Model Business Practices may optionally take advantage of these extended definitions based on need without requiring them. Applications built on the energy usage information model may elect which optional components to present.

However, clients of this information can be expected to recognize all components provided in the application.
REQ.18.3.4.3 identifies the set of core model elements that shall be supported by specifications claiming conformance to these Model Business Practices. The following class diagram illustrates a view[1] of this core of the energy usage information model:



[1] This is but one of several views that might result from choices permitted in the context of the conformance paragraph.

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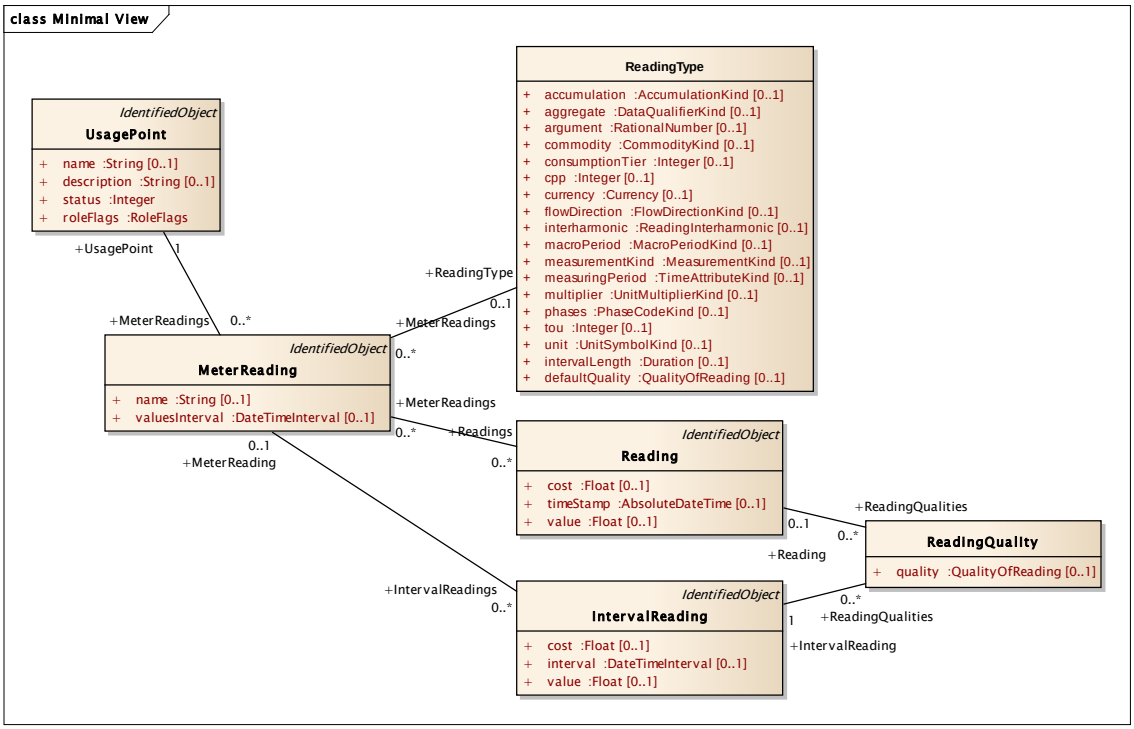

Figure 1: Energy Usage Information Model – Minimal View

The full energy usage information model, illustrated in Figure 2, forms the basis of the ~~required~~recommended Model Business Practices. Note, some minor classes detailed in REQ.18.4.1 are omitted from the diagram to aid in readability (e.g. DateTimeInterval).

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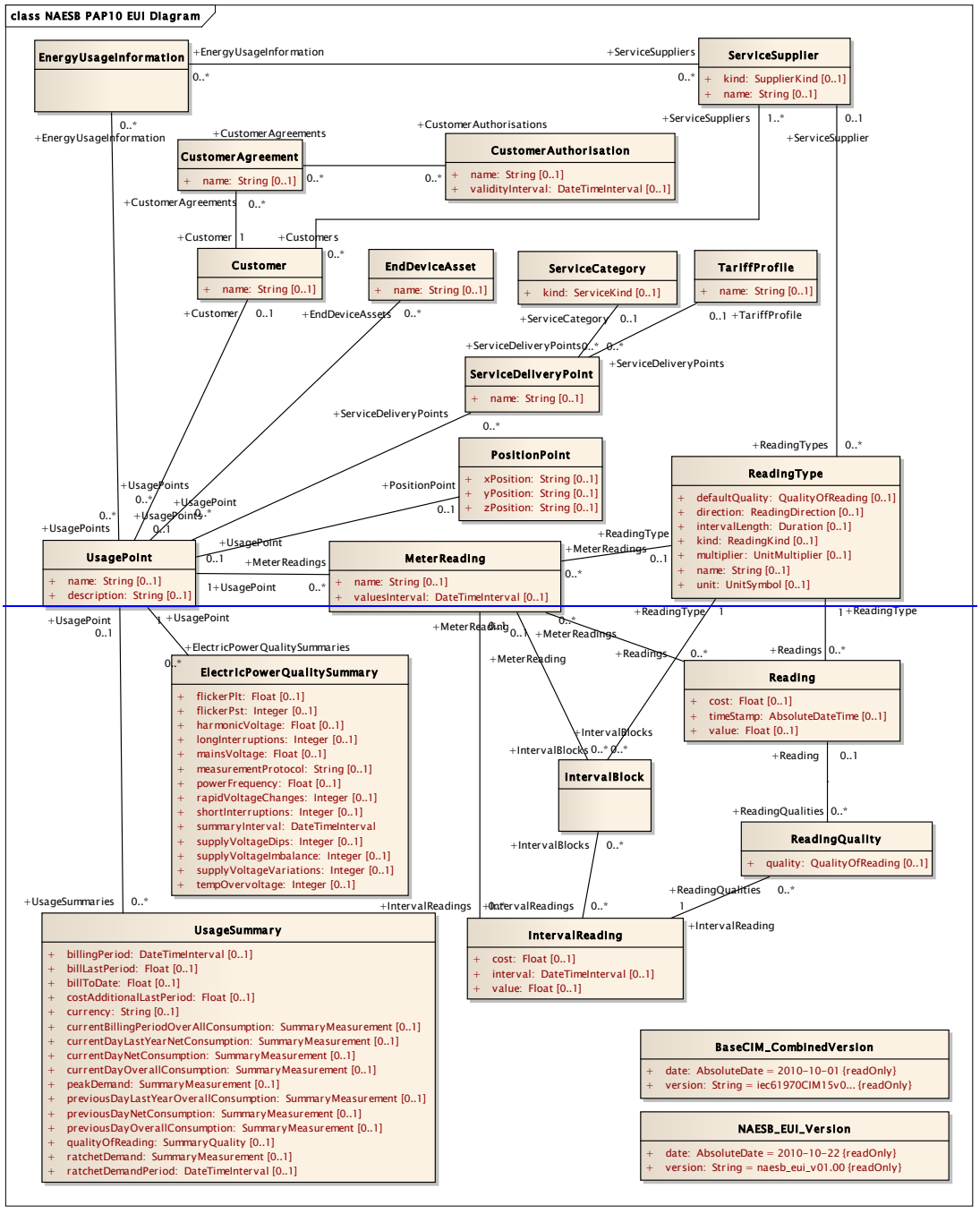

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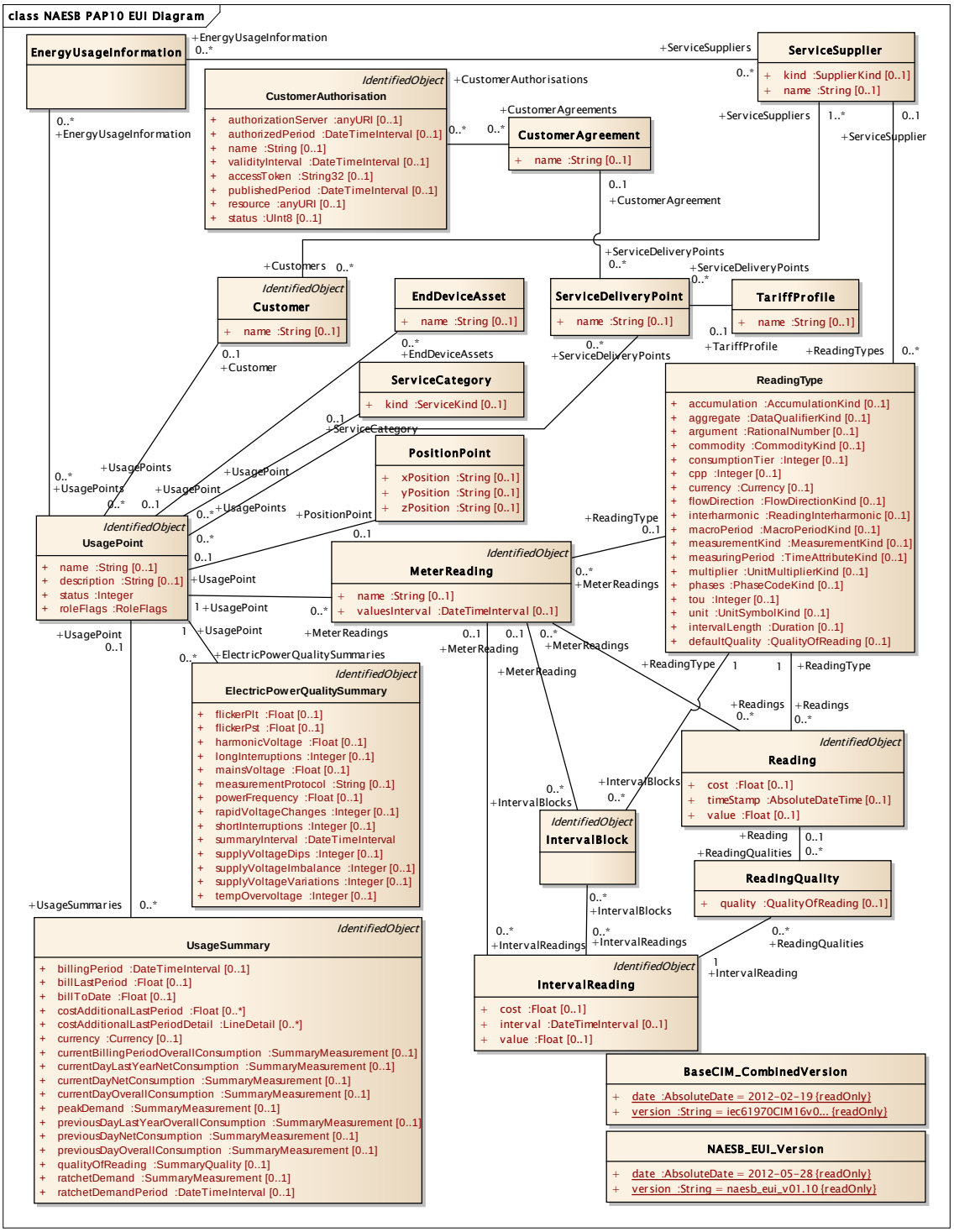

Figure 2: Full Energy Usage Information Model

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REQ.18.4.1 Energy Usage Information Model Details

The following sections contain the classes and attributes defined in the energy usage information model, along with their descriptions. Elements tagged with <<enumeration>> define the valid values for an enumerated data type and so do not have their own data type, and should be self explanatory, not requiring a definition.

Terms in this section may be based upon IEC 61968 classes and their descriptions. Some of the descriptions refer to other components of the IEC model (recognized as camel case terms) and these are not part of the energy usage information model or needed by the components in the energy usage information model. To preserve accurate presentation of unaltered IEC classes, ~~these~~certain terms have been retained.

REQ.18.4.1.1 AbsoluteDateTime *«Datatype»*

Date and time as specified in International Organization for Standardization standard ISO 8601.

REQ.18.4.1.2 BaseCIM_CombinedVersion

The combined version denotes the versions of the subpackages that have been combined into the total CIM model. This is a convenience instead of having to look at each subpackage.

Name	Type	Description
date	*AbsoluteDate*	*Form is YYYY-MM-DD for example for January 5, 2009 it is 2009-01-05.*
version	*String*	Form is IEC61970CIMXXvYY_IEC61968CIMXXvYY_combined where XX is the major CIM package version and the YY is the minor version, and different packages could have different major and minor versions. For example IEC61970CIM13v18_IEC61968CIM10v16_combined. Additional packages might be added in the future.

REQ.18.4.1.3 Boolean *«Primitive»*

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A type with the value space "true" and "false".

REQ.18.4.1.4 Customer

Organization receiving services from ServiceSupplier.

Name	Type	Description
name	*String*	*The name is any free human readable and possibly non unique text naming the object.*

REQ.18.4.1.5 CustomerAgreement

Agreement between the customer and the ServiceSupplier to pay for service at a specific service location. It provides for the recording of certain billing information about the type of service provided at the service location and is used during charge creation to determine the type of service.

Name	Type	Description
name	*String*	*The name is any free human readable and possibly non unique text naming the object.*

REQ.18.4.1.6 CustomerAuthorisation

Holds an authorization for access to specific user-private data granted to a third party service provider.

Name	Type	Description
authorizationServer	*anyURI*	*Contains the URI link to the authorization endpoint associated with this authorization.*
authorizedPeriod	*DateTimeInterval*	*Restricts access to requests or subscriptions within this date time interval.*
name	*String*	*The name is any free human readable and possibly non unique text naming the object.*
validityInterval	*DateTimeInterval*	*Date and time interval this agreement is valid (from going into effect to termination).*
accessToken	*String32*	*Contains the access token associated*

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		with this authorization.
publishedPeriod	*DateTimeInterval*	*Restricts access to the objects within the associated resource that were published within this date time interval.*
resource	*anyURI*	*Contains the identifier of the resource, same as was specified in OAuth "scope".*
status	*UInt8*	The status of this authorization. 0 - Revoked 1 - Active

REQ.18.4.1.7 DateTimeInterval *«Compound»*

Interval of date and time.

Name	Type	Description
start	*AbsoluteDateTime*	*Date and time that this interval started.*
end	*AbsoluteDateTime*	*Date and time that this interval ended.*
duration	*Duration*	*The duration of this interval, in seconds*

REQ.18.4.1.8 Duration *«CIMDatatype»*

An interval of time, specified in International Organization for Standardization standard ISO 8601 compatible format.

REQ.18.4.1.9 ElectricPowerQualitySummary

A summary of power quality events. This information represents a summary of power quality information typically required by customer facility energy management systems. It is not intended to satisfy the detailed requirements of power quality monitoring. All values are as defined by measurementProtocol during the period. The standards typically also give ranges of allowed values; the information attributes are the raw measurements, not the "yes/no" determination by the various standards. See referenced standards for definition, measurement protocol and period.

Name	Type	Description
flickerPlt	*Float*	*A measurement of long term Rapid Voltage Change*
flickerPst	*Float*~~Integer~~	flickerPst is a value measured over 10 minutes that characterizes the likelihood that the voltage fluctuations would result in perceptible light flicker. A

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		value of 1.0 is designed to represent the level that 50% of people would perceive flicker in a 60 watt incandescent bulb.~~A count of Rapid Voltage Change events during the summary interval period~~
harmonicVoltage	*Float*	*A measurement of the Harmonic Voltage during the period. For DC, distortion is with respect to a signal of zero Hz.*
longInterruptions	*Integer*	*A count of Long Interruption events (as defined by measurementProtocol) during the summary interval period.*
mainsVoltage	*Float*	*A measurement of the Mains [Signaling] Voltage during the summary interval period.*
measurementProtocol	*String*	*A reference to the source used as the measurement protocol definition. e.g. "IEEE1519-2009", "EN50160"*
powerFrequency	*Float*	*A measurement of the power frequency during the summary interval period.*
rapidVoltageChanges	*Integer*	*A count of Rapid Voltage Change events during the summary interval period*
shortInterruptions	*Integer*	*A count of Short Interruption events during the summary interval period*
summaryInterval	*DateTimeInterval*	*Interval of summary period*
supplyVoltageDips	*Integer*	*A count of Supply Voltage Dip events during the summary interval period*
supplyVoltageImbalance	*Integer*	*A count of Supply Voltage Imbalance events during the summary interval period*
supplyVoltageVariations	*Integer*	*A count of Supply Voltage Variations during the summary interval period*
tempOvervoltage	*Integer*	*A count of Temporary Overvoltage events (as defined by measurementProtocol) during the summary interval period*

REQ.18.4.1.10 EndDeviceAsset

~~AssetContainer~~EndDeviceAsset that performs one or more end device functions. One type of EndDeviceAsset is a MeterAsset which can perform metering, load management, connect/disconnect, accounting

functions, etc. Some EndDeviceAssets, such as ones monitoring and controlling air conditioner, refrigerator, pool pumps may be connected to a MeterAsset. All EndDeviceAssets may have communication capability defined by the associated ComFunction(s). An EndDeviceAsset may be owned by a consumer, a service provider, utility or otherwise.

There may be a related end device function that identifies a sensor or control point within a metering application or communications systems (e.g., water, gas, electricity).

Some devices may use an optical port that conforms to the ANSI C12.18 standard for communications.

Name	Type	Description
name	*String*	*The name is any free human readable and possibly non unique text naming the object.*

REQ.18.4.1.11 EnergyUsageInformation

A collection of customer energy usage information. This class is a container, and has no attributes.

REQ.18.4.1.12 Float *«Primitive»*

A floating point number. The range is unspecified and not limited.

REQ.18.4.1.13 IdentifiedObject

This is a root class to provide common identification for all classes needing identification and naming attributes.

Name	Type	Description
aliasName	String	The aliasName is free text human readable name of the object alternative to IdentifiedObject.name. It may be non unique and may not correlate to a naming hierarchy.
mRID	String	Master resource identifier issued by a model authority. The mRID is globally unique within an exchange context. The specific type and encoding of mRID is dependent on the context in which it is found by the adopting profiles.
name	String	The name is any free human readable and possibly non unique text naming the

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		object.

REQ.18.4.1.14 Integer *«Primitive»*

An integer number. The range is unspecified and not limited.

REQ.18.4.1.15 IntervalBlock

Time sequence of Readings of the same ReadingType.

REQ.18.4.1.16 IntervalReading

Data captured over a specific interval of time. If not specified, the duration is the intervalLength of the associated ReadingType, where the full definition of the units of measure is located.

Name	Type	Description
cost	*Float*	*The cost associated with this reading for this interval.*
interval	*DateTimeInterval*	*The time interval associated with the reading.*
value	*Float*	*Value of this interval reading.*

REQ.18.4.1.17 MeterReading

Set of values obtained from the meter.

Name	Type	Description
name	*String*	*The name is any free human readable and possibly non unique text naming the object.*
valuesInterval	*DateTimeInterval*	*Date and time interval of the data items contained within this meter reading.*

REQ.18.4.1.18 NAESB_EUI_Version

This class contains the version of the NAESB model.

Name	Type	Description
date	*AbsoluteDate*	*Form is YYYY-MM-DD for example for January 5, 2009 it is 2009-01-05.*
version	*String*	*Form is naesb_eui_vXX.YY where XX is the major version and YY is the minor version.*

REQ.18.4.1.19 Name

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The Name class provides the means to define any number of human readable names for an object.

Name	Type	Description
name	*String*	*Any free text that name the object.*

REQ.18.4.1.20 NameType

~~Type of name. Possible values for attribute 'name' are implementation dependent but standard profiles may specify types. An enterprise may have multiple information technology systems each having its own local name for the same object, e.g. a planning system may have different names from an energy management system. An object may also have different names within the same IT system, e.g. localName and aliasName as defined in CIM version 14. Their definitions from CIM14 are:~~

~~localName: A free text name local to a node in a naming hierarchy similar to a file directory structure. A power system related naming hierarchy may be: Substation, VoltageLevel, Equipment etc. Children of the same parent in such a hierarchy have names that typically are unique among them. The localName is a human readable name of the object. It is only used with objects organized in a naming hierarchy.~~

~~aliasName: A free text alternate name typically used in tabular reports where the column width is limited.~~

Type of name. Possible values for attribute 'name' are implementation dependent but standard profiles may specify types. An enterprise may have multiple information technology systems each having its own local name for the same object, e.g. a planning system may have different names from an energy management system. An object may also have different names within the same system.

Name	Type	Description
name	*String*	*Name of the name type.*

REQ.18.4.1.21 NameTypeAuthority

Authority responsible for creation and management of names of a given type; typically an organization or an enterprise system.

Name	Type	Description

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name	*String*	*Name of the name type authority.*

REQ.18.4.1.22 PositionPoint

Set of spatial coordinates that determine a point, defined in coordinate system specified in 'Location.CoordinateSystem', or "WGS 84" if not specified otherwise. Use a single position point instance to describe a point-oriented location. Use a sequence of position points to describe a line-oriented object (physical location of non-point oriented objects like cables or lines), or area of an object (like a substation or a geographical zone - in this case, have first and last position point with the same values).

Name	Type	Description
xPosition	*String*	*X axis position.*
yPosition	*String*	*Y axis position.*
zPosition	*String*	*(if applicable) Z axis position.*

REQ.18.4.1.23 QualityOfReading *«enumeration»*

List of codes indicating the quality of the reading

Name	Type	Description
estimated		
forecast		
mixed		
raw		
validated		
normalizedForWeather		
other		

REQ.18.4.1.24 Reading

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

Name	Type	Description
cost	*Float*	*Cost in a currency*
timeStamp	*AbsoluteDateTime*	*The time when the value was last updated*
value	*Float*	*Value of this reading.*

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REQ.18.4.1.25 ~~ReadingDirection~~**FlowDirectionKind** *«enumeration»*

This value identifies the direction of flow of what is being measured. Specific indications are supported especially for electrical measurements that can have complex values.~~Direction of reading.~~

~~Name~~	~~Type~~	~~Description~~
~~forward~~		
~~reverse~~		
~~net~~		
~~total~~		

~~REQ.18.4.1.26~~

Name	Type	Description
none		Not Applicable (N/A)
forward		"Delivered," or "Imported" as defined 61968-2. Forward Active Energy is a positive kWh value as one would naturally expect to find as energy is supplied by the utility and consumed at the service. Forward Reactive Energy is a positive VArh value as one would naturally expect to find in the presence of inductive loading. In polyphase metering, the forward energy register is incremented when the sum of the phase energies is greater than zero: $Energy_A + Energy_B + Energy_C > 0$
lagging		Typically used to describe that a power factor is lagging the reference value. Note 1: When used to describe VA, "lagging" describes a form of measurement where reactive power is considered in all four quadrants, but real power is considered only in quadrants I and IV. Note 2: When used to describe power factor, the term "lagging" implies that

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		the PF is negative. The term "lagging" in this case takes the place of the negative sign. If a signed PF value is to be passed by the data producer, then the direction of flow enumeration zero (none) should be used in order to avoid the possibility of creating an expression that employs a double negative. The data consumer should be able to tell from the sign of the data if the PF is leading or lagging. This principle is analogous to the concept that "Reverse" energy is an implied negative value, and to publish a negative reverse value would be ambiguous. Note 3: Lagging power factors typically indicate inductive loading.
leading		Typically used to describe that a power factor is leading the reference value. Note: Leading power factors typically indicate capacitive loading.
net		|Forward| - |Reverse|, See 61968-2. Note: In some systems, the value passed as a "net" value could become negative. In other systems the value passed as a "net" value is always a positive number, and rolls-over and rolls-under as needed.
q1plusQ2		Reactive positive quadrants. (The term "lagging" is preferred.)
q1plusQ3		Quadrants 1 and 3
q1plusQ4		Quadrants 1 and 4 usually represent forward active energy
q1minusQ4		Quadrant1 minus Quadrant4
q2plusQ3		Quadrants 2 and 3 usually represent reverse active energy
q2plusQ4		Quadrants 2 and 4
q2minusQ3		Quadrant2 minus Quadrant3
q3plusQ4		Reactive negative quadrants. (The term "leading" is preferred.)
q3minusQ2		Quadrant3 minus Quadrant2
quadrant1		Quadrant1 only

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quadrant2		Quadrant2 only
quadrant3		Quadrant3 only
quadrant4		Quadrant4 only
reverse		Reverse Active Energy is equivalent to "Received," or "Exported" as defined in 61968-2. Reverse Active Energy is a positive kWh value as one would expect to find when energy is backfed by the service onto the utility network. Reverse Reactive Energy is a positive VArh value as one would expect to find in the presence of capacitive loading and a leading Power Factor. In polyphase metering, the reverse energy register is incremented when the sum of the phase energies is less than zero: $Energy_A + Energy_B + Energy_C < 0$ Note: The value passed as a reverse value is always a positive value. It is understood by the label “reverse” that it represents negative flow.
total		|Forward| + |Reverse|, See 61968-2. The sum of the commodity in all quadrants Q1+Q2+Q3+Q4. In polyphase metering, the total energy register is incremented when the absolute value of the sum of the phase energies is greater than zero: $\lvert Energy_A + Energy_B + Energy_C \rvert > 0$
totalByPhase		In polyphase metering, the total by phase energy register is incremented when the sum of the absolute values of the phase energies is greater than zero:

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		$\lvert Energy_A \rvert + \lvert Energy_B \rvert + \lvert Energy_C \rvert > 0$ In single phase metering, the formulas for "Total" and "Total by phase" collapse to the same expression. For communication purposes however, the "Total" enumeration should be used with single phase meter data.

REQ.18.4.1.26 **MeasurementKind** ~~**ReadingKind**~~ *«enumeration»*

Identifies "what" is being measured, as refinement of 'commodity'. When combined with 'unit', it provides detail to the unit of measure. For example, 'energy' with a unit of measure of 'kWh' indicates to the user that active energy is being measured, while with 'kVAh' or 'kVArh', it indicates apparent energy and reactive energy, respectively. 'power' can be combined in a similar way with various power units of measure: Distortion power ('distortionVoltAmperes') with 'kVA' is different from 'power' with 'kVA'.~~Kind of reading.~~

Name	Type	Description
none		Not Applicable
apparentPowerFactor		
currency		funds
current		
currentAngle		Identifies what is being measured.
currentImbalance		
date		
demand		
distance		
distortionVoltAmperes		
energization		
energy		
energizationLoadSide		
fan		
frequency		

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ieee1366ASAI		
ieee1366ASIDI		
ieee1366ASIFI		
ieee1366CAIDI		
ieee1366CAIFI		
ieee1366CEMIn		
ieee1366CEMSMIn		
ieee1366CTAIDI		
ieee1366MAIFI		
ieee1366MAIFIe		
ieee1366SAIDI		
ieee1366SAIFI		
lineLosses		
losses		
negativeSequence		
phasorPowerFactor		
phasorReactivePower		
positiveSequence		
power		
powerFactor		
quantityPower		
sag		or Voltage Dip
swell		
switchPosition		
tapPosition		
tariffRate		
temperature		
totalHarmonicDistortion		
transformerLosses		
unipedeVoltage		

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Dip10to15		
unipedeVoltageDip15to30		
unipedeVoltageDip30to60		
unipedeVoltageDip60to90		
unipedeVoltageDip90to100		
voltage		
voltageAngle		
voltageExcursion		
voltageImbalance		
volume		Indicates fluid volume
zeroFlowDuration		
zeroSequence		
distortionPowerFactor		
frequencyExcursion		Usually expressed as a “count”
applicationContext		
apTitle		
assetNumber		
bandwidth		
batteryVoltage		
broadcastAddress		
deviceAddressType1		
deviceAddressType2		
deviceAddressType3		
deviceAddressType4		
deviceClass		
electronicSerial		

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Number		
endDeviceID		
groupAddressType1		
groupAddressType2		
groupAddressType3		
groupAddressType4		
ipAddress		
macAddress		
mfgAssignedConfigurationID		
mfgAssignedPhysicalSerialNumber		
mfgAssignedProductNumber		
mfgAssignedUniqueCommunicationAddress		
multiCastAddress		
oneWayAddress		
signalStrength		
twoWayAddress		
signaltoNoiseRatio		
alarm		
batteryCarryover		
dataOverflowAlarm		
demandLimit		
demandReset		Usually expressed as a count as part of a billing cycle
diagnostic		
emergencyLimi		

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t		
encoderTamper		
ieee1366MomentaryInterruption		
ieee1366MomentaryInterruptionEvent		
ieee1366SustainedInterruption		
interruptionBehaviour		
inversionTamper		
loadInterrupt		
loadShed		
maintenance		
physicalTamper		
powerLossTamper		
powerOutage		
powerQuality		
powerRestoration		
programmed		
pushbutton		
relayActivation		
relayCycle		Usually expressed as a count
removalTamper		
reprogrammingTamper		
reverseRotationTamper		
switchArmed		
switchDisabled		
tamper		
watchdogTimeout		

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billLastPeriod		Customer's bill for the previous billing period
billToDate		Customer's bill, as known thus far within the present billing period
billCarryover		part of a previous obligation carried over from a previous billing period
connectionFee		Monthly fee for connection to commodity
audibleVolume		Sound
volumetricFlow		
~~phaseAngle~~		
~~pressure~~		
~~time~~		
~~other~~		
~~carbon~~		
~~carbonDioxide~~		
~~currentAverage~~		
~~currentRMS~~		
~~currentTHD~~		
~~distortionPower~~		
~~HCH~~		
~~methane~~		
~~NOx~~		
~~perfluorocarbons~~		
~~phasorPower~~		
~~quantityPowerQ45~~		
~~quantityPowerQ60~~		
~~SO2~~		
~~sulfurhexafluoride~~		
~~voltageAverage~~		
~~voltageRMS~~		
~~voltageTHD~~		
~~relativeHumidity~~		

REQ.18.4.1.27 ReadingQuality

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

Name	Type	Description
quality	*QualityOfReading*	*Quality, to be specified if different than ReadingType.defaultQuality.*

REQ.18.4.1.28 ReadingType

~~Type of data conveyed by a specific Reading~~*Detailed description for a type of a reading value. Values in attributes allow for the description of metadata about a measurement or measurements.*

Name	Type	Description
accumulation	*AccumulationKind*	*Accumulation behavior of a reading over time, usually 'measuringPeriod', to be us with individual endpoints (as opposed to 'macroPeriod' and 'aggregate' that are u describe aggregations of data from indiv endpoints).*
aggregate	*DataQualifierKind*	*Salient attribute of the reading data aggregated from individual endpoints. T mainly used to define a mathematical operation carried out over 'macroPeriod may also be used to describe an attribute the data when the 'macroPeriod' is not defined.*
argument	*RationalNumber*	Argument used to introduce numbers int unit of measure description where they a needed (e.g., 4 where the measure needs argument such as CEMI(n=4)). Most arguments used in practice however will integers (i.e., 'denominator'=1). Value 0 in 'numerator' and 'denominator' means not applicable.
commodity	*CommodityKind*	*Commodity being measured.*
consumptionTier	*Integer*	In case of common flat-rate pricing for p in which all purchases are at a given rate 'consumptionTier'=0. Otherwise, the valu indicates the consumption tier, which ca used in conjunction with TOU or CPP pr Consumption tier pricing refers to the me

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		of billing in which a certain "block" of e is purchased/sold at one price, after whic next block of energy is purchased at anot price, and so on, all throughout a defined period. At the start of the defined period, consumption is initially zero, and any us measured against the first consumption t ('consumptionTier'=1). If this block of e is consumed before the end of the period energy consumption moves to be recone against the second consumption tier ('consumptionTier'=2), and so on. At the of the defined period, the consumption accumulator is reset, and usage within th 'consumptionTier'=1 restarts.
cpp	*Integer*	*Critical peak period (CPP) bucket the re value is attributed to. Value 0 means not applicable. Even though CPP is usually considered a specialized form of time of 'tou', this attribute is defined explicitly fo flexibility.*
currency	*Currency*	*Metering-specific currency.*
flowDirection	*FlowDirectionKind*	*Flow direction for a reading where the direction of flow of the commodity is important (for electricity measurements includes current, energy, power, and demand).*
interharmonic	*ReadingInterharmonic*	*Indication of a "harmonic" or "interharmonic" basis for the measureme Value 0 in 'numerator' and 'denominator means not applicable.*
macroPeriod	*MacroPeriodKind*	*Time period of interest that reflects how reading is viewed or captured over a lon period of time.*
measurementKind	*MeasurementKind*	*Identifies "what" is being measured, as refinement of 'commodity'. When combin with 'unit', it provides detail to the unit o measure. For example, 'energy' with a u measure of 'kWh' indicates to the user th active energy is being measured, while w 'kVAh' or 'kVArh', it indicates apparent e and reactive energy, respectively. 'power be combined in a similar way with vario*

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		power units of measure: Distortion powe ('distortionVoltAmperes') with 'kVA' is different from 'power' with 'kVA'.
measuringPeriod	*TimeAttributeKind*	Time attribute inherent or fundamental to reading value (as opposed to 'macroPeriod that supplies an "adjective" to describe as of a time period with regard to the measurement). It refers to the way the va was originally measured and not to the frequency at which it is reported or prese For example, an hourly interval of consumption data would have the value 'hourly' as an attribute. However in the ca an hourly sampled voltage value, the meterReadings schema would carry the 'hourly' interval size information. It is common for meters to report demand form that is measured over the course of portion of an hour, while enterprise applications however commonly assume demand (in kW or kVAr) normalized to hour. The system that receives readings directly from the meter therefore must perform this transformation before publis readings for use by the other enterprise systems. The scalar used is chosen based the block size (not any sub-interval size)
multiplier	*UnitMultiplierKind*	*Metering-specific multiplier.*
phases	*PhaseCodeKind*	*Meteric-specific phase code.*
tou	*Integer*	*Time of use (TOU) bucket the reading va attributed to. Value 0 means not applica*
unit	*UnitSymbolKind*	*Metering-specific unit.*
intervalLength	*Duration*	*(if incremental reading value) Length of increment interval.*
defaultQuality	*QualityOfReading*	*The default quality of readings. May be overridden for specific measurements in Reading or IntervalReading classes.*~~Characteristics of a data value conveyed by a specific Reading, which a an application to understand how a speci Reading is to be interpretated.~~
~~direction~~	~~ReadingDirection~~	~~Specifies the direction of flow of the measur~~
~~kind~~	~~ReadingKind~~	~~Kind of reading.~~

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~~multiplier~~	~~UnitMultiplier~~	~~Multiplier for 'unit'.~~
~~name~~	~~String~~	~~The name is any free human readable and possibly non unique text naming the object.~~
~~unit~~	~~UnitSymbol~~	~~Unit for the reading value.~~

REQ.18.4.1.29 Seconds *«Datatype»*

Time, in seconds.

Name	Type	Description
value	*Float*	*Time, in seconds*
unit	*UnitSymbolKind*	
multiplier	*UnitMultiplierKind*	

REQ.18.4.1.30 ServiceCategory

Category of service provided to the customer.

Name	Type	Description
kind	*ServiceKind*	*Kind of service.*

REQ.18.4.1.31 ServiceDeliveryPoint

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

Name	Type	Description
name	*String*	*The name is any free human readable and possibly non unique text naming the object.*

REQ.18.4.1.32 ServiceKind *«enumeration»*

Kind of service.

Name	Type	Description
electricity		
gas		
water		
time		
heat		~~Includes hot water and steam~~
refuse		

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sewerage		
rates		
tvLicence		
internet		
other		
cold		*Includes chilled water and ice*

REQ.18.4.1.33 ServiceSupplier

Organization that provides services to customers.

Name	Type	Description
kind	*SupplierKind*	*Kind of supplier.*
name	*String*	*The name is any free human readable and possibly non unique text naming the object.*

REQ.18.4.1.34 String *«Primitive»*

A string consisting of a sequence of 8 bit characters. The character encoding is UTF-8. The string length is unspecified and unlimited.

REQ.18.4.1.35 SummaryMeasurement

An aggregated summary measurement reading.

Name	Type	Description
multiplier	*UnitMultiplierKind*	*The multiplier part of the unit of measure, e.g. "kilo" (k)*
timeStamp	*AbsoluteDateTime*	*The date and time (if needed) of the summary measurement.*
unit	*UnitSymbolKind*	*The units of the reading, e.g. "Wh"*
value	*Float*	*The value of the summary measurement.*

REQ.18.4.1.36 SummaryQuality *«enumeration»*

List of codes indicating the quality of the summary.

Name	Type	Description
estimated		
forecast		
mixed		
validated		
raw		

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normalizedForWeather		
other		

REQ.18.4.1.37 SupplierKind *«enumeration»*

Kind of supplier.

Name	Type	Description
utility		
retailer		
other		
district		
intermediary		
local		
microgrid		

REQ.18.4.1.38 TariffProfile

A schedule of charges; structure associated with Tariff that allows the definition of complex tariff structures such as step and time of use.

Name	Type	Description
name	*String*	*The name is any free human readable and possibly non unique text naming the object.*

REQ.18.4.1.39 UnitMultiplierKind *«enumeration»*

The unit multiplier is the power of ten multipliers such as kilo, micro, deci, etc...

Name	Type	Description
y		*yocto = x10-24*
z		*zepto = x10-21*
a		*atto = x10-18*
f		*femto = x10-15*
m		*Milli 10**-3*
c		*Centi 10**-2*
p		*Pico 10**-12*
n		*Nano 10**-9*
micro		*Micro 10**-6*
d		*Deci 10**-1*

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none		*Not Applicable or "x1"*
da		*deca 10**1*
h		*hecto 10**2*
k		*Kilo 10**3*
M		*Mega 10**6*
G		*Giga 10**9*
T		*Tera 10**12*
P		*Peta = x1015*
E		*Exa = x1018*
Z		*Zetta = x1021*
Y		*Yotta = x1024*

REQ.18.4.1.40 UnitSymbolKind *«enumeration»*

~~The units defined for usage in the CIM~~This identifies the units of measure based on the NIST Special Publication 330 2008 edition -- The International System of Units. Note that this reference document supports SI units as well as common units of measurements in practice including CGS units.

~~Name~~	~~Type~~	~~Description~~
~~VA~~		~~Apparent power in volt ampere~~
~~W~~		~~Active power in watt~~
~~VAr~~		~~Reactive power in volt ampere reactive~~
~~VAh~~		~~Apparent energy in volt ampere hours~~
~~Wh~~		~~Real energy in Watt hours~~
~~VArh~~		~~Reactive energy in volt ampere reactive hours~~
~~V~~		~~Voltage in volt~~
~~ohm~~		~~Resistance in ohm~~
~~A~~		~~Current in ampere~~
~~F~~		~~Capacitance in farad~~
~~H~~		~~Inductance in henry~~
~~C~~		~~Relative temperature in degrees Celsius~~
~~degC~~		~~Relative temperature in degrees Celsius. In the SI unit system the symbol is ºC. Electric charge is measured in coulomb that has the unit symbol C. To distinguish degree Celsius form coulomb the symbol used in the UML is degC. Reason for not using ºC is the special character º is difficult to manage in software.~~
~~s~~		~~Time in seconds~~

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~~Name~~	~~Type~~	~~Description~~
~~min~~		~~Time in minutes~~
~~h~~		~~Time in hours~~
~~deg~~		~~Plane angle in degrees~~
~~rad~~		~~Plane angle in radians~~
~~J~~		~~Energy in joule~~
~~N~~		~~Force in newton~~
~~S~~		~~Conductance in siemens~~
~~none~~		~~Dimension less quantity, e.g. count, per unit, etc.~~
~~Hz~~		~~Frequency in hertz~~
~~g~~		~~Mass in gram~~
~~Pa~~		~~Pressure in pascal (n/m2)~~
~~m~~		~~Length in meter~~
~~m2~~		~~Area in square meters~~
~~m3~~		~~Volume in cubic meters~~
~~thm~~		~~Energy, in therms~~
~~m3/h~~		~~Volumetric flow, in cubic meters per hour~~
~~ft3/h~~		~~Volumetric flow, in cubic feet per hour~~

~~*This identifies the units of measure based on the NIST Special Publication 330 2008 edition – The International System of Units. Note that this reference document supports SI units as well as common units of measurements in practice including CGS units.*~~

Name	**Type**	**Description**
m		*Length,meter*
g		*Mass,gram*
a		*Current,ampere*
degK		Temperature,Kelvin (Note: the unit “degrees” is implied)
mol		*Amount of substance,mole*
cd		*Luminous intensity,candela*
s		*Time,second*
rad		*Plane angle,Radian (m/m)*
sr		*Solid angle,Steradian (m2/m2)*
gy		*Absorbed dose,Gray (J/kg)*
bq		*Radioactivity,Becquerel (1/s)*
degC		*Relative temperature,degrees Celsius*
sv		*Dose equivalent,Sievert (J/kg)*

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f		*Electric capacitance,Farad (C/V)*
c		*Electric charge,Coulomb (Amp second)*
h		*Electric inductance,Henry (Wb/A)*
v		*Electric potential,Volt (W/A)*
ohm		*Electric resistance,Ohm (V/A)*
j		*Energy joule,(N·m = C·V = W·s)*
n		*Force newton,(kg m/s²)*
hz		*Frequency,Cycles per second or (1/s)*
lx		*Illuminance lux,(lm/m²)*
lm		*Luminous flux,lumen (cd sr)*
wb		*Magnetic flux,Weber (V s)*
t		*Magnetic flux density,Tesla (Wb/m2)*
w		*Real power,Watt. By definition, one Watt equals one Joule per second. Electrical power may have real and reactive components. The real portion of electrical power (I²R), is expressed in Watts. (See also apparent power and reactive power.)*
pa		*Pressure,Pascal (N/m²) (Note: the absolute or relative measurement of pressure is implied with this entry. See below for more explicit forms.)*
siemens		*Electric Conductance,Siemens (A / V = 1 / O)*
paA		*Pressure,Pascal, absolute pressure*
paG		*Pressure,Pascal, gauge pressure*
kat		*Catalytic activity,katal = mol / s*
revPerS		*Rotational speed,rotations per second (Note: compare to cycles per second, Hz)*
m2		*Area,square meter*
m3		*Volume,cubic meter*
mPerS		*Velocity,meter per second (m/s)*
mPerS2		*Acceleration,meter per second squared*
m3PerS		*Volumetric flow rate,cubic meters per second*
mPerM3		*Fuel efficiency,meter / cubic meter*
gM		Moment of mass,kilogram meter (kg·m) (first moment of mass) (Note: users must supply the “k” prefix to obtain “kg

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		m".)
gPerM3		Density,gram/cubic meter (Note: users must supply the prefix multiplier "k" to form kg/ m^3)
m2PerS		*Viscosity,meter squared / second*
wPerMK		*Thermal conductivity,Watt/meter Kelvin*
jPerK		*Heat capacity,Joule/Kelvin*
radPerS		*Angular velocity,radians per second*
vA		*Apparent power,Volt Ampere (See also real power and reactive power.)*
vAr		Reactive power, Volt Ampere reactive. The "reactive" or "imaginary" component of electrical power. (See also real power and apparent power).
vS		*Volt seconds,Volt seconds (Ws/A)*
v2		*Volts squared,Volt squared (W2/A2)*
aS		*Amp seconds,Amp seconds*
a2		*Amps squared,Amp squared*
a2S		*Amps squared time,square Amp second*
vAH		*Apparent energy,Volt Ampere hours*
wH		*Real energy,Watt hours*
vArH		*Reactive energy,Volt Ampere reactive hours*
vPerHz		*Magnetic flux,Volt per Hertz*
hzPerS		*Rate of change of frequency,Hertz per second*
gM2		Moment of mass,kg m2 (Second moment of mass, commonly called the moment of inertia) (Note: users must supply the "k" prefix to obtain "kg m2".)
wPerS		*Ramp rate,Watt per second*
lPerS		*Volumetric flow rate,liters per second*
q		*Quantity power,Q*
qh		*Quantity energy,Qh*
ohmM		*resistivity,Ohm meter*
aPerM		*A/m,magnetic field strength, Ampere per meter*
v2H		*volt-squared hour,Volt-squared-hours*
a2H		*ampere-squared hour,Ampere-squared hour*

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aH		*Ampere-hours,Ampere-hours*
wHPerM3		*Wh/m3,energy per volume*
timeStamp		*Timestamp,time and date per International Organization for Standardization standard ISO 8601 format*
wHPerRev		*Kh-Wh,active energy metering constant*
vArHPerRev		*Kh-VArh,reactive energy metering constant*
vAHPerRev		*Kh-Vah,apparent energy metering constant*
m3PerH		*Volumetric flow rate,cubic meter per hour*
m3CompensatedPerH		*Volumetric flow rate,compensated cubic meter per hour*
m3UncompensatedPerH		*Volumetric flow rate,uncompensated cubic meter per hour*
lPerH		*Volumetric flow rate,liter per hour*
lUncompensatedPerH		*Volumetric flow rate,liter (uncompensated) per hour*
lCompensatedPerH		*Volumetric flow rate,liter (compensated) per hour*
q45		*Quantity power,Q measured at 45º*
q60		*Quantity power,Q measured at 60º*
q45H		*Quantity energy,Qh measured at 45º*
q60H		*Quantity energy,Qh measured at 60º*
jPerKg		*Specific energy,Joule / kg*
m3Uncompensated		*Volume,cubic meter, with the value uncompensated for weather effects.*
m3Compensated		*Volume,cubic meter, with the value compensated for weather effects.*
m1		*Wavenumber,reciprocal meter, (1/m)*
m3PerKg		*Specific volume,cubic meter per kilogram, v*
paS		*Dynamic viscosity,Pascal second*
nM		*Moment of force,Newton meter*
nPerM		*Surface tension,Newton per meter*
radPerS2		*Angular acceleration,radian per second squared*
wPerM2		*Heat flux density, irradiance,Watt per square meter*

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jPerKgK		*Specific heat capacity, specific entropy,Joule per kilogram kelvin*
jPerM3		*energy density,Joule per cubic meter*
vPerM		*electric field strength,Volt per meter*
cPerM3		*electric charge density,Coulomb per cubic meter*
cPerM2		*surface charge density,Coulomb per square meter*
fPerM		*permittivity,Farad per meter*
hPerM		*permeability,Henry per meter*
jPerMol		*molar energy,Joule per mole*
jPerMolK		*molar entropy, molar heat capacity,Joule per mole kelvin*
cPerKg		*exposure (x rays),Coulomb per kilogram*
gyPerS		*absorbed dose rate,Gray per second*
wPerSr		*radiant intensity,Watt per steradian*
wPerM2Sr		*radiance,Watt per square meter steradian*
katPerM3		*catalytic activity concentration,katal per cubic meter*
min		*Time,minute = 60 s*
hr		*Time,hour = 60 min = 3600 s*
d		*Time,day = 24 h = 86400 s*
deg		*Plane angle,degree*
angleMin		*Plane angle,minute*
angleSec		*Plane angle,second*
ha		*Area,hectare*
l		*Volume,liter= dm3 = m3/1000.*
tonne		mass,“tonne” or “metric ton” (1000 kg = 1 Mg)
none		*N/A,none (not applicable)*
cosTheta		*Power factor,dimensionless*
bel		Logarithmic ratio,Bel, Note: users must combine this unit with the multiplier prefix “d” to form decibels (dB)
status		*State,status, where:"1" = "true", "live", "on", "high", "set";"0" = "false", "dead", "off", "low", "cleared"Note: A Boolean value is preferred but other values may be supported*
count		*Amount of substance,Counter value*

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bm		Logarithmic ratio of signal strength,Bel-mW, normalized to 1mW. Note: to form "dBm" combine "Bm" with multiplier "d".
code		*Application Value,Encoded value*
meCode		*EndDeviceEvent,Value to be interpreted as a EndDeviceEventCode*
lPerL		Concentration,The ratio of the volume of a solute divided by the volume of the solution. (Note: Users may need use a prefix such a 'µ' to express a quantitye such as 'µL/L')
gPerG		Concentration,The ratio of the mass of a solute divided by the mass of the solution. (Note: Users may need use a prefix such a 'µ' to express a quantity such as 'µg/g')
molPerM3		*Concentration,The amount of substance concentration, (c), the amount of solvent in moles divided by the volume of solution in m³.*
molPerMol		*Concentration,Molar fraction, the ratio of the molar amount of a solute divided by the molar amount of the solution.*
molPerKg		*Concentration,Molality, the amount of solute in moles and the amount of solvent in kilograms.*
mPerM		*Length,Ratio of length*
sPerS		Time,Ratio of time (Note: Users may need to supply a prefix such as 'µ' to show rates such as 'µs/s')
hzPerHz		Frequency,Rate of frequency change (Note: Users may need to supply a prefix such as 'm' to show rates such as 'mHz/Hz')
vPerV		Voltage,Ratio of voltages (Note: Users may need to supply a prefix such as 'm' to show rates such as 'mV/V')
aPerA		Current,Ratio of Amperages (Note: Users may need to supply a prefix such as 'm' to show rates such as 'mA/A')
wPerVA		*Power factor,PF*
rev		*Amount of rotation,Revolutions*

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wPerW		Signal Strength,Ratio of power (Note: Users may need to supply a prefix such as 'm' to show rates such as 'mW/W')
refractiveIndexN		*Refractive Index,n*
relativePermeabilityMur		*Relative Permeability,μr*
np		*Logarithmic ratio,neper*
eV		*energy,electronvolt (1 eV = 1.602 176 x 10-19J)*
da		*mass,dalton (1 Da = 1.660 538 x 10-27kg)*
u		*mass,unified atomic mass unit (1u = 1 Da)*
ua		*length,astronomical unit (1ua = 1.495 978 x1011m)*
c0		*speed,natural unit of speed (speed of light in a vacuum) 299 792 458 m/s*
nuH		*action,natural unit of action (reduced planck constant) 1.054 571 X 10-34J s*
nuMe		*mass,natural unit of mass (electron mass) 9.109 382 x 10-31 kg*
nuHPerNuMeC02		*time,natural unit of time*
auE		*charge,atomic units of charge (elementary charge) 1.602 176 x 10-19 C*
auMe		*mass,atomic units of mass (electron mass) 9.109 382 x 10-31 kg*
auH		*action,atomic unit of action (reduced planck constant) 1.054 571 X 10-34J s*
auA0		*length,atomic unit of length, bohr (Bohr radius) 0.529 177 x 10-10 m*
auEh		*energy,atomic unit of energy, hartree 4.359 744*
auHPerAuEh		*time,atomic unit of time*
char		*Number of characters,characters*
charPerSec		*Data rate,characters per second*
money		*Monetary unit,Generic money (Note: Specific monetary units are identified the currency class).*
ft3		*Volume,cubic foot*

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ft3Compensated		*Volume,cubic foot compensated for weather*
ft3Uncompensated		*Volume,cubic foot uncompensated for weather*
ft3PerH		*Volumetric flow rate,cubic foot per hour*
ft3CompensatedPerH		*Volumetric flow rate,compensated cubic feet per hour*
ft3UncompensatedPerH		*Volumetric flow rate,uncompensated cubic feet per hour*
uSGal		*Volume,US gallon (1 gal = 231 in3 = 128 fl oz.)*
uSGalPerH		*Volumetric flow rate,US gallon per hour*
impGal		*Volume,Imperial gallon*
impGalPerH		*Volumetric flow rate,Imperial gallon per hour*
btu		*Energy,British Thermal Unit*
btuPerH		*Power,BTU per hour*
psiA		*Pressure,Pound per square inch, absolute*
psiG		*Pressure,Pound per square inch, gauge*
lUncompensated		*Volume,Liter, with the value uncompensated for weather effects.*
lCompensated		*Volume,Liter, with the value compensated for weather effects.*
therm		*Energy,Therm*
bar		*Pressure,bar (1 bar = 100 kPa)*
mmHg		*Pressure,millimeter of mercury (1 mmHg ˜ 133.3 Pa)*
angstrom		*Length,ångström (1Å = 10-10m)*
nmi		*Length,nautical mile (1 M = 1852 m)*
barn		*Area,barn (1 b = 100 fm2 = 10-28 m2)*
kn		*Speed,knot (1 kn = 1852/3600) m/s*
ci		*Activity,curie (1 Ci = 3.7 x 1010Bq)*
r		*exposure,roentgen (1 R = 2.58 x 10-4 C/kg)*
doseRad		*absorbed dose,rad (1 rd = 1 cGy)*
rem		*dose equivalent,rem (1 rem = 10-2 Sv)*
in		*length,inch*
ft		*length,foot (1 ft = 12 in)*
rod		*length,rod (1 rod = 16.5 ft)*

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fur		*length,furlong (1 fur = 660 ft)*
mi		*length,mile (1 statute mile = 8 fur = 80 chains = 320 rods = 5280 feet)*
ft2		*area,square foot (1 ft2 = 144 in2)*
yd2		*area,square yard (1 yd2 = 9 ft2)*
rod2		*area,square rod (1 rod2 = 272.25 ft2)*
acre		*area,acre (1 acre = 160 rd2 = 43 560 ft2)*
mi2		*area,square mile (1 mi2 = 640 acres)*
sectionOfLand		*area,section of land (1 mi2 = 1 section of land)*
township		*area,township (1 township = 6 miles square)*
yd3		*Volume,cubic yard (1 yd3 = 27 ft3)*
li		*length,link (1 li = 0.66 ft)*
ch		*length,chain (1 ch = 100 links = 4 rods = 66 ft)*
uSLiqPt		*Volume,US liquid pint (1 pt = 28.875 in3 = 128 fl dr)*
uSLiqQt		*Volume,US liquid quart (1 qt = 2 pt)*
flDrAp		*Volume,Apothecaries fluid dram*
flOzAp		*Volume,Apothecaries fluid ounce (1 fl oz ap = 8 fl dr ap)*
usDryPt		*Volume,US dry pint (1 pt = 67.2 in3)*
usDryQt		*Volume,US dry quart (1 qt = 2 pints)*
usPk		*Volume,US peck (1 pk = 8 qt)*
usBu		*Volume,US bushel (1 bu = 4 pk)*
gr		Mass,grain (1 grain = 1/7000 avdp lb) Note: The “grain” is the same in the avoirdupois, troy, and apothecaries units of mass.
avdpDr		Mass,Avoirdupois dram (1 Avdp dr = 27-11/32 gr) Note: The abbreviation “dr” may be used if there is no chance of confusing the avoirdupois dram with the troy or apothecaries dram.
avdpOz		Mass,Avoirdupois ounce (1 Avdp oz = 16 Avdp dr) Note: The abbreviation “oz” may be used if there is no chance of confusing the avoirdupois ounce with the troy or apothecaries ounce.

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avdpLb		Mass,Avoirdupois pound (1 lb = 16 oz) Note: Although the term "pound" is commonly used in many countries simply as "pound (lb)", the historical term "avoirdupois" is added to provide context and distinguish it in this setting from the troy and apothecaries systems of measure which use the same names. The abbreviation "lb" may be used instead of "avdp lb" if no confusion is possible with the pound named in these other systems.
shortCwt		*Mass,Avoirdupois hundredweight (1 cwt = 100 lbs)*
shortTon		*Mass,Avoirdupois ton (1 short ton = 2000 lbs)*
longCwt		*Mass,Avoirdupois gross or long hundredweight (1 long cwt = 112 lbs)*
longTon		*Mass,Avoirdupois gross or long ton (1 long ton = 20 long cwt)*
dwt		*Mass,Troy pennyweight (1 dwt = 24 grains)*
ozT		*Mass,Troy ounce (1 oz t = 20 dwt)*
lbT		*Mass,Troy pound (1 lb t = 12 oz t)*
sAp		*Mass,Apothecaries scruple (1 s ap = 20 grains)*
drAp		*Mass,Apothecaries dram (1 dr ap = 3 s ap)*
ozAp		*Mass,Apothecaries ounce (1 oz ap = 8 dr ap)*
lbAp		*Mass,Apothecaries pound (1 lp ap = 12 oz ap)*
mpgImp		*Fuel economy,mile per imperial gallon*
mpgUS		*Fuel economy,mile per US gallon*
mPGeUS		*Fuel economy,mile per US gallon equivalent*
lPer100km		*Fuel economy,liter per 100 km*
wHPerMi		Fuel economy,watt-hour per mile (Note: users must supply the "k" prefix to create "kWh/mi")
wHPer100Mi		Fuel economy,watt-hour per 100 mile (Note: users must supply the "k" prefix

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		to create “kWh/(100 mi)”)
degF		*Temperature,degrees Fahrenheit*
erg		*Energy,erg (1 erg = 10-7 J)*
dyn		*Force,dyne (1 dyn = 10-5 N)*
p		*Dynamic viscosity,poise (1 P = 0.1 Pa s)*
st		*Kinematic viscosity,stokes (1 St = 1 cm2/s)*
sb		*Luminance,stilb (1 sb = 104 cd/m2)*
ph		*Illuminance,phot (1 ph = 104 lx)*
gal		Acceleration,gal (1 Gal = 10-2 m s-2) Note: This “Gal” is an abbreviation for “Galileo” not “gallon”
mx		*Magnetic flux,Maxwell (1 Mx = 10-8 Wb)*
gauss		*Magnetic flux density,Gauss (1 G = 10-4 T)*
oe		Magnetic field,Œrsted (1 Oe = (103/4p) A/m)

REQ.18.4.1.41 UsagePoint

Logical point on a network at which consumption or production is either physically measured (e.g. metered) or estimated (e.g. unmetered street lights).

Name	Type	Description
name	*String*	*The name is any free human readable and possibly non unique text naming the object.*
description	*String*	*A human readable description of the object.*
status	*Integer*	Status of this UsagePoint: 0 - Off 1 - On
roleFlags	*RoleFlags*	*The set of roles pertinant to this UsagePoint*

REQ.18.4.1.42 UsageSummary

Summary of usage for a billing period

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Name	Type	Description
billingPeriod	*DateTimeInterval*	*The billing period to which the included measurements apply*
billLastPeriod	*Float*	*The amount of the bill for the previous period*
billToDate	*Float*	*The bill amount related to the billing period as of the date received*
costAdditionalLastPeriod	*Float*	*Additional charges from the last billing period*
costAdditionalLastPeriodDetail	*LineDetail*	*Additional charges from the last billing period*
currency	~~String~~Currency	*The International Organization for Standardization standard ISO 4217 code indicating the currency applicable to the bill amounts in the summary. See list at http://www.unece.org/cefact/recommendations/rec09/rec09_ecetrd203.pdf*
currentBillingPeriodOverallConsumption	*SummaryMeasurement*	*The total consumption for the billing period*
currentDayLastYearNetConsumption	*SummaryMeasurement*	*The amount of energy consumed one year ago*
currentDayNetConsumption	*SummaryMeasurement*	*Net consumption for the current day (delivered - received)*
currentDayOverallConsumption	*SummaryMeasurement*	*Overall energy consumption for the current day*
peakDemand	*SummaryMeasurement*	*Peak demand recorded for the current period*
previousDayLastYearOverallConsumption	*SummaryMeasurement*	*The amount of energy consumed on the previous day one year ago*
previousDayNetConsumption	*SummaryMeasurement*	*Net consumption for the previous day*
previousDayOverallConsumption	*SummaryMeasurement*	*The total consumption for the previous day*

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qualityOfReading	*SummaryQuality ~~QualityOfReading~~*	*Indication of the quality of the summary readings*
ratchetDemand	*SummaryMeasurement*	*The current ratchet demand value for the ratchet demand period*
ratchetDemandPeriod	*DateTimeInterval*	*The period over which the ratchet demand applies*

REQ.18.4.1.43 RoleFlags

Describe a set of specific communication or physical attributes that the associated UsagePoint may have. The term RoleFlags in this specific case pertains to the application-specific nature of the UsagePoint. More than one of these flags can be true for any UsagePoint.

Name	Type	Description
isDC	*boolean*	*Is direct current (DC) rather than alternating current (AC)*
isDER	*boolean*	*Is a ~~DER~~distributed energy resource point*
isMirror	*boolean*	*Represents a copy or mirror of an original UsagePoint*
isOneway	*boolean*	*Device is a one-way communications device that can only transmit its information and cannot receive.*
isPEV	*boolean*	*Is a PEV Usage Point*
isPremiseAggregationPoint	*boolean*	*This UsagePoint aggregates the contributions of other UsagePoints in the premise*
isRevenueQuality	*boolean*	*Is revenue quality.*

REQ.18.4.1.44 LineDetail

Details on an amount line, with rounding, date and note.

Name	Type	Description
amount	~~*Money*~~float	*Amount for this line item.*
rounding	~~*Money*~~float	*Totalized monetary value of all errors due to process rounding or truncating that is not reflected in 'amount'.*

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dateTime	*DateTime*	*Date and time when this line was created in the application process.*
note	*String*	*Free format note relevant to this line.*

REQ.18.4.1.45 ReadingInterharmonic *«Compound»*

Interharmonics are represented as a rational number 'numerator' / 'denominator', and harmonics are represented using the same mechanism and identified by 'denominator'=1.

Name	Type	Description
numerator	*Integer*	*Interharmonic numerator. Value 0 means not applicable. Value 1 is used in combination with 'denominator'=2 to represent interharmonic 1/2, and with 'denominator'=1 it represents fundamental frequency. Finally, values greater than 1 indicate the harmonic of that order (e.g., 'numerator'=5 is the fifth harmonic).*
denominator	*Integer*	*Interharmonic denominator. Value 0 means not applicable. Value 2 is used in combination with 'numerator'=1 to represent interharmonic 1/2. Finally, value 1 indicates the harmonic of the order specified with 'numerator'.*

REQ.18.4.1.46 RationalNumber *«Compound»*

Rational number = 'numerator' / 'denominator'.

Name	Type	Description
numerator	*Integer*	*Numerator.*
denominator	*Integer*	*Denominator. Value 1 indicates the number is a simple integer.*

REQ.18.4.1.47 AccumulationKind *«enumeration»*

Accumulation behavior of a reading over time, usually 'measuringPeriod', to be used with individual endpoints (as opposed to 'macroPeriod' and

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'aggregate' that are used to describe aggregations of data from individual endpoints).

Name	Type	Description
none		*Not Applicable, or implied by the unit of measure.*
bulkQuantity		A value from a register which represents the bulk quantity of a commodity. This quantity is computed as the integral of the commodity usage rate. This value is typically used as the basis for the dial reading at the meter, and as a result, will roll over upon reaching a maximum dial value. Note 1: With the metering system, the roll-over behavior typically implies a roll-under behavior so that the value presented is always a positive value (e.g. unsigned integer or positive decimal.) However, when communicating data between enterprise applications a negative value might occur in a case such as net metering. Note 2: A BulkQuantity refers primarily to the dial reading and not the consumption over a specific period of time.
continuousCumulative		The sum of the previous billing period values and the present period value. Note: "ContinuousCumulative" is commonly used in conjunction with "demand." The "ContinuousCumulative Demand" would be the cumulative sum of the previous billing period maximum demand values (as occurring with each demand reset) summed with the present period maximum demand value (which has yet to be reset.)
cumulative		The sum of the previous billing period values. Note: "Cumulative" is commonly used in conjunction with "demand." Each demand reset causes the maximum demand value for the present billing period (since the last demand reset) to accumulate as an

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		accumulative total of all maximum demands. So instead of "zeroing" the demand register, a demand reset has the affect of adding the present maximum demand to this accumulating total.
deltaData		The difference between the value at the end of the prescribed interval and the beginning of the interval. This is used for incremental interval data. Note: One common application would be for load profile data, another use might be to report the number of events within an interval (such as the number of equipment energizations within the specified period of time.)
indicating		As if a needle is swung out on the meter face to a value to indicate the current value. (Note: An "indicating" value is typically measured over hundreds of milliseconds or greater, or may imply a "pusher" mechanism to capture a value. Compare this to "instantaneous" which is measured over a shorter period of time.)
summation		A form of accumulation which is selective with respect to time. Note : "Summation" could be considered a specialization of "Bulk Quantity" according to the rules of inheritance where "Summation" selectively accumulates pulses over a timing pattern, and "BulkQuantity" accumulates pulses all of the time.
timeDelay		*A form of computation which introduces a time delay characteristic to the data value*
instantaneous		Typically measured over the fastest period of time allowed by the definition of the metric (usually milliseconds or tens of milliseconds.) (Note: "Instantaneous" was moved to attribute #3 in 61968-9Ed2 from attribute #1 in 61968-9Ed1.)
latchingQuantit		When this description is applied to a

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y		metered value, it implies that the value is a time-independent cumulative quantity much a BulkQuantity, except that it latches upon the maximum value upon reaching that value. Any additional accumulation (positive or negative) is discarded until a reset occurs. Note: A LatchingQuantity may also occur in the downward direction – upon reaching a minimum value. The terms "maximum" or "minimum" will usually be included as an attribute when this type of accumulation behaviour is present. When this description is applied to an encoded value (UOM= "Code"), it implies that the value has one or more bits which are latching. The condition that caused the bit to be set may have long since evaporated. In either case, the timestamp that accompanies the value may not coincide with the moment the value was initially set. In both cases a system will need to perform an operation to clear the latched value.
boundedQuantity		*A time-independent cumulative quantity such as BulkQuantity or a LatchingQuantity, except that the accumulation stops at the maximum or minimum values. When the maximum is reached, any additional positive accumulation is discarded, but negative accumulation may be accepted (thus lowering the counter.) Likewise, when the negative bound is reached, any additional negative accumulation is discarded, but positive accumulation is accepted (thus increasing the counter.)*

REQ.18.4.1.48 CommodityKind *«enumeration»*

Identifies the commodity being measured.

For Quadrant: Retail Electtric Quadrant
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Name	Type	Description
none		*Not Applicable*
electricitySecondaryMetered		All types of metered quantities. This type of reading comes from the meter and represents a "secondary" metered value.
electricityPrimaryMetered		It is possible for a meter to be outfitted with an external VT and/or CT. The meter might not be aware of these devices, and the display not compensate for their presence. Ultimately, when these scalars are applied, the value that represents the service value is called the "primary metered" value. The "index" in sub-category 3 mirrors those of sub-category 0.
communication		*A measurement of the communication infrastructure itself.*
air		
insulativeGas		(SF_6 is found separately below.)
insulativeOil		
naturalGas		
propane		
potableWater		*Drinkable water*
steam		*Water in steam form, usually used for heating.*
wasteWater		*(Sewerage)*
heatingFluid		*This fluid is likely in liquid form. It is not necessarily water or water based. The warm fluid returns cooler than when it was sent. The heat conveyed may be metered.*
coolingFluid		*The cool fluid returns warmer than when it was sent. The heat conveyed may be metered.*
nonpotableWater		*Reclaimed water – possibly used for irrigation but not sufficiently treated to be considered safe for drinking.*
nox		Nitrous Oxides NO_X
so2		Sulfur Dioxide SO_2
ch4		Methane CH_4
co2		Carbon Dioxide CO_2

For Quadrant: Retail Electtric Quadrant
Requesters:
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carbon		
pfc		*Perfluorocarbons PFC*
sf6		Sulfur hexafluoride SF_6
tvLicence		*Television*
internet		*Internet service*
refuse		*trash*
h2		*Hydrogen, H2*
c2h2		*Acetylene, C2H2*
c2h4		*Ethylene, C2H4*
c2h6		*Ethane, C2H6*
co		*Carbon monoxide, CO*
o2		*Oxygen, O2*
dissolvedCombustibleGas		*Dissolved Combustible Gas (A combination of combustible gasses such as H2, CH4, C2H2, C2H4, C2H6, and/or CO in some mixture.)*
co2e		*Carbon Dioxide CO2 Equivalent*
lead		*Lead, Pb*
mercury		*Mercury, Hg*
ozone		*Ozone, O3*
pm10		*Particulate matter whose maximum size is 10 µm.*
pm25		*Particulate matter whose maximum size is 2.5 µm.*
sox		*Sulfur Oxides, SOX*

REQ.18.4.1.49 Currency *«enumeration»*

Monetary currencies. Apologies for this list not being exhaustive. The complete set of enumerated values can be found in International Organization for Standardization standard ISO 4217 currency and funds name and code elements.

Name	Type	Description
USD		*US dollar*
EUR		*European euro*
AUD		*Australian dollar*
CAD		*Canadian dollar*
CHF		*Swiss francs*
CNY		*Chinese yuan renminbi*
DKK		*Danish crown*

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GBP		*British pound*
JPY		*Japanese yen*
NOK		*Norwegian crown*
RUB		*Russian ruble*
SEK		*Swedish crown*
INR		*India rupees*
other		*Another type of currency.*

REQ.18.4.1.50 DataQualifierKind *«enumeration»*

This value qualifies the measurement as to what it represents -- for example a minimum or maximum value or a nominal or nameplate value.

Name	Type	Description
high		*Typically used to identify the high volume flow port of a compound water meter.*
low		*Typically used to identify the low volume flow port of a compound water meter.*
none		*Not Applicable*
average		*The value represents an average*
excess		*The value represents an amount over which a threshold was exceeded.*
highThreshold		*The value represents a programmed threshold.*
lowThreshold		*The value represents a programmed threshold.*
maximum		*The highest value observed*
minimum		*The smallest value observed*
nominal		*The value represents nominal or nameplate values*
normal		*The value represents typical operating values*
secondMaximum		*The second highest value observed*
secondMinimum		*The second smallest value observed*
thirdMaximum		*The third highest value observed*
fourthMaximum		*The fourth highest value observed*
fifthMaximum		*The fifth highest value observed*

For Quadrant:	**Retail Electtric Quadrant**
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sum		*The accumulated sum*

REQ.18.4.1.51 MacroPeriodKind *«enumeration»*

Time period of interest that reflects how the reading is viewed or captured over a long period of time.

Name	Type	Description
none		*Not Applicable*
billingPeriod		*Captured during the billing period starting at midnight of the first day of the billing period (as defined by the billing cycle day). If during the current billing period, it specifies a period from the start of the current billing period until "now".*
daily		*Daily Period starting at midnight. If for the current day, this specifies the time from midnight to "now".*
monthly		*Monthly period starting at midnight on the first day of the month. If within the current month, this specifies the period from the start of the month until "now."*
seasonal		*A season of time spanning multiple months. E.g. "Summer," "Spring," "Fall," and "Winter" based cycle. If within the current season, it specifies the period from the start of the current season until "now."*
weekly		*Weekly period starting at midnight on the first day of the week and ending the instant before midnight the last day of the week. If within the current week, it specifies the period from the start of the week until "now."*
specifiedPeriod		*For the period defined by the start and end of the TimePeriod element in the message.*

REQ.18.4.1.52 MeasuringPeriodKind *«enumeration»*

Time attribute inherent or fundamental to the reading value (as opposed to 'macroPeriod' that supplies an "adjective" to describe aspects of a time period with regard to the measurement). It refers to the way the value was originally measured and not to the frequency at which it is reported or

For Quadrant:	**Retail Electtric Quadrant**
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presented. For example, an hourly interval of consumption data would have the value 'hourly' as an attribute. However in the case of an hourly sampled voltage value, the meterReadings schema would carry the 'hourly' interval size information.

It is common for meters to report demand in a form that is measured over the course of a portion of an hour, while enterprise applications however commonly assume the demand (in kW or kVAr) normalized to 1 hour. The system that receives readings directly from the meter therefore performs this transformation before publishing readings for use by the other enterprise systems. The scalar used is chosen based on the block size (not any sub-interval size).

Name	Type	Description
none		*Not Applicable*
tenMinute		*10-minute*
fifteenMinute		*15-minute*
oneMinute		*1-minute*
twentyfourHour		*24-hour*
thirtyMinute		*30-minute*
fiveMinute		*5-minute*
sixtyMinute		*60-minute*
twoMinute		*2-minute*
threeMinute		*3-minute*
present		*Within the present period of time*
previous		*Shifted within the previous monthly cycle and data set*
twentyMinute		*20-minute interval*
fixedBlock60Min		*60-minute Fixed Block*
fixedBlock30Min		*30-minute Fixed Block*
fixedBlock20Min		*20-minute Fixed Block*
fixedBlock15Min		*15-minute Fixed Block*
fixedBlock10Min		*10-minute Fixed Block*
fixedBlock5Mi		*5-minute Fixed Block*

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n		
fixedBlock1Min		*1-minute Fixed Block*
rollingBlock60MinIntvl30MinSubIntvl		*60-minute Rolling Block with 30-minute sub-intervals*
rollingBlock60MinIntvl20MinSubIntvl		*60-minute Rolling Block with 20-minute sub-intervals*
rollingBlock60MinIntvl15MinSubIntvl		*60-minute Rolling Block with 15-minute sub-intervals*
rollingBlock60MinIntvl12MinSubIntvl		*60-minute Rolling Block with 12-minute sub-intervals*
rollingBlock60MinIntvl10MinSubIntvl		*60-minute Rolling Block with 10-minute sub-intervals*
rollingBlock60MinIntvl6MinSubIntvl		*60-minute Rolling Block with 6-minute sub-intervals*
rollingBlock60MinIntvl5MinSubIntvl		*60-minute Rolling Block with 5-minute sub-intervals*
rollingBlock60MinIntvl4MinSubIntvl		*60-minute Rolling Block with 4-minute sub-intervals*
rollingBlock30MinIntvl15MinSubIntvl		*30-minute Rolling Block with 15-minute sub-intervals*
rollingBlock30MinIntvl10MinSubIntvl		*30-minute Rolling Block with 10-minute sub-intervals*
rollingBlock30MinIntvl6MinSubIntvl		*30-minute Rolling Block with 6-minute sub-intervals*
rollingBlock30MinIntvl5MinSubIntvl		*30-minute Rolling Block with 5-minute sub-intervals*
rollingBlock30MinIntvl3MinSubIntvl		*30-minute Rolling Block with 3-minute sub-intervals*
rollingBlock30		*30-minute Rolling Block with 2-minute*

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MinIntvl2MinSubIntvl		*sub-intervals*
rollingBlock15MinIntvl5MinSubIntvl		*15-minute Rolling Block with 5-minute sub-intervals*
rollingBlock15MinIntvl3MinSubIntvl		*15-minute Rolling Block with 3-minute sub-intervals*
rollingBlock15MinIntvl1MinSubIntvl		*15-minute Rolling Block with 1-minute sub-intervals*
rollingBlock10MinIntvl5MinSubIntvl		*10-minute Rolling Block with 5-minute sub-intervals*
rollingBlock10MinIntvl2MinSubIntvl		*10-minute Rolling Block with 2-minute sub-intervals*
rollingBlock10MinIntvl1MinSubIntvl		*10-minute Rolling Block with 1-minute sub-intervals*
rollingBlock5MinIntvl1MinSubIntvl		*5-minute Rolling Block with 1-minute sub-intervals*

REQ.18.4.1.53 PhaseCodeKind *«enumeration»*

Enumeration of phase identifiers. Allows designation of phases for both transmission and distribution equipment, circuits and loads.

Residential and small commercial loads are often served from single-phase, or split-phase, secondary circuits. Phases 1 and 2 refer to hot wires that are 180 degrees out of phase, while N refers to the neutral wire. Through single-phase transformer connections, these secondary circuits may be served from one or two of the primary phases A, B, and C. For three-phase loads, use the A, B, C phase codes instead of s12N.

Name	Type	Description
none		*Not applicable to any phase*
phaseN		*Neutral*
phaseNtoGnd		*Neutral to ground*
phaseC		*Phase C*
phaseCtoN		*Phase C to Neutral*
phaseCtoAv		*Phase C current or voltage relative to Phase A voltage*

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phaseCAtoN		*CA to Neutral*
phaseB		*Phase B*
phaseBtoN		*Phase B to Neutral*
phaseBtoC		*Phase B to C*
phaseBtoAv		*Phase B current or voltage relative to Phase A voltage*
phaseBCtoN		*BC to Neutral*
phaseA		*Phase A*
phaseAtoN		*Phase A to Neutral*
phaseAtoB		*Phase A to B*
phaseAtoAv		*Phase A current relative to Phase A voltage*
phaseABtoN		*AB to Neutral*
phasesABC		*Involving all phases*
phaseABCtoN		*ABC to Neutral*
s2		*Phase S2*
s2N		*Phase S2 to Neutral*
s1		*Phase S1*
s1N		*Phase S1 to Neutral*
s12		*Phase S1 to S2*
s12N		*Phase S1, S2 to Neutral*
threeWireWye		*Three wire Wye*
fourWireWye		*Four wire Wye*
threeWireDelta		*Three wire Delta*
fourWireDelta		*Four wire Delta*
fourWireHLDelta		*Four wire High-leg Delta*
fourWireOpenDelta		*Four wire Open Delta*
networked		*Networked meter*

REQ.18.4.1.54 TimeAttributeKind *«enumeration»*

This value identifies the time period during which this measurement was performed. For example if averaged (see DataQualifierKind) what period is averaged. Other complex time periods for how a measurement is computed are identified.

Name	Type	Description
twelveMinute		*12-minute*
twoHour		*2-hour*

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fourHour		*4-hour*
sixHour		*6-hour*
twelveHour		*12-hour*
specifiedInterval		The interval length is described in RationalNumber.numerator in seconds. Attribute RationalNumber.denominator should be '1' for whole seconds.
specifiedFixedBlock		The fixed block duration is described in RationalNumber.numerator in seconds. RationalNumber.denominator should be '1' for whole seconds.
specifiedRollingBlock		*The rolling block size is described by RationalNumber.numerator in seconds, and the sub-interval size by RationalNumber.denominator in seconds.*
none		*Not Applicable*
tenMinute		*10-minute*
fifteenMinute		*15-minute*
oneMinute		*1-minute*
twentyfourHour		*24-hour*
thirtyMinute		*30-minute*
fiveMinute		*5-minute*
sixtyMinute		*60-minute*
twoMinute		*2-minute*
threeMinute		*3-minute*
present		*Within the present period of time*
previous		*Shifted within the previous monthly cycle and data set*
twentyMinute		*20-minute interval*
fixedBlock60Min		*60-minute Fixed Block*
fixedBlock30Min		*30-minute Fixed Block*
fixedBlock20Min		*20-minute Fixed Block*
fixedBlock15Min		*15-minute Fixed Block*
fixedBlock10Min		*10-minute Fixed Block*

For Quadrant: Retail Electtric Quadrant
Requesters:
Request No.: 2012 Retail Annual Plan Item 7.b.i
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fixedBlock5Min		*5-minute Fixed Block*
fixedBlock1Min		*1-minute Fixed Block*
rollingBlock60MinIntvl30MinSubIntvl		*60-minute Rolling Block with 30-minute sub-intervals*
rollingBlock60MinIntvl20MinSubIntvl		*60-minute Rolling Block with 20-minute sub-intervals*
rollingBlock60MinIntvl15MinSubIntvl		*60-minute Rolling Block with 15-minute sub-intervals*
rollingBlock60MinIntvl12MinSubIntvl		*60-minute Rolling Block with 12-minute sub-intervals*
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rollingBlock60MinIntvl6MinSubIntvl		*60-minute Rolling Block with 6-minute sub-intervals*
rollingBlock60MinIntvl5MinSubIntvl		*60-minute Rolling Block with 5-minute sub-intervals*
rollingBlock60MinIntvl4MinSubIntvl		*60-minute Rolling Block with 4-minute sub-intervals*
rollingBlock30MinIntvl15MinSubIntvl		*30-minute Rolling Block with 15-minute sub-intervals*
rollingBlock30MinIntvl10MinSubIntvl		*30-minute Rolling Block with 10-minute sub-intervals*
rollingBlock30MinIntvl6MinSubIntvl		*30-minute Rolling Block with 6-minute sub-intervals*
rollingBlock30MinIntvl5MinSubIntvl		*30-minute Rolling Block with 5-minute sub-intervals*
rollingBlock30MinIntvl3MinSubIntvl		*30-minute Rolling Block with 3-minute sub-intervals*

For Quadrant:	**Retail Electtric Quadrant**
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rollingBlock30MinIntvl2MinSubIntvl		*30-minute Rolling Block with 2-minute sub-intervals*
rollingBlock15MinIntvl5MinSubIntvl		*15-minute Rolling Block with 5-minute sub-intervals*
rollingBlock15MinIntvl3MinSubIntvl		*15-minute Rolling Block with 3-minute sub-intervals*
rollingBlock15MinIntvl1MinSubIntvl		*15-minute Rolling Block with 1-minute sub-intervals*
rollingBlock10MinIntvl5MinSubIntvl		*10-minute Rolling Block with 5-minute sub-intervals*
rollingBlock10MinIntvl2MinSubIntvl		*10-minute Rolling Block with 2-minute sub-intervals*
rollingBlock10MinIntvl1MinSubIntvl		*10-minute Rolling Block with 1-minute sub-intervals*
rollingBlock5MinIntvl1MinSubIntvl		*5-minute Rolling Block with 1-minute sub-intervals*

4. SUPPORTING DOCUMENTATION

a. Description of Request:

b. Description of Recommendation:

c. Business Purpose:

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

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

via email and posting

TO: NAESB Retail Electric Quadrant Members and Interested Industry Participants
FROM: NAESB Office
RE: NAESB Retail Request for Formal Comments – Due January 3, 2013
DATE: December 3, 2012

An industry comment period begins today, December 3, 2012 and ends at the close of business on January 3, 2013 for the following Retail recommendation that is posted on the NAESB web site:

Recommendation:
2012 Retail Annual Plan Item No. 7.b.i: Book 2 – Develop standards to support PAP 10 - Standards Energy Usage Information, Phase 2, Harmonization with CIM and SEP 2.0 **Recommendation**: http://www.naesb.org/pdf4/retail_2012_api_7bi_rec.docx

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 3, 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,

Jonathan Booe
NAESB Office

cc: Rae McQuade, President

From: Ezell, Lisa
Sent: Thursday, January 03, 2013 2:14 PM
To: naesb; Jonathan Booe
Subject: From Leonard Tillman - RE: NAESB Retail Request for Formal Comments – Due January 3, 2013

You may want to reconcile what appears to be the inadvertent use of different fonts in the first few pages of the recommendation.

If you have any comments or questions, please let us know.

Thank you.
LCT

BALCH
& BINGHAM LLP

Leonard C. Tillman, Partner, Balch & Bingham LLP
1710 Sixth Avenue North • Birmingham, AL 35203-2015
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BALCH
& BINGHAM LLP

Lisa R. Ezell, CP, Paralegal, Balch & Bingham LLP
1710 Sixth Avenue North • Birmingham, AL 35203-2015
www.balch.com

From: <naesbmail@naesb.org>
Date: December 3, 2012, 4:21:45 PM CST
To: <ltillman@balch.com>
Subject: NAESB Retail Request for Formal Comments – Due January 3, 2013

NAESB Retail Electric Quadrant Members and Interested Industry Participants:
An industry comment period begins today, December 3, 2012 and ends at the close of business on January 3, 2013 for the following Retail recommendation that is posted on the NAESB web site:

Recommendation:
2012 Retail Annual Plan Item No. 7.b.i: Book 2 – Develop standards to support PAP 10 - Standards Energy Usage Information, Phase 2, Harmonization with CIM and SEP 2.0

Recommendation: http://www.naesb.org/pdf4/retail_2012_api_7bi_rec.docx

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 3, 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,

Jonathan Booe
NAESB Office

cc: Rae McQuade, President

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

January 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 Revised Triage Actions Pending for Requests Nos. R12010, R12011, R13001, R13002

Dear Triage Subcommittee and EC members,

We have four requests to triage – R12010, R12011, R13001, R13002-- provided below as hyperlinks. The NAESB office recommends the following dispositions for your consideration. Request No. R12010 has been revised to direct the request to the WEQ JESS subcommittee rather than the WEQ OASIS subcommittee:

For R12010, submitted by J.T. Wood on behalf of Southern Company Services, Inc.:

> 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 support a direction of FERC Order No. 764 that transmission entities accept scheduling interchange in 15 minute intervals within the operating hour, 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 R12011, submitted by Mary Draemer and others on behalf of Energy Transfer Tiger Pipeline, LLC and others:

> 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 add a new data element to WGQ Standard No. 0.4.2 - Operational Capacity data set to provide information that an allocation due to a constraint or nominations exceeding capacity has or has not occurred at allocation, 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.

For R13001, submitted by Dave Mollerstuen on behalf of Open ADE Task Force of the UCAIug:

> This request is (1) found within scope; (2) to be assigned to the Retail Electric Quadrant (REQ); and (3) because it is a request to modify REQ Standard No. 021 – Energy Services Provider Interface to reflect enhancements and corrections defined by the UCAIug, it should be assigned the REQ Energy Service Providers Interface Task Force of the Smart Grid Standards Subcommittee of PAP 10. 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.

For R13002, submitted by Jerry Gross on behalf of Questar Pipeline Company:

> 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 add a data element to the NAESB WGQ Standard No. 5.4.16 – System Wide Notices to provide for the notice subject, 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 Friday February 1, the dispositions as noted above will be considered approved.

R13001

North American Energy Standards Board

Request for Initiation of a NAESB Business Practice Standard, Model Business Practice or Electronic Transaction
or
Enhancement of an Existing NAESB Business Practice Standard, Model Business Practice or Electronic Transaction

Instructions:

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

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

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

   Rae McQuade
   NAESB, President
   801 Travis, Suite 1675
   Houston, TX 77002

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

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

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

Please note that submitters should provide the requests to the NAESB office in sufficient time so that the NAESB Triage Subcommittee may fully consider the request prior to taking action on it. It is preferable that the request be submitted a minimum of 3 business days prior to the Triage Subcommittee meetings. Those meeting schedules are posted on the NAESB web site at http://www.naesb.org/monthly_calendar.asp.

R13001

North American Energy Standards Board

Request for Initiation of a NAESB Business Practice Standard, Model Business Practice or Electronic Transaction
or
Enhancement of an Existing NAESB Business Practice Standard, Model Business Practice or Electronic Transaction

Date of Request: January 15, 2013

1. Submitting Entity & Address:

OpenADE Task Force
c/o UCA International Users Group
10604 Candler Falls Court
Raleigh, NC 27614

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

Name : David Mollerstuen
Title : Chair, OpenADE Task Force
Phone : 720-340-1488
Fax : 303-340-1488
E-mail : Dave Mollerstuen (dave@alcaeng.com)

3. Title and Description of Proposed Standard or Enhancement:

Title:

NAESB REQ.21 Energy Services Provider Interface (ESPI)

Description:

The ESPI standard, REQ.21 has been in use for approximately one year. Since its ratification it has been successfully proposed and adopted as the basis for the Green Button Initiative, an industry-led initiative proposed and sponsored by the US Office of Science and Technology Policy (OSTP) and an intergovernmental team consisting of OSTP, DOE, NIST, and CEP.

Over the course of the year, a number of corrections and enhancements have been discussed in the UCAIug contributed by implementers of Green Button. These discussions have resulted in a number of technical improvements to the ESPI standard proposed as the basis of a next version of ESPI.

4. Use of Proposed Standard or Enhancement (include how the standard will be used, documentation on the description of the proposed standard, any existing documentation of the proposed standard, and required communication protocols):

   The Standard may have many uses, but we anticipate that it will be initially used primarily between a Consumer's utility provider and a third party that the consumer nominates to display that energy usage information.

   The OpenADE Task Force within the UCAIug's OpenSG has done extensive requirements analysis and initial service definition work in this domain, and intends to contribute their collected work to this standardization effort within NAESB.

5. Description of Any Tangible or Intangible Benefits to the Use of the Proposed Standard or Enhancement:

   The uniform use of a common data and exchange format for energy usage information provides utilities and their customers with a rich feedback mechanism on the way they use energy. With this knowledge they are in a better position to optimize their usage to their economic benefit, as well as, to the benefit of a more dynamic grid.

6. Estimate of Incremental Specific Costs to Implement Proposed Standard or Enhancement:

   Minimal cost to complete standard definition; initial implementation cost will be comparable to implementation of existing proprietary interfaces, but need only be completed once by each Provider and Consumer of Energy Usage Information.

7. Description of Any Specific Legal or Other Considerations:

   N/A.

8. If This Proposed Standard or Enhancement Is Not Tested Yet, List Trading Partners Willing to Test Standard or Enhancement (Corporations and contacts):

   UCAIug is developing a comprehensive testing and certification capability around the REQ.21 standard.

9. If This Proposed Standard or Enhancement Is In Use, Who are the Trading Partners :

   See http://www.greenbuttondata.org/greenadopt.html for current adopters.

10. Attachments (such as : further detailed proposals, transaction data descriptions, information flows, implementation guides, business process descriptions, examples of ASC ANSI X12 mapped transactions):

    OpenADE Help Desk Document describing current set of issues and proposed resolutions:
    http://osgug.ucaiug.org/sgsystems/OpenADE/Shared%20Documents/Testing%20and%20Certification/GreenButtonTestPlan/HelpDeskItems.docx

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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 – **Decline** 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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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/wgq_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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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_attach1.doc
Attachment 2: http://www.naesb.org/member_login_form.asp?doc=fa_wgq_r97064_h_attach2.doc
Attachment 3: 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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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 US-Cert Vulnerability Note VU#864643) 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:
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:
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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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 WGQ 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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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.doc 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*

Recommendations:

2012 WGQ Annual Plan Item 1 – Investigate how to make standards referencing, which may include reorganization, more user friend for implementation (Reorganize Standards Requests)
Recommendation: http://www.naesb.org/pdf4/wgq_2012_ap_1_rec_010413.doc
Request for Comments: http://www.naesb.org/pdf4/wgq_011513reqcom.doc - *comments due February 13, 2013*

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.
Recommendation: http://www.naesb.org/pdf4/wgq_r11012_rec_112712.doc
Request for Comments: http://www.naesb.org/pdf4/wgq_011513reqcom.doc - *comments due February 13, 2013*

Request R12003/Request R12004 – Add contact detail data elements to Imbalance Trade datasets/Add contact data elements to Withdrawal of Request for Imbalance
Recommendation**:** http://www.naesb.org/pdf4/wgq_r12003_r12004_rec_010413.doc
Request for Comments: http://www.naesb.org/pdf4/wgq_011513reqcom.doc - *comments due February 13, 2013*

R12005 - Add data element to Service Requester Level Charge/Allowance Invoice to NAESB WGQ Standard 3.4.4.
Recommendation: http://www.naesb.org/pdf4/wgq_r12005_rec_112712.doc
Request for Comments: http://www.naesb.org/pdf4/wgq_011513reqcom.doc - *comments due February 13, 2013*

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Request R12007 – Modify NAESB WGQ Standard No. 5.3.70 to allow the use of Notice Type as an alternative to the Notice Type Abbreviation
Recommendation: http://www.naesb.org/pdf4/wgq_r12007_rec_010413.doc
Request for Comments: http://www.naesb.org/pdf4/wgq_011513reqcom.doc - *comments due February 13, 2013*

R12009 - Add two Sender's Option Data Elements to NAESB WGQ 5.4.22— Transactional Reporting – Interruptible Transportation.
Recommendation: http://www.naesb.org/pdf4/wgq_r12009_rec_112712.doc
Request for Comments: http://www.naesb.org/pdf4/wgq_011513reqcom.doc - *comments due February 13, 2013*

2012 WGQ Annual Plan Item 14.a - Modify NAESB WGQ Standard Nos. 4.3.4 and 10.3.2 as per the WGQ 2012 Annual Plan Item 14a.
Recommendation: http://www.naesb.org/pdf4/wgq_2012_ap_14a_rec_112712.doc
Request for Comments: http://www.naesb.org/pdf4/wgq_011513reqcom.doc - *comments due February 13, 2013*

R12011 - Add a new data element to the Operational Capacity data set. Add a new Sender's Option (SO) data element Allocated Indicator Data to the NAESB WGQ Standard No. 0.4.2 Operational Capacity data set.
Request: http://www.naesb.org/pdf4/r12011.doc

2012 WGQ Annual Plan Item 14.b – Address design capacity issues present in paragraph 30 of FERC Order No. 587-V[3].
Recommendation: http://www.naesb.org/pdf4/wgq_2012_ap_14b_rec.doc
Request for Comments:

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/wgq_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. 1.4.4 – Confirmation Response, 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 WGQ 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

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)***
Request for Comments: http://www.naesb.org/pdf4/wgq_051012reqcom.doc - Ended June 11, 2012

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)*

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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/wgq_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.
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.
Recommendation: http://www.naesb.org/pdf4/wgq_mc12004_rec_022312.doc (*Effective March 30, 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.

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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)*

MC12007 – For NAESB Version 2.1, Request is for new Nomination Quick Response Validation Codes - To the Nomination Quick Response document (1.4.2), add new Nominations Quick Response Validation Codes (Sub-detail).
Minor Correction Request: http://www.naesb.org/pdf4/wgq_mc12007.doc

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)*

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.
Recommendation: http://www.naesb.org/pdf4/wgq_mc12014_rec_050312.doc *(Effective June 11, 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.*

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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.
Recommendation: http://www.naesb.org/pdf4/wgq_mc12015_rec_050312.doc *(Effective June 11, 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.*

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.
Recommendation: http://www.naesb.org/pdf4/wgq_mc12023_rec_082312.doc *(Effective September 28, 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.*

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.
Recommendation: http://www.naesb.org/pdf4/wgq_mc12024_rec_082312.doc *(Effective September 28, 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.*

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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.
Recommedation: http://www.naesb.org/pdf4/wgq_mc12031_rec_112712.doc
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.

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)*

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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)*

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*

MC12042 – For NAESB, Version 2.0, Add code value for Authorization Indicator in NAESB WGQ Standard No. 2.4.9 - Authorization to Post Imbalance.
Request: http://www.naesb.org/pdf4/wgq_mc12042.doc
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.

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.
Recommendation: http://www.naesb.org/pdf4/wgq_mc12043_mc12046_rec_010413.doc
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.

MC12044 – For NAESB, Version 2.0, Add code value for Imbalance Direction Indicator for NAESB WGQ Standard No. 2.4.10 - Posted Imbalances Download.
Request: http://www.naesb.org/pdf4/wgq_mc12044.doc
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.

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.
Recommendation: http://www.naesb.org/pdf4/wgq_mc12045_rec_010413.doc
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.

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.
Recommendation combined with MC12043 (see above)
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.

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NAESB UPDATE: VERSION 2.1 – WHOLESALE GAS QUADRANT (WGQ)
FEBRUARY 11, 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.
Recommendation: http://www.naesb.org/pdf4/wgq_mc12047_rec_012213.doc

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.
Recommendation: http://www.naesb.org/pdf4/wgq_mc12048_rec_011813.doc

MC12049 (Revised) – For NAESB Versions 1.9 and 2.0, correct the applicable LQ Segments (Detail and Sub-detail), 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.
Recommendation: http://www.naesb.org/pdf4/wgq_mc12049_rec_011813.doc
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.

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.
Recommendation: http://www.naesb.org/pdf4/wgq_mc12051_rec_011813.doc

MC12052 – For NAESB Version 2.1, modify the Code Value Description for one of the existing codes for the data element "Cycle Indicator" in the following datasets for the next available NAESB WGQ Version release: Operational Capacity - NAESB WGQ Standard 0.4.2, Nomination - NAESB WGQ Standard 1.4.1, Request for Confirmation - NAESB WGQ Standard 1.4.3, Confirmation Response - NAESB WGQ Standard 1.4.4, Scheduled Quantity - NAESB WGQ Standard 1.4.5 Scheduled Quantity for Operator - NAESB WGQ Standard 1.4.6, Offer - NAESB WGQ Standard 5.4.24, Bid - NAESB WGQ Standard 5.4.25 and Award Download - NAESB WGQ Standard 5.4.26.
Request: http://www.naesb.org/pdf4/wgq_mc12052.doc

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 (-).
Request: http://www.naesb.org/pdf4/wgq_mc13001.doc

MC13002 - NAESB WGQ Version 2.1 – Correction to R10004 – Sample Paper for Transactional Reporting – Capacity Release - NAESB WGQ Standard No. 5.4.20.
Request: http://www.naesb.org/pdf4/wgq_mc13002.doc

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]
Request: http://www.naesb.org/pdf4/wgq_mc13003.doc

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NAESB UPDATE: VERSION 2.1 – WHOLESALE GAS QUADRANT (WGQ)
FEBRUARY 11, 2013

TIMELINE:

- Version 2.1 is scheduled for publication in March 31, 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 003.1 – WHOLESALE ELECTRIC QUADRANT (WEQ)
JANUARY 17, 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

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*

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NAESB UPDATE: VERSION 003.1 – WHOLESALE ELECTRIC QUADRANT (WEQ)
JANUARY 17, 2013

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.
Recommendation: http://www.naesb.org/pdf4/weq_2012_api_6a_rec.docx (redline)
Request for Comments: http://www.naesb.org/pdf4/weq_120312_reqcom.doc - *ended January 3, 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 second 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)
JANUARY 17, 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)
JANUARY 17, 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*

Recommendations:

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.
Recommendation: http://www.naesb.org/pdf4/retail_2012_api_7bi_rec.docx (redline)
Request for Comments: http://www.naesb.org/pdf4/req_120312_reqcom.doc - *ended January 3, 2013*

Retail 2012 Annual Plan Item 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
Request for Comments: http://www.naesb.org/pdf4/retail_120412_reqcom.doc - *ended January 4, 2013*

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*)

TIMELINE:

- 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
Month - 0	Date of Publication.

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January 3, 2013

TO: NAESB Board of Directors, Executive Committee (EC) Members, EC Alternates, and Invited Guests

FROM: Jonathan Booe, NAESB Deputy Director

RE: Draft Minutes of the NAESB Board Meeting – December 6, 2012

NAESB BOARD OF DIRECTORS MEETING & MEETING OF THE MEMBERS
Four Seasons Hotel, Houston, Texas
Thursday, December 6, 2012 – 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. Mr. Desselle noted the incoming and outgoing members and thanked the invited guests for their attendance.

2. Adoption of the Consent Agenda

Mr. Fusco moved, seconded by Mr. True, to approve the consent agenda, which included the agenda, draft minutes from the September 20, 2012 Board of Directors meeting and the Retail, Wholesale Electric and Wholesale Gas 2012 annual plans. The motion passed without opposition.

3. Membership and Financial Report

Membership Report: Ms. McQuade reviewed the membership report and profile with the Board members. She noted that there are currently 286 members and that during the last quarter the Wholesale Electric Quadrant (WEQ) a net loss of two members, the Wholesale Gas Quadrant (WGQ) has a net loss of three members, the Retail Electric Quadrant (REQ) experienced a gain of two members and the Retail Gas Quadrant (RGQ) had a loss of two members. She reminded the participants that the numbers represent the net membership differences by quadrant and that the losses are offset by the number of members gained during the previous quarter. Mr. True and Ms. Rager noted that the nomination period for Board seats that expire at the end of the years closes on December 20, 2012.

Financial Report: Ms. McQuade and Ms. Wishart reviewed the financial profile and report. Ms. McQuade stated that both the revenues collected and the budgeted expenditures are less than what was projected for 2012 to date. The net income for the quarter was $351,000 as opposed to the $448, 0000 projected in the budget and we are expecting to have negative retained earnings of $37,000 at the end of the year. She also noted that there has been an increase in the number of meetings held to date at this time during the previous year, largely as result of the expedited projects undertaken to meet publication deadlines and the Gas-Electric Harmonization effort. Mr. Parker asked about the process for collecting membership dues from companies that are 90-days in arrears. Ms. McQuade responded that she and Ms. Rager typically contact the companies and if action is not taken by the company to become current, their membership IDs and Passwords are removed. Mr. True asked if the organization is still on target to implement the changes to the website and the non-member meeting participation fee by January 1st. Ms. McQuade stated that the new website is still being tested and that the meeting participation fee cannot be implemented until the new website is functional.

2013 Budget: Ms. McQuade reviewed the 2013 budget with the Board members. She stated that the budget may need to be revised during 2013 after the effects of the non-member meeting attendance fee and other membership enhancements adopted by the board are implemented. Mr. Stites asked if the projected 10 member increase during 2013 is optimistic given the 2012 membership statistics. Ms. McQuade stated that the membership increase was included in the budget as a result of the board actions she previously noted. Mr. True asked if the meeting expense reduction for 2013 is a result of the decreased number of Board meetings. Ms. McQuade stated that the reduction of Board meetings contributed but that she anticipates a reduced amount of travel as result of the type of projects that

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will be addressed during the next year. Mr. Parker moved to adopt the proposed budget for 2013 and Mr. True seconded the motion. The motion passed without opposition.

4. Reports from Board Committees

Revenue Committee: Mr. Desselle reviewed the activities of the Revenue Committee and noted that a single meeting was held on October 19, 2012 to consider the proposal concerning the negative retained earnings made during the previous Board meeting. He stated the Committee voted to defer taking any action, including initiating an assessment to offset the negative retained earnings, pending a review of the modifications to the membership benefits adopted by the Board in September. However, the Committee agreed that if the negative retained earnings reach 25% of the entire budget, roughly $500,000, that they should reconvene to consider whether additional action should be undertaken. He also noted that a couple of ideas that may lead to an increase in revenue where proposed during the leadership meetings and that a Committee meeting may be scheduled to consider those proposals.

Mr. Desselle recommended that the Retail Structure Review Committee report be addressed next in the agenda.

Retail Restructuring: Ms. McKeever and Mr. Minneman provided an update of the Retail Structure Review Committee proposal. She stated that the Committee held five conference calls since the last Board meeting to discuss and develop the report included in the materials and that the recommendations of the Committee are captured on the first page of the document. Mr. Minneman and Ms. McKeever noted that the Committee spent significant time discussing a number of options but the proposal of moving forward with a merged Retail quadrant was the most heavily supported by representatives from both the gas and electric quadrants. Mr. Novak moved to adopt the three part recommendation of the Retail Restructuring Review Committee to (1) 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) to bring a full recommendation with implementation to the board for its approval in April 2013, and (3) that the change be put in place through a motion of the board for a period of a minimum of two years, after which we would ask the board to review its success and determine if this interim solution should be codified in the NAESB Operating Practices, Bylaws and Certificate. Mr. Burks seconded the motion. Mr. Kruse clarified that the recommendation of the Committee does not include a waiver of the existing By-laws at this time and that the Board is being asked only to endorse the proposed direction of the Committee. Mr. Boswell confirmed. The motion passed without opposition.

Managing Committee: Ms. Desselle provided an update of the Managing Committee activities during the two meetings held on November 29, 2012. One meeting was a closed session dedicated to staffing issues and the other meeting was an open session to address a number of issues including the actions proposed by the Retail Structure Review Committee (RSRC), the Revenue Committee, activities related to cybersecurity and the Public Key Infrastructure (PKI) standards and the transition to the Electric Industry Registry (EIR). He stated that the Managing Committee voted to endorse the recommendations of both the Revenue Committee and the RSRC and discussed the formation of an ad-hoc group to help develop a fact sheet concerning cybersecurity and impacts to the NAESB standards. He also noted the Managing Committee discussed an reaffirmed the Board's previous decision to wait until the PKI standards development effort has been completed before seeking affidavits from the Authorized Certification Authorities pending approval. Related to the recommendation of the RSRC, the Managing Committee recommended two modifications to the Bylaws for Board consideration - the first, a modification to Bylaw Section 9.7, related to the Board meeting attendance requirements and the second, a modification to Bylaw Section 2.3, which would reaffirm and clarify the Board's authority to take action with respect to minimum membership thresholds via resolution. Mr. Desselle reviewed the proposed modification to Bylaw Section 9.7 with the participants and made a motion to adopt proposed revision. Ms. Crockett seconded the motion. Mr. Young stated that he had some non-substantive suggested language changes for the purpose of clarity. He proposed his modifications and the Board members discussed the implications of the revision. Through friendly amendment, Mr. Desselle and Ms. Crockett accepted the following hardline modifications:

> *While Board Members may participate and vote by means of teleconference or other electronic means, eligibility to continue serving as a Board member is dependent upon in-person attendance at ~~no less than 25%~~a minimum of one scheduled Board Meetings~~s~~ per year and participation in at*

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least ~~75%~~two ~~of~~ such meetings per year. Such attendance/participation threshold shall be reviewed ~~at March 31 and September 30 of each year for the preceding twelve months~~annually.

The motion passed the required super majority vote without opposition.

Next, Mr. Desselle reviewed the proposed modifications to Bylaw Section 2.3 with the participants and made a motion to adopt the revisions. Mr. Burks seconded the motion. Mr. Kruse asked if the modification was actually necessary, since the Board already has the authority to take the action described by the proposed revision. Mr. Boswell stated that the Managing Committee thought the Board might find the additional specificity helpful and that it is only offered for the Board's consideration. Mr. Kruse stated that he is concerned that the language is not specifically tied to quadrants that do not meet the minimum membership requirements. The participants discussed revisions to the language that would address Mr. Kruse's concern. After discussion, Mr. Desselle withdrew his motion and recommended, at Mr. Boswell's direction, that the proposed revision be discussed at the next Board meeting so that that there is ample time for consideration.

Mr. Desselle stated that he would like to address one more agenda item out of turn concerning the copyright filing made by NAESB on November 20, 2012, as it was heavily discussed during the Wholesale Gas Quadrant (WGQ) leadership meeting. Mr. Boswell discussed the NAESB copyright policy, the purpose of the communication to FERC and reminded the participants that the NAESB copyright policy has been in place for a number of years and that the policy is completely in-line with the protections afforded by United States copyright law, under which all NAESB standards are operational. He also noted that if the organization does not enforce its copyright, the copyright protections afforded by law may be diminished, and that the organization has often granted copyright waivers to companies that have made the request. Mr. Young stated that he had an issue with the timing of the filing, not necessarily the content, as the report was submitted in late November before the December 1st implementation. He also stated requesting permission to reproduce a NAESB standard every time a filing is made could prove administratively difficult. Mr. Kruse stated that he was unaware that NAESB was going to make such a filing and that he would have preferred that notice be given in this case. He also supported Mr. Young's comments and noted that there are some sections in most pipeline tariffs that must quote NAESB standards language directly in order to be intelligible. Mr. Hunter asked if NAESB could consider some sort of licensing agreement with member companies. Mr. Boswell responded that he understands the concerns expressed by the Board and that he would be interested in discussing any specific suggested protocols to handle the issue but, the organization has to balance the needs of the industry with the preservation of the copyright protection of the standards. Mr. Novak stated that he, as an LDC, has had to quote NAESB standards in public documents and has never been denied a request to do so by NAESB. Mr. Connor noted that there have been some copyright protection issues at the subcommittee level and recommended that NAESB address some of the related issues being raised at that level as well so as not to affect standards development. Mr. Field stated that, like Mr. Kruse, he found the timing of the filing to be the most disconcerting and encouraged the organization to find a solution to the problem expressed by the pipelines. Mr. Boswell reiterated that NAESB is only following United States copyright law and the NAESB copyright policy and that NAESB would welcome any suggested modifications to the current policy that would increase flexibility of use of the standards while maintaining the integrity of their copyright. Mr. Kruse recommended that a Board level committee be formed to investigate the issue and discuss a solution at the next Board meeting. Mr. Desselle stated that the he would take the recommendation under advisement.

5. Project Discussions

PKI, Accreditation and the Certification Program: Mr. Booe provided an update of the PKI standards development activities and the certification program. He stated NAESB submitted a status report to the FERC on November 30, 2012 describing the PKI standards development and related certification program effort to date. He noted that there is currently one remaining set of ancillary standards out for ratification through December 27, 2012 and that NAESB intends to submit the entire suite of PKI and related standards to the FERC after the first of 2013. Ms. McQuade noted that NAESB will start accepting affidavits from the Authorized Certificate Authorities (ACA) pending approval after the standards have been filed with the Commission. She noted that affidavits will be applicable to the standards described by Mr. Booe that will be included in the anticipated filing. Mr. Hurley questioned why the ACAs would not be allowed to submit affidavits that attest to compliance with the standards already in existence as

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part of Version 3.0. Mr. Desselle stated that it has always been the intention of the Board and Managing Committee to only accept affidavits from ACAs compliant with the updated standards. Mr. Hurley stated that he believes this a deviation from what has been previously communicated. Mr. Desselle stated that the direction of the Managing Committee and the Board, as articulated on numerous occasions, has been that NAESB would not start accepting ACA affidavits until the standards are complete and that position has been consistently supported. Mr. Desselle recommended that he have a discussion with Mr. Hurley after the meeting concerning the issue if has misinterpreted the Board's direction.

Cybersecurity Fact Sheet: Mr. Desselle noted that the cybersecurity fact sheet update had been covered in the Managing Committee update and stated that he would work with Ms. McQuade to form the ad-hoc group to develop the fact sheet after the first of the year.

Registry Transfer Update: Mr. Booe provided an update of the registry transfer that took place on November 13, 2012. He noted that during the previous day's leadership meeting the participants discussed the need for a process to evaluate the current registry and make any necessary enhancements in the future. He stated that he would work with Mr. Desselle and the Joint Electric Scheduling Subcommittee (JESS) leadership to develop a process. Mr. Desselle thanked Bob Harshbarger, Puget Sound, Clint Aymond, Entergy, and NERC for all of their hard work to make the transition a success.

Gas-Electric Harmonization Update: Ms. Crockett provided an update on the Gas-Electric Harmonization project. She noted that Commissioner Simon, California, and Commissioner Gardner, Pennsylvania brought forth a resolution endorsing the NAESB report that was adopted by the National Association of Regulatory Utility Commissioners (NARUC) during their November meeting. She also stated that the FERC published a staff report in November that summarizes the summer meetings on the topic and also announced that additional meetings will be held in 2013. NAESB will monitor these activities and only participate upon request.

Dodd-Frank Implementation and Gas Contracts Update: Mr. Sappenfield provided an update of the WGQ Contracts subcommittee activities related to Dodd-Frank and the natural gas liquids (NGL) contract. Mr. Stultz stated that he is also aware that there is some confusion concerning the confirmation of "book-outs" and how those should be classified and reported.

Smart Grid, Green Button and Data Privacy Update: Mr. Booe provided an update of the Smart Grid activities, including the Green Button initiative and revisions to the Data Privacy standards. He noted that he and Mr. Burks attended the Smart Grid Interoperability Panel (SGIP) meeting earlier in the week and that they have continued to ask NAESB to consider making the Energy Service Provider Interface (ESPI) standard, which supports the Green Button initiative, freely available and develop a method for internationalizing its publication. Ms. McQuade noted that a request to do such should come from Dr. Gallagher, Director of the National Institute of Standards and Technology (NIST). Mr. Burks noted that the SGIP is now being transitioned from a government funded entity to a private, industry supported organization.

6. Updates from Leadership Meetings and 2013 Annual Plan Adoption

WGQ: Mr. Buccigross provided a review of the 2013 WGQ Annual Plan as revised during the leadership meeting. Mr. Burks moved that the 2013 WGQ Annual Plan be adopted as revised and Ms. York seconded the motion. The motion passed a simple majority vote. Ms. Davis briefly reviewed the discussion at the WGQ leadership meeting and noted the discussion mostly concerned the copyright issue discussed during the meeting.

WEQ: Ms. York provided a review of the 2013 WEQ Annual Plan as revised during the leadership meeting. She moved that the 2013 WEQ Annual Plan be adopted as revised and Mr. Buccigross seconded the motion. The motion passed a simple majority vote. Ms.York briefly reviewed the discussion at the WEQ leadership meeting and noted the discussion center mostly around the registry transfer and the PKI standards effort.

Retail: Mr. Minneman provided a review of the 2013 Retail Annual Plan as revised during the leadership meeting. He moved that the 2013 Retail Annual Plan be adopted as revised and Mr. Burks seconded the motion. The motion passed a simple majority vote. Mr. Minneman noted that the Retail leadership meeting focused mostly on the activities of the Retail Structure Review Committee.

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7. Old and New Business

Ms. McQuade reviewed the organization's interactions with external groups including meetings with Senator Reid, Senator Lieberman, and Senator Murkowski staff and Department of Homeland Security staff related to the PKI standards development effort and cybersecurity. She also noted that she has been in touch with the Department of Energy and that is possible that NAESB may undergo an audit through Sandia National Laboratory in 2013. Mr. Desselle thanked the guests for their attendance at the Board meeting and noted that the next meeting will be held on April 4, 2012.

8. Adjourn

Mr. Young made a motion to adjourn the meeting and Mr. Stultz seconded the motion. The meeting adjourned at 12:19 pm Central.

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9. Board Attendance and Voting Record (Vacancies Omitted) (NB – indicates notational ballot)

WGQ PRODUCERS SEGMENT		ATTENDANCE	VOTE
Richard D. Smith	Regulatory & Compliance Manager, Noble Energy Inc.	In Person	Support
Mark Stultz	Sr. Vice President – Policy and Regulatory Affairs, US America Gas and Power, BP Energy Company	In Person	Support
Keith Sappenfield	Regional Director – US Regulatory Affairs, EnCana Oil & Gas (USA), Inc.	Phone	Support
Randy E. Parker	Global Regulatory Advisor, ExxonMobil Gas and Power Marketing Company	In Person	Support
Pete Frost	Director - Regulatory Affairs, ConocoPhillips Gas and Power Marketing	In Person	Support
WGQ PIPELINE SEGMENT			
Douglas Field	Manager – Compliance, Southern Star Ventral Gas Pipeline	Phone	Support
Michael Langston	Vice President and Chief Regulatory Officer, Panhandle Eastern Pipe Line (an Energy Transfer Interstate company)	In Person	Support
Gene Nowak	Vice President – Transportation & Storage, Interstate Pipelines for Kinder Morgan (Natural Gas Pipeline Co of America	In Person	Support
Randy Young	Vice President – Regulatory Compliance and Corporate Services, Boardwalk Pipeline Partners, LP	In Person	Support
Richard Kruse	Senior Vice President, Spectra Energy Transmission	In Person	Support
WGQ LOCAL DISTRIBUTION COMPANY (LDC) SEGMENT			
Craig Colombo	Energy Trader III, Dominion Resources	Phone	Support
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	Support
James A. Stanzione	Director – Federal Gas Regulatory Policy, National Grid	In Person	Support
Perry Pergola	Director – Gas Supply, Vectren Corporation		Support (NB)
WGQ END USERS SEGMENT			
Valerie Crockett	Senior Program Manager – Energy Markets & Policy, Tennessee Valley Authority	In Person	Support
Timothy W. Gerrish	Director of Origination-Energy Marketing and Trading, Florida Power & Light	In Person	Support

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Tina Burnett	Natural Gas Resources Administrator, The Boeing Company	Phone	Support
Lori-Lynn C. Pennock	Senior Fuel Supply Analyst, Salt River Project	In Person	Support
WGQ SERVICES SEGMENT			
Cleve Hogarth	Vice President & Chief Commercial Officer, Quorum Business Solutions	In Person	Support
Marty Patterson	Senior Vice President Commercial Services, American Midstream Partners, LP		
Shelley L. Hurley	Partner, Accenture LLP		Support (NB)
Sylvia Munson	Industry Specialist, SunGard Energy	In Person	Support
REQ SERVICE PROVIDERS/SUPPLIERS SEGMENT			
Wendell Miyaji	Senior Director – Systems, Comverge, Inc.	Phone	Support
Jim Minneman	Controller, PPL Solutions LLC	In Person	Support
J Cade Burks	Executive Vice President of ista	In Person	Support
REQ UTILITIES SEGMENT			
Brandon Stites	Director – Energy Conservation & Advanced Metering, Dominion Virginia Power	In Person	Support
Dennis Derricks	Director Regulatory Policy and Analysis, Wisconsin Public Service Corporation	Phone	Support
Ruth Kiselewich	Director – Demand Side Management Programs, Baltimore Gas & Electric Company		Support (NB)
Debbie McKeever	Market Advocate, Oncor	In Person	Support
REQ END USERS/PUBLIC AGENCIES SEGMENT			
James P. Cargas	Senior Assistant City Attorney, City of Houston		
Tobin Richardson	Director – Smart Energy, ZigBee Alliance		Support (NB)
Chris Kotting	Executive Director, Energy Information Standards Alliance	Phone	Support (NB)

WEQ TRANSMISSION SEGMENT		**SUBSEGMENT**		
Dan Klempel	Director Transmission Regulatory Compliance, Basin Electric Power Cooperative	Muni/Coop	Phone	Support
Chuck Feagans	Senior Manager, Reliability Policy, Tennessee Valley Authority	Fed/State/Prov.	Phone	Support

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Terry Coggins	Manager – Transmission Policy, Southern Company Transmission	IOU	In Person	Support
Alex DeBoissiere	Senior Vice President – Government Relations, The United Illuminating Company	at large		Support (NB)
Narinder Saini	Policy Consultant, Entergy Services, Inc.	at large	In Person	Support
WEQ GENERATION SEGMENT				
William J. Gallagher	Special Projects Chief, Vermont Public Power Supply Authority	Muni/Coop	Phone	Support
Kathy York	Senior Program Manager – Energy Markets, Policy and Compliance Reporting, Tennessee Valley Authority	Fed/State/Prov.	In Person	Support
Lou Oberski	Director – Electric Market Policy, Dominion Resources Services, Inc.	IOU	In Person	Support
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	In Person	Support
Joe Hartsoe	Managing Director – Federal Policy, American Electric Power Service Corp.	at large	Phone	Support
WEQ MARKETERS/BROKERS SEGMENT				
Roy True	Manager of Regulatory and Market Affairs, ACES Power Marketing	Muni/Coop	In Person	Support
Jeff Ackerman	Manager – Colorado River Storage Project Energy Management and Marketing Office, Western Area Power Administration	Fed/State/Prov.	In Person	Support
Jim Drake	Trading Desk Head – Power, Florida Power & Light	IOU	Phone	Support
R. Scott Brown	Vice President and Director, Exelon Generation Power Team	IOU		Support (NB)
WEQ DISTRIBUTION/LOAD SERVING ENTITIES (LSE) SEGMENT				

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Arthur G. Fusco	Vice President and General Counsel, Central Electric Power Cooperative Inc.	Muni/Coop	In Person	Support
Paul McCurley	Manager – Power Supply, National Rural Electric Cooperative Association	Muni/Coop		
Nelson Peeler	Vice President System Operations, Duke Energy	IOU		Support (NB)
Mark Lauby	Vice President and Director – Standards, NERC	at large		Support (NB)
Bruce Ellsworth	New York State Reliability Council	At-Large	In Person	Support
WEQ END USERS SEGMENT				
Jesse D. Hurley	Chief Executive Officer, Shift Research, LLC	at large	Phone	Support
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	Support
Michehl Gent	Open Access Technology International, Inc.	At-Large	Phone	Support
WEQ INDEPENDENT GRID OPERATORS/PLANNERS				
Michael Desselle	Vice President Process Integrity, Southwest Power Pool		In Person	Support
Chuck Manning	Vice President of Human Resources and Chief Compliance Officer, ERCOT			
Kevin Kirby	Vice President Market Operations, ISO New England, Inc.		Phone	Support
Rana Mukerji	Vice President Market Structures, New York Independent System Operator, Inc. (NYISO)			Support (NB)
Andy Ott	Senior Vice President Marketing, PJM Interconnection, LLC		Phone	Support
Bill Phillips	Vice President Standards Compliance & Strategy, Midwest ISO (MISO)		In Person	Support

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9. Board Attendance and Voting Record (Vacancies Omitted) (NB – indicates notational ballot)

Mark Wilson	Director of Corporate Planning, Independent Electricity System Operator (IESO)	Phone	Support
WEQ TECHNOLOGY AND SERVICES			
Jim Buccigross	Vice President Energy Industry Practice, 8760 Inc.	In Person	Support
Laurent M. Liscia	Executive Director, Organization for the Advancement of Structured Information Standards (OASIS)		Support (NB)
David A. Wollman	Leader, Smart Grid Team – Standards and Electrical Metrology Groups, National Institute of Standards and Technology (NIST)	Phone	Support
Bill Hunter	Partner, Stryve Advisors	In Person	Support
TJ Ferreira	Director, Power Costs, Inc.	In Person	Support
RGQ SERVICE PROVIDERS/SUPPLIERS SEGMENT			
Leigh Spangler	President, Latitude Technologies Inc.	In Person	Support
Joseph Monroe	Vice President – External Affairs, SouthStar Energy Services, LLC		Support (NB)
Dave Darnell	President & CEO, Systrends USA	Phone	Support
Greg Lander	President, Capacity Center		Support (NB)
RGQ DISTRIBUTORS SEGMENT			
Alonzo Weaver	Vice President of Engineering and Operations, Memphis Light, Gas & Water Division (APGA)	Phone	Support
Ralph Cleveland	Senior Vice President – Engineering and Operations, AGL Resources, Inc.		Support (NB)
Mike Novak	Assistant General Manager – Federal Regulatory Affairs, National Fuel Gas Distribution	Phone	Support
Richard Dobson	Manager Gas Supply (PGL/NSG), Integrys Energy Group, Inc.		
RGQ END USERS/PUBLIC AGENCIES SEGMENT			

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10. Other 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
Jim Castle	New York ISO	In Person
Pete Connor	Representing American Gas Association	Phone
Chuck Cook	Chevron	In Person
Elise Cort	Enbridge Energy	Phone
John Ciza	Southern Company	Phone
Dale Davis	Williams Gas Pipeline	In Person
Rae Davis	Carolina Gas Transmission	In Person
Rhonda Denton	BP	In Person
Megan Doss	Spectra Energy	In Person
Mark Gracey	Tennessee Gas Pipeline Company	In Person
Margarita Jannasch	Accenture	In Person
Elizabeth Mallet	NAESB	In Person
Rae McQuade	NAESB	In Person
Joel Mickey	ERCOT	In Person
Susan Munson	ERCOT	In Person
Denise Rager	NAESB	In Person
Deepak Raval	NiSource	Phone
Judy Ray	Alabama Power	Phone
Alyssa Schnidler	NiSource	In Person
Lisa Simpkins	Constellation	Phone
Ed Skiba	Midwest ISO	In Person
Rick Smead	Navigant Consulting	In Person
Lori Spence	Midwest ISO	In Person
Veronica Thomason	NAESB	In Person
Caroline Trum	NAESB	In Person
Kim Van Pelt	Boardwalk Pipeline	In Person
Jill Vaughan	Preferred Legal Services	In Person

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10. Other Attendance

Name	Organization	Attendance
Larry Williamson	OATI	Phone
Darla Wishart	NAESB	Phone
JT Wood	Southern Company	Phone
Charles Yeung	SPP	In Person

North American Energy Standards Board Membership List
As of January 18, 2013

NAESB Membership Statistics – Changes by Quadrant for 2013 as of January 18, 2013

NAESB Membership Report - 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

North American Energy Standards Board Membership List
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WEQ	New Members:	**0**
	Member Resignations: 1-Lincoln Electric System (Generation, Muni/Coop)	1
WGQ	New Members:	**0**
	Member Resignations:	0
REQ	New Members: 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:	**1**
	Member Resignations:	3

North American Energy Standards Board Membership List
As of January 18, 2013

	Organization	Seg [1]	Contact	Sub-Seg [2]
Retail 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	
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, Jennifer Teel	
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	Chuck Darville	
26	SunGard Consulting Services, LLC	s	Austin Morris	
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	
Wholesale Gas Quadrant Members:				

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

[2] The sub-segment apply only to the WEQ and the abbreviations are – muni – municipal/cooperative, iou – investor owned utility, itc – independent transmission company, fed – federal/state/provincial facility/agency, lind – large industrial, sgen – self generation, end use – end user that may be represented in other segments, merc – merchant, N – no designation, reg – regulatory agency, niou – not investor owned utility. To get a full description of the subsegment, please reference the WEQ Procedures: http://www.naesb.org/pdf/weq_quadrant_procedures.doc

North American Energy Standards Board Membership List
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	Organization	Seg [1]	Contact	Sub-Seg [2]
1	8760, Inc.	s	Jim Buccigross	
2	Accenture, LLP	s	Shelley Hurley	
3	AGL Resources Inc	l	Tim Sherwood	
4	Alliance Pipeline LP	pl	Cathie Legge, Brian Troicuk	
5	American Gas Association	l	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.	l	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	l	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	l	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	

North American Energy Standards Board Membership List
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	Organization	Seg [1]	Contact	Sub-Seg [2]
39	Department of Energy	e	Christopher Freitas	
40	Devon Energy Corporation	pr	Bill Green, Josephina Nguyen, Mike Dionisio	
41	Dominion Resources	l	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	Enbridge (U.S.) Inc.	pl	Elise Cort	
46	Encana Marketing (USA) Inc.	s	Keith Sappenfield, Jeff Jarvis	
47	Encana Oil & Gas (USA) Inc.	pr	Keith Sappenfield, Jeff Jarvis	
48	Energy Transfer Partners, L.P.	pl	Josie Castrejana, Miki Kolobara	
49	Enogex Energy Resources LLC	s	Cary Metz	
50	Entergy Services, Inc.	e	Laura Berryman, Terry Shields	
51	Enterprise Products Partners L.P.	pl	Jeff Molinaro	
52	EP Energy E&P Company, L.P.	pr	Stephanie Karm	
53	Equitrans, LP	pl	Paul W. Diehl	
54	ExxonMobil Gas & Power Marketing Company a division of Exxon Mobil Corporation	pr	Randy E. Parker, John W. Poe	
55	Florida Power & Light Company	e	Tim Gerrish, Art Morris	
56	Gas Transmission Northwest Corp.	pl	Joseph Pollard	
57	Golden Pass Pipeline, LLC	pl	Vickie Long	
58	Great Lakes Gas Transmission	pl	Joseph Pollard	
59	Iberdrola USA Management Corporation	l	Mark Marini	
60	Imperial Irrigation District	e	Susie Carrillo	
61	Integrys Energy Group, Inc.	l	David E. Wear	
62	Iroquois Gas Transmission System	pl	Tom Gwilliam	
63	JP Morgan Ventures Energy Corp	S	Paul Tramonte	
64	Kern River Gas Transmission Co	pl	Brenda Martin	
65	Kinder Morgan Western Region Pipelines	pl	William Griffith	
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	l	James A. Stanzione	
73	New Mexico Gas Company Inc.	l	Ericka DeCourcey	
74	Nexen Marketing	s	Deb Strang, Sharron Roberts	
75	NextEra Energy Power Marketing, LLC	e	Marty Jo Rogers	
76	NiSource, Inc.	l	Deepak Raval, Michael D. Watson	
77	Noble Americas Corp	pl	Joseph Limone, Marisa Scauzillo, Vanessa R. Mathieu	

North American Energy Standards Board Membership List
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	Organization	Seg [1]	Contact	Sub-Seg [2]
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	l	Randolph Friedman	
82	NOVA Gas Transmission Ltd.	pl	Sherry Hill, Bob Jones	
83	ONEOK	l	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)	l	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.	l	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	l	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	
108	TransCanada Pipelines	pl	Sherry Hill, Bob Jones	
109	Transwestern Pipeline Company, LLC	pl	Blair V. Lichtenwalter, Mary Draemer	
110	Vector Pipeline L.P.	pl	Amy Bruhn	
111	Vectren Corporation	l	Elizabeth Beck	
112	WBI Energy Transmission, Inc.	pl	Keith Tiggelaar, Gwen Schoepp, Kelly Brooks, Lori Myerchin	
113	Williams Energy Resources, LLC	s	Tina Still, Cindy Bottomley, Kelly Knopp	
114	Williams Gas Pipeline	pl	Dale Davis, Christopher Burden	
115	WPX Energy Marketing, LLC	s	Rich Ficken	

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	Organization	Seg [1]	Contact	Sub-Seg [2]
Wholesale Electric Quadrant Members:				
1	8760, Inc.	ts	Jim Buccigross	
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	Cleco Power, LLC	t	Cindy Guillot	iou
25	Consolidated Edison Company of New York, Inc.	t	Scott Butler	iou
26	Deseret Power Electric Co-op	g	Curt Winterfeld	muni
27	Dominion Energy Marketing, Inc.	g	Lou Oberski	iou
28	Duke Energy Corp.	d	Alan Pritchard	iou
29	Duke Energy Corp.	m	John Sturgeon	iou
30	Duke Energy Corp.	t	Jack Armstrong, Michael Anthony, Lee Schuster	iou
31	Dynegy Marketing and Trade, LLC	g	Contracts – Legal Department	merc
32	Edison Electric Institute	n	David Owens, Dave Dworzak, James P. Fama	n
33	Electric Reliability Council of Texas (ERCOT)	i	John Dumas, Paul Wattles, Joel Mickey	
34	Empire District Electric Company, The	t	Bary K. Warren	iou
35	Entergy Services, Inc.	t	Yarrow Etheredge, Narinder Saini	iou
36	Exelon Generation - Power Team	m	Jack Crowley	iou
37	First Energy Service Company	d	Robert M. Martinko, Thomas C. Burgess	iou
38	Florida Municipal Power Agency	g	Frank Gaffney, Dan O'Hagan	muni
39	Florida Municipal Power Agency	d	Frank Gaffney, Dan O'Hagan	muni

North American Energy Standards Board Membership List
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	Organization	Seg [1]	Contact	Sub-Seg [2]
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
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
78	Open Access Technology International, Inc.	t	Paul R. Sorenson	at large

North American Energy Standards Board Membership List
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	Organization	Seg [1]	Contact	Sub-Seg [2]
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, Patricia Merville, 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	
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	Tri-State Generation and Transmission Association, Inc.	t	Doug Reese	muni

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	Organization	Seg [1]	Contact	Sub-Seg [2]
115	Tri-State G&T Association, Inc.	g	Janelle Marriott	muni
116	Tucson Electric Power Company	t	Raquel Aguilar, Ed Beck, Amy Welander	iou
117	United Illuminating Company, The	t	Jim Clemente, Laurie Lombardi	iou
118	Vermont Public Power Supply Authority	g	William J. Gallagher	muni
119	Vermont Public Service Board	e	Mary Jo Krolewski	reg
120	We Energies (Wisconsin Electric)	d	Linda Horn	iou
121	We Energies (Wisconsin Electric)	g	James R. Keller	iou
122	Westar Energy, Inc.	g	Grant Wilkerson	iou
123	Western Area Power Administration	t	JB Hite	fed
124	Western Area Power Administration	m	Jeffrey Ackerman	fed
125	Western Electricity Coordinating Council	t	Michelle Mizumori, Craig L. Williams	at large
126	White & Case LLP	ts	Richard Cousins	
127	Wisconsin Public Service Corporation	g	Christopher Plante, Charles W. Severance, Neal Balu	iou
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	
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	

North American Energy Standards Board

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TO: NAESB Files

FROM: Rae McQuade, NAESB President and COO

RE: Notes from the November 29, 2012 Managing Committee Call at 10 a.m. C

DATE: November 29, 2012

The NAESB Managing Committee met via conference call on November 29, 2012 to review: (1) the Retail Structure Review Committee draft report, (2) the determination made by the Revenue Committee regarding assessments, (3) the efforts underway for cybersecurity, PKI and the registry transfer, and (4) the bylaw provisions for attendance at Board meetings. The meeting was convened at 10:00 a.m. C by Mr. Desselle. All members were in attendance with the exception of Mr. Cleveland, who had noted via emails that he would be updated on the Managing Committee's efforts after the meeting, due to other commitments. Mr. Skiba from Midwest ISO, and Mr. Tronnier and Mr. Anderson from OATI were also in attendance along with NAESB staff members Rae McQuade and Jonathan Booe.

Mr. Desselle 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 Mr. Ellsworth and seconded by Ms. Crockett. The agenda was adopted with no opposition noted.

After an overview of the Retail Structure Review Committee's draft report, the committee supported the direction of the report with a motion made by Mr. Burks and seconded by Mr. Ellsworth. The motion to support the direction set by the report, subject to legal review by Mr. Boswell, passed with no opposition. The legal review was specific to permitting a board resolution to support interim structural changes for a period of at least two years before implementing any needed bylaws changes. Mr. Boswell provided legal advice at the conclusion of the meeting indicating that the bard had the ability to implement structural changes for an interim period before making any changes to the bylaws, certificate or operating practices.

After an overview of the Revenue Committee recommendations, made on October 19 regarding the September board discussion on assessments to offset negative retained earnings, the committee approved a motion that supported the Revenue Committee determinations that: (1) any action on preparing a recommendation regarding assessments to offset negative retained earnings be deferred, and the Revenue Committee review the impacts of the dues increase and membership benefits changes over the next few quarters, (2) the Revenue Committee review the status of the negative retained earnings in mid-2013 and at that time discuss the necessity of establish a threshold amount that would trigger an investigation of whether action should be taken to prepare a recommendation on assessments for board approval (the Revenue Committee preliminary discussions centered on a trigger of a negative $500,000), and (3) the NAESB office provide information to the board regarding the use of accrual based and cash based accounting. The motion was made by Ms. Crockett and seconded by Mr. Ellsworth and was adopted unanimously. The motion is in full support of the recommendations made by the Revenue Committee.

After an overview of the background materials provided for cybersecurity, the transition of the registry and the efforts underway for PKI standards and the certification program, the managing committee took two actions. The Managing Committee supported Mr. Desselle in his creation an ad hoc group to work with Ms. McQuade in the development of two fact sheets on cybersecurity that describe the NAESB cybersecurity related standards, how they are used, to which transactions they apply, and how they affect the markets for both natural gas and electricity markets. Mr. Desselle will work with Ms. McQuade to name members of this ad hoc group. This action was supported through a motion made by Mr. Ellsworth and seconded by Mr. Burks. The motion passed unanimously. For the transition of the Registry to NAESB from NERC, Mr. Desselle noted that at the board meeting next week, he would thank all who made this transition a success.

After a review of the status of the PKI standards, filings with FERC, and the upcoming acceptance of affidavits for Authorized Certificate Authorities (ACAs), the Managing Committee reiterated its intent and the Board's intent that the certificates be granted only for ACAs that comply with the WEQ-012 and related NAESB WEQ standards that include the

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modifications to be ratified by yearend – namely the final actions and versions following WEQ Version 003. Affidavits will not be accepted for ACAs specifying WEQ Version 002.1 or WEQ Version 003 – neither of which includes the changes soon to be ratified. The motion was made by Mr. Burks and seconded by Mr. Ellsworth and all were in favor.

For the provision in the bylaws specifying thresholds for attendance at board meetings, the Managing Committee will recommend to the board that the bylaws be changed to reflect the decision for 2013, to hold three scheduled board meetings rather than the four meetings that have been scheduled in prior years. The changes that the Managing Committee will propose to the board for adoption are as follows and can be seen in blackline below with highlights added for ease of review:

> NAESB Bylaws Section 9.7(f)
>
> While Board Members may participate and vote by means of teleconference or other electronic means, eligibility to continue serving as a Board member is dependent upon in-person attendance at ~~no less than~~ at least ~~25%~~ one ~~of~~ scheduled Board Meetings and participation in at least ~~75%~~ two ~~of~~ such meetings. Such attendance/participation threshold shall be reviewed ~~at March 31 and September 30 of~~ twice each year for the preceding twelve months.

The motion to propose amendments to the bylaws for the language above was made by Ms. Crockett and seconded by Mr. Ellsworth. The motion was adopted unanimously. While conforming changes could be made to the section on attendance by Executive Committee members for Executive Committee meetings, (NAESB Bylaws Section 10.4(j)), it was determined that as the EC meeting schedule of four meetings per year had not changed, any changes to the language would not be necessary.

Mr. Boswell offered further changes to the bylaws to clarify that the board did have the authority to consider changes to the quadrant structure of the organization through board resolution. He noted that the board did already have this authority and indeed had used it when it granted waivers to the retail quadrants for failing to meet the membership thresholds. He added that the clarification would be helpful. The clarification can be seen below in blackline with highlights added for ease of review:

> NAESB Bylaws Section 2.3 Quadrants and Segments
>
> The procedures of each Quadrant and Segment, respectively, shall conform to the policies of NAESB as stated in the Certificate and these Bylaws. The Board shall have authority to enforce these NAESB policies with regard to the procedures of the 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. The Board by resolution may take action to waive the minimum requirements, temporarily suspend them, or merge or otherwise restructure the Quadrants. 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.
>
> A fully populated segment is one which has eighty percent (80%) of the seats filled on the Board (for a vote at the Board) or one hundred percent (100%) for the EC (for a vote at the EC), and only a fully populated segment may exercise the affirmative voting rights provided in Article V of the Certificate, for actions taken by the Board or the EC, as the case may be.

These changes should also support the recommendation by the Retail Structure Review Committee that its structural changes be considered interim for a period of at least two years, after which time the board can evaluate the success of the restructuring and determine if it should be codified into the NAESB Certificate, NAESB Bylaws and NAESB Operating Practices. The motion to recommend the above bylaw changes to the board was made by Mr. Ellsworth and seconded by Mr. Burks. The motion passed unanimously.

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For the last agenda item, a summary of the meeting was provided by Mr. Desselle. Ms. McQuade took the action item to modify the board agenda to include possible votes on the bylaws changes offered by the Managing Committee, including highlighting the change and including a notational ballot, as the adoption of changes to the bylaws requires a 75% affirmative vote threshold for passage. There was no other business discussed.

The meeting concluded at 11:07 am C, with a motion to adjourn by Mr. Burks which was seconded by Ms. Crockett. There was no opposition to adjourning.

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TO: NAESB Files

FROM: Rae McQuade, NAESB President and COO

RE: Notes from the November 29, 2012 Managing Committee Call at 2 p.m. C

DATE: November 29, 2012

The NAESB Managing Committee met via conference call on November 29, 2012 to review: (1) performance and compensation of staff, and (2) the 2013 budget and the September 2012 actuals and financial report. The meeting was convened at 2:00 p.m. C by Mr. Desselle. All members were in attendance with the exception of Mr. Cleveland, who had noted via emails that he would be updated on the Managing Committee's efforts after the meeting, due to other commitments. Because of its subject matter, this Managing Committee session was closed to only Managing Committee members.

Mr. Desselle 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 Mr. Ellsworth and seconded by Ms. Crockett. The agenda was adopted with no opposition noted.

After an overview of staff performance, and compensation, the Managing Committee appointed Mr. Booe as a Vice President of the organization. The motion was made by Mr. Burks and seconded by Ms. Crockett. All were in support of the motion. For the proposed staff compensation changes (excluding Ms. McQuade's) a motion made by Mr. Burks and seconded by Ms. Crockett to approve the proposed changes was adopted with all in favor. Ms. McQuade left the meeting and the committee discussed Ms. McQuade's performance and compensation.

Ms. McQuade rejoined the meeting at Mr. Burk's notice. In discussion on the 2013 budget, Ms. McQuade reviewed the financial report with the year-to-date actuals up through September and the estimates remaining for the year. She then applied those estimates and explained the notes section for the 2013 proposed budget. After discussion, the committee approved the budget for presentation to the board through a motion made by Mr. Ellsworth and seconded by Mr. Burks. All were in favor of the proposed budget.

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 3:20 pm C.

NORTH AMERICAN ENERGY STANDARDS BOARD
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November 30, 2012
Filed Electronically

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street N.E., Room 1A
Washington, D.C. 20585

RE: NAESB Progress Report on the Public Key Infrastructure Standards (WEQ-012) and Public Key Infrastructure Related Standards Development

Dear Ms. Bose:

The North American Energy Standards Board ("NAESB") herewith submits this status report to the Federal Energy Regulatory Commission ("FERC" or "Commission") describing the NAESB standards development efforts related to Public Key Infrastructure ("PKI"). This standards development effort has resulted in modifications to the NAESB WEQ-012 PKI standards, the development of the NAESB Accreditation Requirements for Certification Authorities Specification and the NAESB Authorized Certificate Authority Process. In addition, NAESB has adopted conforming changes to NAESB WEQ-000 Abbreviations, Acronyms, and Definition of Terms, the NAESB WEQ-002 Open Access Same-Time Information Systems Standards and Communication Protocols standards, and is in the process of adopting modifications to the NAESB WEQ-004 Coordinate Interchange standards. It is expected that the conforming changes to WEQ-004 will be adopted and ratified by NAESB before the end of the year.[1]

The purpose of this status report is to inform the Commission of the actions taken by NAESB related to the PKI standards development effort to date and to prepare the Commission for an anticipated supplemental filing to the NAESB Wholesale Electric Quadrant Version 003 standards report, which will include the updated WEQ-000, WEQ-002, WEQ-004 and WEQ-012 standards.

The report is being filed electronically in Adobe Acrobat® Portable Document Format (.pdf). The report 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 NAESB work products.

Respectfully submitted,

Rae McQuade

Ms. Rae McQuade
President & COO, North American Energy Standards Board

[1] The NAESB standards and specifications referenced in this report are reasonably available to the public through multiple methods. To access the standards or specifications at no cost, NAESB will provide a limited copyright waiver for evaluation purposes using a product called Locked Lizard (http://www.locklizard.com). To request a waiver, please contact the NAESB office or follow the instructions in the following document: http://www.naesb.org/pdf/ordrform.pdf.

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November 30, 2012

cc: 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 Commission
Mr. David Morenoff, Acting General Counsel, Federal Energy Regulatory Commission

Mr. Mason Emnett, Associate Director, Office of Energy Policy and Innovation, 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

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, Standards, North American Electric Reliability Corporation

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November 30, 2012

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Standards for Business Practices and	**)**	**Docket No. RM 05-5-000**
Communication Protocols for Public Utilities	**)**	**Docket No. RM 05-5-022**

STATUS REPORT OF THE NORTH AMERICAN ENERGY STANDARDS BOARD

The North American Energy Standards Board ("NAESB") is voluntarily submitting this status report to the Federal Energy Regulatory Commission ("FERC" or the "Commission") in the above referenced docket to inform the Commission of the NAESB Public Key Infrastructure ("PKI") standards development efforts to date.

On September 18, 2012, NAESB filed the NAESB Wholesale Electric Quadrant ("WEQ") Version 003 standards report[2] with the Commission in Docket Nos. RM 05-5-000, RM 05-17-000, and RM 07-1-000. At that time, a recommendation proposing modifications to the WEQ-012 PKI standards had been approved by the WEQ Executive Committee ("EC") but had not been ratified by the NAESB membership, and the NAESB Open Access Same-time Information Systems ("OASIS") Subcommittee and the Joint Electric Scheduling ("JESS") Subcommittee were in the development phases of recommendations addressing conforming changes to the OASIS standards (WEQ-001, WEQ-002, WEQ-003 and WEQ-013) and coordinate interchange standards (WEQ-004) to support the proposed WEQ-012 modifications. As such, NAESB is supplementing the September 18, 2012 WEQ Version 003 report to the Commission with this status update and intends to submit a subsequent report including the revised WEQ-000, WEQ-002, WEQ-004 and WEQ-012 standards at the beginning of 2013 upon ratification of the final PKI related standard by the membership. The purpose of this status report is to inform the Commission of the actions taken by NAESB related to the PKI standards development effort to date and to give notice of the supplemental report expected to be submitted to the Commission after the first of the year.

[2] NAESB Version 003 Standards, Docket No. RM05-5 et al, *available at*: http://www.naesb.org/pdf4/ferc_091812_weq_version003_report.pdf (submitted September 18, 2012).

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Background Information

The existing WEQ-012 standards developed in 2006 and adopted by the Commission in 2008,[3] were drafted to provide cybersecurity standards for use in commercial transactions – namely OASIS based transactions, and to support the transition of the North American Electric Reliability Corporation ("NERC") Transmission System Information Network ("TSIN") registry from NERC to NAESB. The registry is a tool that serves as a central repository of information required for commercial transactions involving the scheduling of power through electronic tagging in the e-Tag system. Through discussions between NERC and NAESB leadership, it was determined that the registry would be more appropriately maintained by NAESB given the tool's commercial function. After an extended period of planning, NERC and NAESB, through the JESS subcommittee, drafted a functional specification for the development of the Electric Industry Registry ("EIR"), which would serve as the tool to replace the NERC TSIN, and issued a request for proposal[4] for an EIR registry administrator to facilitate the transition. After evaluating the proposal, the NAESB Managing Committee and NERC leadership selected Open Access Technology International, Inc. ("OATI") to serve as the registry administrator in the summer of 2010.

A requirement of the functional specification for the EIR was that it employ a PKI security scheme, which necessitates the use of digital certificates issued by certification authorities. To facilitate the transfer, NAESB leadership recognized that action would need to be taken to develop a program to approve certificate authorities as NAESB Authorized Certificate Authorities ("ACA") and to modify the WEQ-012 PKI standards to reflect updates to technology and current market conditions related to the secure transfer of information. To accomplish this, the NAESB Board Certification Program Committee was reactivated in April 2011 to develop a program for the authorization of certificate authorities and the WEQ EC created the PKI Subcommittee in August 2011 to review and revise the WEQ-012 standards. These activities have led to the creation of the Board of Directors approved NAESB Authorized Certificate Authority Process, the NAESB Accreditation Requirements for Certificate Authorities Specification ("Accreditation Specification") created by the PKI Subcommittee, modifications to the NAESB WEQ-000, WEQ-002, WEQ-004 and WEQ-012 standards and the NAESB WEQ Electronic Tagging

[3] The FERC adopted NAESB standards in FERC Order No. 676-C on July 21, 2008 and the order can be access from the FERC web site or through this link: http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20080721-3055.
[4] The request for proposal is available at: http://www.naesb.org/pdf4/tsin_registry_rfp_022210.pdf

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Functional Specification. All of these efforts have been orchestrated to coincide with the registry transition which took place on November 13, 2012. [5]

Upon ratification of the modifications to the WEQ-004 standards at the end of December, NAESB will submit a report to the Commission noting their completion and a description of the WEQ-000, WEQ-003, WEQ-004 and WEQ-012 standards modifications.

NAESB Authorized Certificate Authority Process

On April 4, 2011 the Board Certification Program Committee met for the first time since 2007 to evaluate the WEQ-012 standards and initiate the development of a process to support the authorization of certificate authorities. Over the course of five months, the committee met a total of six times through August 2011 to develop a process by which certificate authorities may seek approval by NAESB as an ACA. The process requires the submission of several documents, which initially included an attestation of compliance with the NAESB WEQ-012 PKI business practice standards, proof of compliance through an audit letter and documentation indicating whether the applying certificate authority has undergone an SSAE 16 SOC3 or WebTrust audit. The process also defined the terms surrounding revocation and notification requirements. On August 29, 2011, the Committee unanimously adopted the draft Authorized Certificate Authority Process with the understanding that there may be the need for revisions upon completion of the update to the WEQ-012 PKI standards. The Authorized Certificate Authority Process was presented to the Board of Directors during the September 22, 2011 meeting and approved without opposition, noting the caveat that modifications may be required upon completion of the revisions to the WEQ-012 standards.

On September 14, 2012[6], after WEQ EC approval of the modifications to the WEQ-012 standards and the Accreditation Specification, the Board Certification Program Committee reconvened to review the Authorized Certificate Authority Process in light of the EC action. During this meeting the committee agreed to modify the board approved process to include compliance with the newly created Accreditation Specification in addition to other updates identified by the PKI Subcommittee during the standards development process. The updated and

[5] Distribution related to the registry transition is available at: http://www.naesb.org/pdf4/eir_distribution_101812.pdf
[6] The minutes from this meeting are available at: http://www.naesb.org/pdf4/cpc091412mn.doc

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current version of the Authorized Certificate Authority Process was adopted by the Board of Directors on September 20, 2012.[7]

NAESB WEQ-012 PKI Standards Modifications and Accreditation Specification

In August of 2011, the NAESB WEQ EC created the PKI Subcommittee for the purpose of reviewing and revising the WEQ-012 standards to reflect updates to technology and current market conditions related to the secure transfer of information. As with the Authorized Certificate Authority Process effort, this action was taken at the direction of NAESB leadership to coincide with the transfer of the NERC TSIN and the implementation of the EIR. The PKI Subcommittee was chaired by technology company 8760, Inc. and the subcommittee held its first meeting on September 22, 2011. Over the course of ten months, through July 2012, the subcommittee met a total of fourteen times to develop the recommended revisions to the WEQ-012 standard and the accreditation specification. Through subcommittee discussion, it was determined that it would be appropriate to split the previous version of the WEQ-012 standard into two documents; one document, the revised WEQ-012 standard, defining the standards that should apply to end entities implementing PKI transactions, and a second document, the Accreditation Specification, containing the requirements that should be met by certificate authorities seeking approval as a NAESB ACA. This action was taken in recognition that certificate authorities are not necessarily subject to the Commission's jurisdictional authority granted through the Federal Power Act and because a requirements specification, rather than a NAESB standard, may be modified through an expedited NAESB process in the event that technology advances are needed in response to a security threat. As such, the requirements pertaining to certificate authorities were extrapolated from the existing WEQ-012 standard and included in the Accreditation Specification. After the division both documents were reviewed and modified to reflect technology and security updates that are necessary for a secure PKI implementation.

With very few exceptions, the details of theWEQ-012 standard and Accreditation Specification were drafted with unanimous support of the subcommittee. A single issue concerning the required validity period of ACA root certificates required a vote and resulted in a compromised position that was adopted with a single vote in opposition. A few participants supported limiting the life of the ACA root certificates to 20 years, while a majority of participants recommended 20 years with the opportunity for an extension to 30 years if certain requirements were

[7] The minutes from this meeting are available at: http://www.naesb.org/pdf4/bd092012dm.docx

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met. The participants supporting the longer limit advocated that a 30 year life cycle is the current industry standard and that setting a lower limit would be overly burdensome and costly to the industry, as existing certificates would have to be reissued and modifications to certificate authorities' processes would be required. Participants supporting a shorter life cycle argued that a shorter time period would significantly reduce the risk of a security breach, as the root certificates would be vulnerable for a reduced amount of time. As a compromise the subcommittee set a maximum life of 20 years for all certificate root keys, unless the certificate qualified to be grandfathered under the condition that there have been no security breaches to certificate authority operations within 10 years and that all key sizes in the certificate chain are at least 2048 bit. The compromise resolution for key lifetimes is based on guidelines contained in section 6.3.2 of the X.509 Certificate Policy for the Federal Bridge Certification Authority and is consistent with the National Institute of Standards and Technology ("NIST") recommended key lifetimes contained in NIST SP 800-57, section 5.6.2. As previously noted the compromise was approved during the June 14, 2012 meeting and supported by all but one participant.

The Accreditation Specification as a whole was also voted out of the subcommittee on June 14, 2012 with no votes in opposition. It was distributed for a thirty day public comment period on June 25, 2012. The subcommittee next met on July 3, 2012 and July 9, 2012 to review of the remaining WEQ-012 standards, make modifications and vote on a recommendation. The WEQ-012 PKI standards modifications were distributed for a thirty day public comment period on July 10, 2012. On August 15, 2012 and August 16, 2012, the subcommittee met to review and develop a set of late comments in response to the four sets of comments submitted on the Accreditation Specification and the six sets of comments submitted on the WEQ-012 standard. All comments, including the late comments submitted by the subcommittee, were presented to the WEQ EC during the August 21, 2012 meeting.[8] Both recommendations were approved as recommended in the late comments of the PKI Subcommittee and modified during the meeting with only one vote in opposition. The modifications to the WEQ-012 standards were submitted for membership ratification and ratified on October 4, 2012. As the Accreditation Specification is, in fact, a specification rather than a standard, the specification did not require membership ratification and will not be included in the supplemental filing made by NAESB for Version 003.

Modifications to NAESB WEQ-000, WEQ-002, and WEQ-004

[8] The minutes from this meeting are available at: http://www.naesb.org/pdf4/weq_ec082112fm.docx

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During the review of the comments submitted on the proposed modifications to the WEQ-012 standards and the Accreditation Specification, the PKI Subcommittee recognized that the applicability of the standard to specific business transactions had not been defined in the standard. The subcommittee determined that the WEQ-012 standard should be applicable to transactions on OASIS and through the e-Tag system as defined in the WEQ-001, WEQ-002, WEQ-003, WEQ-004 and WEQ-013 standards. As such, specific language was proposed to section 1.3.4 of the WEQ-012 standard in the late comments of the subcommittee provided for WEQ EC consideration. During the review and adoption of the standards modifications, including the proposed language changes related to applicability, the WEQ EC recommended that the OASIS and JESS subcommittees review the OASIS and Coordinate Interchange standards to determine what modifications would be required to enable the WEQ-012 standard to provide a standard method for secured access to OASIS and e-Tag applications. The WEQ EC also asked the OASIS and JESS subcommittees to expedite the development of the complimentary standards as part of the NAESB full-staffing process.

The WEQ OASIS Subcommittee met twice, for a total of six hours, with members of the WEQ PKI Subcommittee to develop a recommendation proposing modifications to the WEQ-000 and WEQ-002 standards. The recommended modifications to the WEQ-002 Standards and Communication Protocols require that transmission service information providers verify certain information in the EIR before establishing a valid user account on OASIS, specifically that the subscriber certificate is issued by a NAESB ACA. In addition, technical standards to support the implementation of the WEQ-012 standards in the OASIS system and the transition of the registry from NERC to NAESB were made to the WEQ-002 standards. Two acronyms from the WEQ-012 standard were proposed for inclusion in WEQ-000 Abbreviations, Acronyms and Definitions of Terms. The subcommittee voted out the recommendation on September 7, 2012 and after a thirty day comment period, the recommendation was presented to the WEQ EC during the October 23, 2012 meeting.[9] During that meeting, the WEQ EC reviewed the comments submitted on the recommendation and made a modification in response to a request from the New York ISO to require the check of the assurance level contained in the certificate at the time of registration rather than each time a party connects to OASIS. The recommendation, as revised, passed a super majority vote without opposition was distributed for a membership ratification period that concluded on November 28, 2012.

[9] The minutes from this meeting are available at: http://www.naesb.org/weq/weq_ec.asp

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The WEQ JESS initiated efforts to develop complimentary WEQ-004 standards and consistent modifications to the WEQ Electronic Tagging Functional Specification Version 1.8.1 on September 6, 2012. Over the course of three meetings the JESS developed two recommendations, one which contained proposed modifications to the WEQ-004 standards[10] and one that proposed consistency revisions to the e-Tag Specification Version 1.8.1[11] to support the WEQ-012 standards and the EIR transition. The recommendation related to the Coordinate Interchange standards proposed the addition of a single standard requiring all e-Tag communications be secured using digital certificates issued by a NAESB ACA in accordance with the WEQ-012 standards.

The thirty-day industry comment period for both recommendations concluded on November 5, 2012 and the JESS met on November 7, 2012 to review the single set of comments submitted by the NAESB Standards Review Subcommittee providing an internal consistency suggestion. At the request of the chair of the WEQ EC, a notational ballot was distributed on November 13, 2012 to the WEQ EC requesting their vote on the two recommendations. The notational ballot period concluded on November 27, 2012 and both recommendations, as modified in the late comments submitted by the JESS, received the required votes in support for approval. The WEQ-004 standard[12] was distributed for a thirty-day membership ratification period which ends on December 28, 2012. Like the Accreditation Specification, the modified e-Tag Specification Version 1.8.1 is not considered a NAESB standard and will not be subject to membership ratification or included in the NAESB supplemental filing for Version 003.

Next Steps

All certificate authorities that have expressed interest in becoming a NAESB ACA are currently in a pending status and have not been officially credentialed by NAESB. NAESB has not requested that the ACAs pending approval submit documentation in compliance with the Authorized Certificate Authority Process and will not do so until two activities have been finalized. First, the WEQ-012 standard and complementary modifications to WEQ-000, WEQ-002 and WEQ-004 standards are complete and filed with the Commission. As previously noted this will take place after the first of the year. Second, globally unique object identifiers must be obtained by NAESB

[10] The recommendation is available at: http://www.naesb.org/member_login_check.asp?doc=weq_2012_api4b_part1_rec.doc
[11] The recommendation is available at: http://www.naesb.org/pdf4/weq_2012_api4b_part2_rec.doc
[12] The recommendation as approved by the WEQ EC is available at:
http://www.naesb.org/member_login_check.asp?doc=weq_100512_weq_jess_part1_late.doc

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and incorporated into the Accreditation Specification. As a requirement of the Accreditation Specification, certificates issued by an ACA must include a certificate policy extension that asserts compliance with an assurance level specified in the accreditation specification. For an ACA to comply, a globally unique object identifier should be assigned to each of the assurance levels and made part of an ACA certificate. NAESB is currently in the process of obtaining the globally unique object identifiers through the American National Standards Institute ("ANSI"). Once delivered by ANSI, NAESB will incorporate the object identifiers into the Accreditation Specification and give notice to the ACAs pending approval. Currently, there are four ACAs pending approval and all have been heavily involved in the NAESB PKI standards development effort or have followed its progress. As subject matter experts, their participation is crucial and their contributions have been instrumental in shaping the requirements for both ACAs and the end entities that will employ PKI security.

Finally, the WEQ EC has made a recommendation that an item be added to the 2013 WEQ Annual Plan to ensure that issues raised in the Commission's "Report on the Use of North American Energy Standards Board Public Key Infrastructure Standards" on August 27, 2012 in Docket No. EL 12-86-000 are addressed.[13] As recommended by the Commission, the NAESB PKI Subcommittee will review the root key validity period issue and discuss a possible modification at the beginning of 2013. As always, NAESB appreciates the opportunity to provide this status report and to support the directives of the Commission.

[13] The report is available at: http://www.ferc.gov/EventCalendar/Files/20120827175825-EL12-86-000.pdf

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December 20, 2012
Filed Electronically

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street N.E., Room 1A
Washington, D.C. 20585

RE: Standards for Business Practices and Communication Protocols for Public Utilities (Docket Nos. RM05-5-000, RM05-5-022)

Dear Ms. Bose:

The North American Energy Standards Board (NAESB) herewith submits this report to the Federal Energy Regulatory Commission ("FERC" or "Commission") regarding errata to Version 003 of the NAESB Wholesale Electric Quadrant ("WEQ") business practice standards provided to the Commission on September 18, 2012 (Docket No. RM05-5-022).[1] The minor corrections included in this report were adopted by the WEQ Executive Committee on October 23, 2012. This report is submitted voluntarily.

The report is being filed electronically in Adobe Acrobat® Portable Document Format (.pdf). All of the documents are also available on the NAESB web site (www.naesb.org). Should you have need of the filing in editable format, we can provide it in Microsoft® Word® 2003. 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 errata to Version 003 of the NAESB WEQ business practice standards.

Respectfully submitted,

Jonathan Booe

Mr. Jonathan Booe
Vice President, North American Energy Standards Board

[1] The standards referenced and provided in this report are protected by federal copyright law. Reproduction of the standards in any form is strictly prohibited without first obtaining the express permission of NAESB.

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December 20, 2012

cc: 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 R. Norris, Federal Energy Regulatory Commission

Mr. Michael Bardee, Director, Office of Electric Reliability, Federal Energy Regulatory Commission
Mr. David Morenoff, Acting General Counsel, Federal Energy Regulatory Commission

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December 20, 2012

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Standards for Business Practices and	**)**	**Docket No. RM05-5-000**
Communication Protocols for Public Utilities	**)**	**Docket No. RM05-5-022**

REPORT OF THE NORTH AMERICAN ENERGY STANDARDS BOARD

The North American Energy Standards Board ("NAESB") is voluntarily submitting this report to the Federal Energy Regulatory Commission ("FERC" or "Commission") in the above referenced docket to inform the Commission of errata to the NAESB Wholesale Electric Quadrant ("WEQ") Version 003 business practice standards. This report is organized into appendices; the first four appendices reference the specific minor corrections as adopted by the WEQ Executive Committee. The last three appendices reference the WEQ Executive Committee action approving the minor corrections on October 23,2012, the notice to WEQ membership of the WEQ EC adoption of the minor correction distributed on October 30, 2012, and the NAESB Operating Procedures for minor clarifications and corrections to standards.

The list of appendices shown below in tabular form include the FERC docket number(s) for the amended standard(s), the version(s) of standard(s) amended, and a description of the amendments:

Appendix No.	**Minor Correction Description**
Appendix 1	**MC12032** applies to Docket No. RM05-5-022 and Version 003 of the NAESB WEQ business practice standards Minor Correction – make consistency changes for the movement of the NERC TSIN registry to the NAESB EIR registry in the following NAESB WEQ Business Practice Standards, Version 003: • Business Practice Standards WEQ-000 Abbreviations, Acronyms, and Definitions of Terms • Business Practice Standards WEQ-001 Open Access Same-Time Information Systems (OASIS), Version 2.0 • Business Practice Standards WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, Version 2.0

Appendix No.	Minor Correction Description
Appendix 2	**MC12034** applies to Docket No. RM05-5-022 and Version 003 of the NAESB WEQ business practice standards Minor Correction – to avoid confusion the acronym "ISO – International Organization for Standardization" was deleted and spelled out as "International Organization for Standardization Standard" and the acronym "VEE – Validation Editing and Estimation" was changed to "VEE – Validating, Editing and Estimating" in the following NAESB WEQ Business Practice Standards, Version 003: • Business Practice Standards WEQ-000 Abbreviations, Acronyms, and Definitions of Terms • Business Practice Standards WEQ-019 Customer Energy Usage Information Communication
Appendix 3	**MC12035** applies to Docket No. RM05-5-022 and Version 003 of the NAESB WEQ business practice standards Minor Correction – make consistency changes (capitalization) based on terms documented in NAESB WEQ Business Practice Standards WEQ-000 Abbreviations, Acronyms, and Definition of Terms by changing "Firm" to "firm" and update references to NERC documents in the following NAESB WEQ Business Practice Standards, Version 003: • Business Practice Standards WEQ-008 Transmission Loading Relief (TLR) – Eastern Interconnection
Appendix 4	**MC12036** applies to Docket No. RM05-5-022 and Version 003 of the NAESB WEQ business practice standards Minor Correction – make consistency changes in the use of "template" to the defined term "OASIS Template" in the following NAESB WEQ Business Practice Standards, Version 003: • Business Practice Standards WEQ-001 Open Access Same-Time Information Systems (OASIS), Version 2.0 • Business Practice Standards WEQ-002 Open Access Same-Time Information Systems (OASIS) and Communication Protocol (S&CP), Version 2.0 • Business Practice Standards WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, Version 2.0 • Business Practice Standards WEQ-013 Open Access Same-Time Information Systems (OASIS) Implementation Guide, Version 2.0
Appendix 5	NAESB WEQ Executive Committee notational ballot results approving NAESB WEQ minor corrections.
Appendix 6	Notice to WEQ members of Executive Committee adoption of minor corrections.
Appendix 7	NAESB operating procedures for minor clarifications and corrections to standards.

Appendix 1 – Minor Correction MC12032
Errata for NAESB Wholesale Electric Quadrant Business Practice Standards, Version 003
December 20, 2012

Appendix 1 contains **Minor Correction MC12032,** minor correction to NAESB WEQ Business Practice Standards, Version 003: Business Practice Standards WEQ-000 Abbreviations, Acronyms, and Definitions of Terms, Business Practice Standards WEQ-001 Open Access Same-Time Information Systems (OASIS), Version 2.0, and Business Practice Standards WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, Version 2.0 as approved by the WEQ EC on October 23, 2012.

MC12032

Approved by the WEQ Executive Committee on October 23, 2012
North American Energy Standards Board

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

Date of Request: September 12, 2012

1. Submitting Entity & Address:

JT Wood
Southern Company Services, Inc.
600 North 18th Street
Birmingham, AL 35291-8210

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

Name: JT Wood
Title: Reliability Standards Project Manager
Phone: 205-769-7328
Fax: 205-769-7344
E-mail: jtwood@southernco.com

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

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

NAESB Business Practice Standards WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, Version 2.0

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

NAESB Business Practice Standards WEQ-000 Abbreviations, Acronyms, and Definitions of Terms

WEQ-000-1 ABBREVIATIONS AND ACRONYMS

~~TSIN~~ ~~Transmission System Information Network~~

NAESB Business Practice Standards WEQ-001 Open Access Same-Time Information Systems (OASIS), Version 2.0

001-2.1 A Transmission Provider shall use the values and definitions below for the service period attributes, SERVICE_INCREMENT and TS_WINDOW for all Transmission Services offered on OASIS, or shall register~~post~~ alternative service period values and associated definitions in the EIR~~on the OASIS Home Page at http://www.tsin.com~~, or shall use existing attribute values and definitions registered~~posted~~ by other Transmission Providers. (See Business Practice Standard WEQ-001-3 for registration requirements.)

001-2.2 A Transmission Provider shall use the values and definitions below to describe the service class, TS_CLASS, for Transmission Services offered on OASIS, or shall register~~post~~ alternative TS_CLASS attribute values and associated definitions in the EIR~~on the OASIS Home Page at http://www.tsin.com~~, or shall use the attribute values and definitions registered~~posted~~ by other Transmission Providers. (See Business Practice Standard WEQ-001-3 for registration requirements.)

001-2.3 A Transmission Provider shall use the values and definitions below to describe the service type, TS_TYPE, for Transmission Services offered on OASIS, or shall register~~post~~ alternative attribute values and associated definitions in the EIR~~on the OASIS Home Page at http://www.tsin.com~~, or shall use the attribute values and definitions registered~~posted~~ by other Transmission Providers. (See Business Practice Standard WEQ-001-3 for registration requirements.)

001-2.4 A Transmission Provider that has adopted NERC TLR procedures shall use the Curtailment priority definitions contained in those procedures for all Transmission Services offered on OASIS. A Transmission Provider that has adopted alternative Curtailment procedures shall register~~post~~ its alternative

attribute values and associated definitions in the EIR~~on the OASIS Home Page at http://www.tsin.com~~, or shall use attribute values and definitions registered~~posted~~ by another Transmission Provider. (See Business Practice Standard WEQ-001-3 for registration requirements.)

001-2.5 A Transmission Provider shall use the definitions below to describe the AS_TYPEs offered on OASIS, or shall register~~post~~ alternative attribute values and associated definitions in the EIR~~on the OASIS Home Page at http://www.tsin.com~~, or shall use attribute values and definitions registered~~posted~~ by another Transmission Provider. (See Business Practice Standard WEQ-001-3 for registration requirements.)

001-3.1 All entities or persons using OASIS shall register the identity of their organization (including DUNS number) or person in the EIR~~at the OASIS Home Page at http://www.tsin.com~~. Registration identification shall include the parent entity (if any) of the registrant. Registration shall be a prerequisite to OASIS usage and renewed annually and whenever changes in identification occur and thereafter. An entity or person not complying with this requirement or providing false information may be denied access by a Transmission Provider to that Transmission Provider's OASIS Node.

The registration requirement applies to any entity logging onto OASIS for the purpose of using or updating information, including Transmission Providers, Transmission Customers, Observers, Control Areas, Security Coordinators, and Independent System Operators.

Process to Register Non-Standard Service Attribute Values

Business Practice Standard WEQ-001-2 addresses the use of standard terminology in defining services on OASIS. These standard definitions for service attribute values will be registered~~posted~~ publicly in the EIR~~on the OASIS Home Page at http://www.tsin.com~~ and may be used by all Transmission Providers to offer Transmission Services and ancillary services on OASIS. If the Transmission Provider determines that the standard definitions are not applicable, the Transmission Provider may register new attribute values and definitions in the EIR~~on the OASIS Home Page~~. Any Transmission Provider may use the attribute values and definitions registered~~posted~~ by another Transmission Provider.

001-3.2 Providers of Transmission Services and ancillary services shall use only attribute values and definitions that have been registered in the EIR~~on the OASIS Home Page at http://www.tsin.com~~ for all Transmission Services and ancillary services offered on their OASIS.

001-3.3 Providers of Transmission Services and ancillary services shall endeavor to use on their OASIS Nodes attribute values and definitions that have been registered~~posted~~ by other Transmission Providers in the EIR~~on the OASIS~~

~~Home Page at http://www.tsin.com~~ whenever possible.

Registration of PORs and PODs

In order to improve coordination of path naming and to enhance the identification of commercially available connection points between Transmission Providers and Regional Entities, the Business Practice for OASIS requires that:

I. Transmission Providers register in the EIR~~at the OASIS Home Page at http://www.tsin.com~~, all service points (PORs and PODs) for which Transmission Service is available over the OASIS.

II. Each Transmission Provider would then indicate on its OASIS Node, for each Posted Path on its OASIS Node, the PORs and PODs to which each path is connected.

A Transmission Provider is not required to register specific generating stations as PORs, unless they were available as service points for the purposes of reserving Transmission Service on OASIS. The requirement also does not include registration of regional Flowgates, unless they are service points for the purposes of reserving Transmission Service on OASIS.

001-3.4 A Transmission Provider shall register and thereafter maintain in the EIR~~on the OASIS Home Page at http://www.tsin.com~~ all PORs and PODs to and from which a Transmission Customer may reserve and schedule Transmission Service.

001-3.5 For each reservable Posted Path on their OASIS Nodes, Transmission Providers shall indicate the available PORs and PODs for that path. These PORs and PODs shall be from the list registered in the EIR~~on the OASIS Home Page at http://www.tsin.com~~.

001-6.4 A Transmission Provider may designate a sub-level for PORs and PODs. For example, a Transmission Customer reserves a path to POD AAAA. The ultimate load may be indeterminate at the time. Later, the Transmission Customer schedules energy to flow to a particular load that may be designated by the Transmission Provider as a sub-level POD. This option is necessary to ensure certain Transmission Providers are not precluded from using more specific service points by the inclusion of the POR/POD in the path name. All sub-level PORs and PODs must be registered as such in the EIR~~on http://www.tsin.com~~.

001-101.12.1 For customer-owned or customer-leased generation, the Eligible Customer or Transmission Customer shall use the EIR~~TSIN~~-registered Source name.

001-101.13.1 For all requests to designate Network Load, the Eligible Customer or

Transmission Customer shall use the EIR~~TSIN~~-registered Sink name.

NAESB Business Practice Standards WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, Version 2.0

Delete first occurrence of ~~AS_TYPE~~	~~ASTYPE~~	~~1{ALPHANUMERIC}20~~	~~Valid Values:~~ ~~SC~~ ~~RV~~ ~~RF~~ ~~EI~~ ~~SP~~ ~~SU~~ ~~GI~~ ~~DT~~ ~~TL~~ ~~BS~~ ~~{Registered}~~	~~SC – Scheduling, system Control and Dispatch~~ ~~RV – Reactive Supply and Voltage Control~~ ~~RF – Regulation and Frequency Response~~ ~~EI – Energy Imbalance~~ ~~SP – Spinning Reserve~~ ~~SU – Supplemental Reserve~~ ~~GI – Generator Imbalance~~ ~~DT – Dynamic Transfer~~ ~~TL – Real power Transmission Loss~~ ~~BS – System Black Start Capability~~ ~~{Registered} – must be registered with www.tsin.com and listed in the ancserv Template~~
AS_TYPE	ASTYPE	1{ALPHANUMERIC}20	Valid Values: SC RV RF EI SP SU GI DT TL BS {Registered}	SC – Scheduling, system Control and Dispatch RV – Reactive Supply and Voltage Control RF – Regulation and Frequency Response EI – Energy Imbalance SP – Spinning Reserve SU – Supplemental Reserve GI – Generator Imbalance DT – Dynamic Transfer TL – Real power

				Transmission Loss BS – System Black Start Capability {Registered} – must be registered in the EIR~~with www.tsin.com~~ and listed in the ***ancserv*** Template
CUSTOMER_CODE	CUST	1{ALPHANUMERIC}6	Unique value, registered in the EIR~~on www.tsin.com~~	Any entity that is eligible to view OASIS information, to execute a service agreement, and/or to receive Transmission Service.
PRIMARY_PROVIDER _CODE	PROVIDER	1{ALPHANUMERIC}4	Unique code	Unique code for each Transmission Provider. Used by PATH_NAME and in URL. Registered as part of URL in the EIR~~at www.tsin.com~~.
SERVICE_INCREMENT	SRVINCR	1{ALPHANUMERIC}8	Valid Values: HOURLY DAILY WEEKLY MONTHLY YEARLY {Registered}	The Transmission Service increments provided. Five are pre-defined, while additional increments can be used if they are registered in the EIR~~on www.tsin.com~~ and shown in the Transmission Provider's ***list*** Template.
TS_CLASS	TSCLASS	1{ALPHANUMERIC}20	Valid Values: FIRM NON-FIRM TTC SECONDARY {Registered}	The Transmission Service classes provided. Four are pre-defined, while additional classes can be used if they are registered in the EIR~~on www.tsin.com~~ and shown in the Transmission Provider's ***list*** Template page. SECONDARY is defined as alternate PORs or PODs for POINT_TO_POINT, or as non-designated

				resources for NETWORK service. TTC is retained as a Valid Value for historical purposes only.
TS_PERIOD	TSPER	1{ALPHANUMERIC}20	Valid Values: ON_PEAK OFF_PEAK FULL_PERIOD {Registered}	The Transmission Service periods provided. Three are pre-defined, while additional periods can be used if they are registered in the EIR~~on www.tsin.com~~ and shown in the Transmission Provider's ***list*** Template.
TS_TYPE	TSTYPE	1{ALPHANUMERIC}20	Valid Values: POINT_TO_POINT NETWORK ATC {Registered}	The Transmission Service types provided. Three are pre- defined, while additional types can be used if they are registered in the EIR~~on www.tsin.com~~ and shown in the Transmission Provider's ***list*** Template. ATC is retained as a Valid Value for historical purposes only.
TS_WINDOW	TSWIND	1{ALPHANUMERIC}20	Valid Values: FIXED SLIDING EXTENDED NEXT_INCREMENT {Registered }	The Transmission Service windows provided. Four are pre-defined, while additional windows can be used if they are registered in the EIR~~on www.tsin.com~~ and shown in the Transmission Provider's ***list*** Template.

5. Reason for of Minor Correction/Clarification:
   To make consistency changes to the NAESB OASIS Business Practice Standards for the movement of the NERC TSIN registry to the NAESB EIR registry.

Appendix 2 – Minor Correction MC12034
Errata for NAESB Wholesale Electric Quadrant Business Practice Standards, Version 003
December 20, 2012

Appendix 2 contains **Minor Correction MC12034,** minor correction to NAESB WEQ Business Practice Standards, Version 003: Business Practice Standards WEQ-000 Abbreviations, Acronyms, and Definitions of Terms, and Business Practice Standards WEQ-019 Customer Energy Usage Information Communication as approved by the WEQ EC on October 23, 2012.

MC12034

Approved by the WEQ Executive Committee on October 23, 2012
North American Energy Standards Board

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

Date of Request: September 19, 2012

3. Submitting Entity & Address:

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Fax: 317-249-5358
E-mail: eskiba@misoenergy.org

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

NAESB WEQ Business Practice Standards, Version 003:

NAESB Business Practice Standards WEQ-000 Abbreviations, Acronyms, and Definitions of Terms

NAESB Business Practice Standards WEQ-019 Customer Energy Usage Information Communication.

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

WEQ-000-1 Abbreviations and Acronyms

ISO	Independent System Operator
~~ISO~~	~~International Organization for Standardization~~
VEE	Validating, Editing ~~&~~and Estimating
~~VEE~~	~~Validation Editing and Estimation~~

WEQ-000-2 Definitions of Terms

Power Plant Gas Coordinator (PPGC)	The entity(ies) responsible for acquiring natural gas to meet a PPGC Facility's operating requirements and for scheduling the delivery of said natural gas to the PPGC Facility that has responsibility for gas requirements for a natural gas-fired electric generating facility(ies) and is responsible for coordinating natural gas deliveries with the appropriate Transportation Service Provider(s) to meet those requirements. The PPGC may perform some or alls ~~a number~~ of the following coordinated activities, including, but not limited to, power plant operations, unit dispatch, natural gas procurement and/or gas transportation arrangements. Because each PPGC is structured differently, specific responsibilities within each PPGC should be determined by the PPGC and the point of contact for the PPGC should be communicated to the Transportation Service Provider(s). (*Note: This also applies to NAESB WGQ Standard Nos. 0.2.1, 0.2.2, 0.3.11, 0.3.12, 0.3.13, 0.3.14, and 0.3.15*)
~~Validation Editing and Estimation~~ Validating, Editing and Estimating (VEE)	The process of confirming the accuracy of raw meter data and, if necessary, replacing corrupt or missing data. VEE guidelines are published in the Edison Electric Institute's Uniform Business Practices for Unbundled Electricity Metering.

WEQ-019 Sections

019-3.1.1 019-3.1.8 019-3.1.42	~~ISO~~ International Organization for Standardization Standard ISO

5. Reason for of Minor Correction/Clarification:

There are two different meanings for ISO currently in WEQ-000: a) Independent System Operator and b) International Organization for Standardization. To avoid confusion it is recommended that the acronym for International Organization for Standardization should not be used. Rather, it should be spelled out. Conforming changes are required for WEQ-019.

After reviewing the WEQ Demand Response/Energy Subcommittee co-chairs reviewed the Edison Electric Institute's standards it was recommended that VEE be changed to Validating, Editing and Estimating. Conforming changes are also being made to WEQ-000-2.

Correct a typographical error in definition of Power Plant Gas Coordinator.

Appendix 3 – Minor Correction MC12035
Errata for NAESB Wholesale Electric Quadrant Business Practice Standards, Version 003
December 20, 2012

Appendix 3 contains **Minor Correction MC12035,** minor correction to NAESB WEQ Business Practice Standards, Version 003: Business Practice Standards WEQ-008 Transmission Loading Relief (TLR) – Eastern Interconnection as approved by the WEQ EC on October 23, 2012.

MC12035

Approved by the WEQ Executive Committee on October 23, 2012
North American Energy Standards Board

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

Date of Request: September 19, 2012

5. Submitting Entity & Address:

Ed Skiba
MISO
P.O. Box 4202
Carmel IN 46082-4202

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

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

NAESB WEQ Business Practice Standards, Version 003:

NAESB Business Practice Standards WEQ-008 Transmission Loading Relief (TLR) – Eastern Interconnection

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

NAESB WEQ-008 Transmission Loading Relief

Redline:

008-2.2.1.1 The RC shall consider the entire Interchange Transaction non-firm if the transmission link (i.e. a segment on the Contract Path) on the Constrained Facility or Flowgate is Non-Firm Transmission Service, even if other links in the Contract Path are ~~Firm~~ firm.

Clean:

008-2.2.1.1 The RC shall consider the entire Interchange Transaction non-firm if the transmission link (i.e. a segment on the Contract Path) on the Constrained Facility or Flowgate is Non-Firm Transmission Service, even if other links in the Contract Path are firm.

Minor correction for Business Practice Standard WEQ-008-3.3.1 to delete "(as found in current version of NERC IRO-006-4)" This is not the current version of the standards, and IRO-006-5 no longer includes anything about Reallocation.

Redline:

008-3.3.1 The RC shall allow those Interchange Transactions using Firm Transmission Service that have been submitted prior to the NERC-approved Tag submission deadline for Reallocation ~~(as found in current version of NERC IRO-006-4)~~ to be initiated as scheduled.

Clean:

008-3.3.1 The RC shall allow those Interchange Transactions using Firm Transmission Service that have been submitted prior to the NERC-approved Tag submission deadline for Reallocation to be initiated as scheduled.

Minor correction for Business Practice Standard WEQ-008-3.3.1.2 to change INT-004.1 to INT-004.2.

Redline:

008-3.3.1.2 Reallocations for Dynamic Schedules are as follows: If an Interchange Transaction is identified as a Dynamic Schedule and the Transmission Service is considered firm according to the constrained path method, then it will not be held by the IDC during TLR level 4 or lower. Adjustments to Dynamic Schedules in accordance with current version of NERC ~~INT-004-1~~INT-004-2 will not be held under TLR level 4 or lower.

Clean:

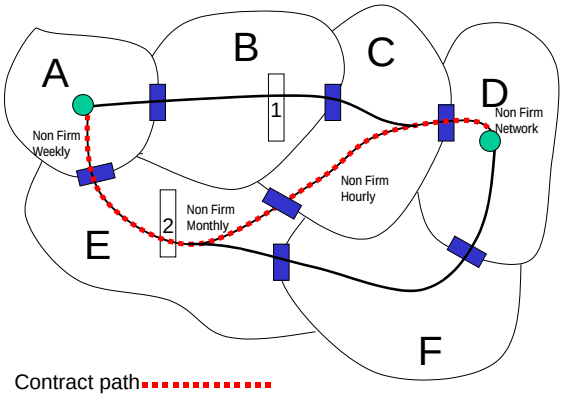
008-3.3.1.2 Reallocations for Dynamic Schedules are as follows: If an Interchange Transaction is identified as a Dynamic Schedule and the Transmission Service is considered firm according to the constrained path method, then it will not be held by the IDC during TLR level 4 or lower. Adjustments to Dynamic Schedules in accordance with current version of NERC INT-004-2 will not be held under TLR level 4 or lower.

Redline

008-A Appendix A – Examples of On-Path and Off-Path Mitigation

…

Case 1: E is a ~~Non-Firm~~ non-firm monthly path, C ~~Non-Firm~~ non-firm hourly; E has Constraint at #2.

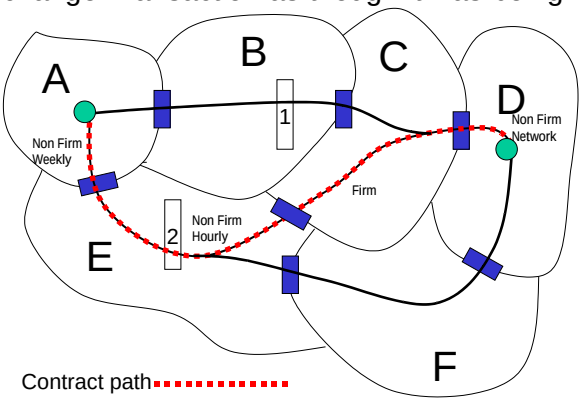


- E may call RC for TLR procedure to relieve overload at Constraint #2.
- Interchange Transaction A-D may be curtailed by TLR action **as though it was being served by ~~Non-Firm~~ non-firm monthly PTP**, even though it was using ~~Non-Firm~~ non-firm hourly PTP from C. That

is, it takes on the priority of the link with the Constrained Facility or Flowgate along the Contract Path. (See Business Practice Standard WEQ-008-2.2.)

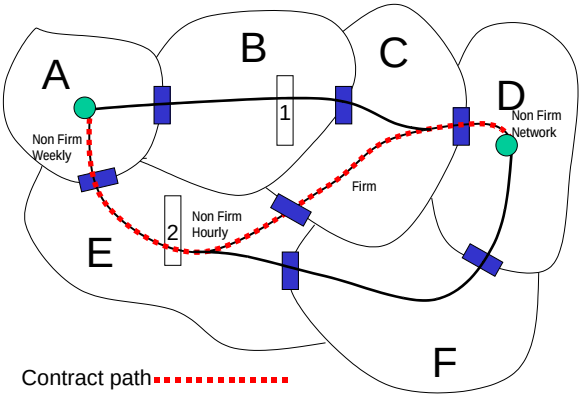
Case 2: E is a ~~Non-Firm~~ non-firm hourly path, C is firm; E has Constraint at #2.

- Although C is providing Firm Transmission Service, the Constraint is not on C's system; therefore, E is not obligated to treat the Interchange Transaction as though it was being served by Firm Transmission Service.
- E may call RC for TLR procedure to relieve overload at Constraint #2.
- Interchange Transaction A-D may be curtailed by TLR action as though it was being served by ~~Non-Firm~~ non-firm hourly PTP, even though it was using Firm Transmission Service from C. That is, when the Constraint is on the Contract Path, the Interchange Transaction takes on the priority of the link with the Constrained Facility or Flowgate. (See Business Practice Standard WEQ-008-2.2.)



Case 3: E is a ~~Non-Firm~~ non-firm hourly path, C is firm, B has Constraint at #1.

- B may call RC for TLR procedure to relieve overload at Constraint #1.
- Interchange Transaction A-D may be curtailed by TLR action as though it was being served by ~~Non-Firm~~ non-firm hourly PTP, even if it was using Firm Transmission Service elsewhere on the path. When the Constraint is off the Contract Path, the Interchange Transaction takes on the lowest priority reserved on the Contract Path. (See Business Practice Standard WEQ-008-2.3.)



…

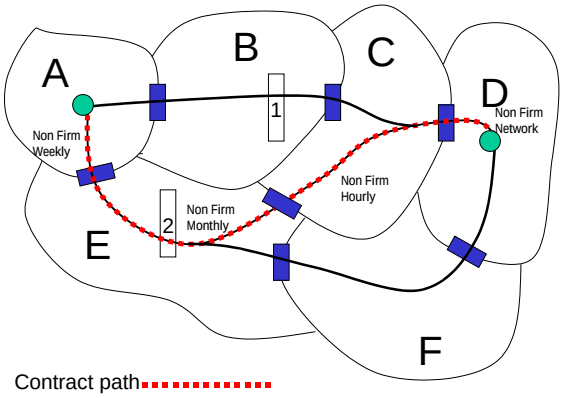
Clean

008-A Appendix A – Examples of On-Path and Off-Path Mitigation

…

Case 1: E is a non-firm monthly path, C non-firm hourly; E has Constraint at #2.

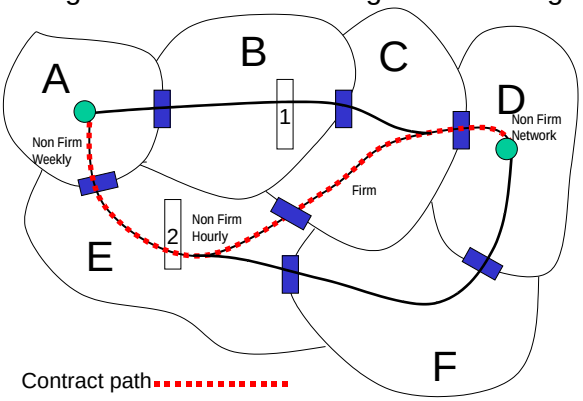
- E may call RC for TLR procedure to relieve overload at Constraint #2.
- Interchange Transaction A-D may be curtailed by TLR action **as though it was**



being served by non-firm monthly PTP, even though it was using non-firm hourly PTP from C. That is, it takes on the priority of the link with the Constrained Facility or Flowgate along the Contract Path. (See Business Practice Standard WEQ-008-2.2.)

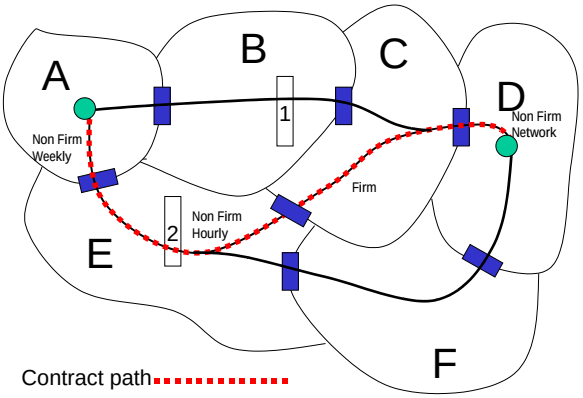
Case 2: E is a non-firm hourly path, C is firm; E has Constraint at #2.

- Although C is providing Firm Transmission Service, the Constraint is not on C's system; therefore, E is not obligated to treat the Interchange Transaction as though it was being served by Firm Transmission Service.
- E may call RC for TLR procedure to relieve overload at Constraint #2.
- Interchange Transaction A-D may be curtailed by TLR action as though it was being served by non-firm hourly PTP, even though it was using Firm Transmission Service from C. That is, when the Constraint is on the Contract Path, the Interchange Transaction takes on the priority of the link with the Constrained Facility or Flowgate. (See Business Practice Standard WEQ-008-2.2.)



Case 3: E is a non-firm hourly path, C is firm, B has Constraint at #1.

- B may call RC for TLR procedure to relieve overload at Constraint #1.
- Interchange Transaction A-D may be curtailed by TLR action as though it was being served by non-firm hourly PTP, even if it was using Firm Transmission Service elsewhere on the path. When the Constraint is off the Contract Path, the Interchange Transaction takes on the lowest priority reserved on the Contract Path. (See Business Practice Standard WEQ-008-2.3.)



5. Reason for of Minor Correction/Clarification:

Changes are being submitted to reflect updates references to NERC documents and to make conforming changes based on terms documented in WEQ-000

Appendix 4 – Minor Correction MC12036
Errata for NAESB Wholesale Electric Quadrant Business Practice Standards, Version 003
December 20, 2012

Appendix 4 contains **Minor Correction MC12036,** minor correction to NAESB WEQ Business Practice Standards, Version 003: Business Practice Standards WEQ-001 Open Access Same-Time Information Systems (OASIS), Version 2.0, Business Practice Standards WEQ-002 Open Access Same-Time Information Systems (OASIS) and Communication Protocol (S&CP), Version 2.0, Business Practice Standards WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, Version 2.0 and Business Practice Standards WEQ-013 Open Access Same-Time Information Systems (OASIS) Implementation Guide, Version 2.0 as approved by the WEQ EC on October 23, 2012.

MC12036

Approved by the WEQ Executive Committee on October 23, 2012
North American Energy Standards Board

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

Date of Request: September 19, 2012

7. Submitting Entity & Address:

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

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

NAESB Business Practice Standards WEQ-013 Open Access Same-Time Information Systems (OASIS) Implementation Guide, Version 2.0

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

Appendix 4 – Minor Correction MC12036
Errata for NAESB Wholesale Electric Quadrant Business Practice Standards, Version 003
December 20, 2012

NAESB Business Practice Standards WEQ-001 Open Access Same-Time Information Systems (OASIS), Version 2.0

001-22.2 The Transmission Provider shall post all scheduled use of CBM and any Curtailments of those schedules in accordance with NAESB Business Practice Standards WEQ-002 and WEQ-013 such that these schedules may be queried, viewed and audited using the ***scheduledetail*** OASIS Tt~~t~~emplate.

NAESB Business Practice Standards WEQ-002 Open Access Same-Time Information Systems (OASIS) and Communication Protocol (S&CP), Version 2.0

002-4.2.7.4 Data Records

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

002-4.2.10.4 Use of Comments

PTP and ancillary service reservation OASIS Tt~~t~~emplates support the following text Data Elements to be used to communicate information between parties (i.e., Transmission Provider, Reseller, and Transmission Customer) to a transaction:

002-4.3.1 **Template Summary**

The following table provides a summary of the process areas, and OASIS Templates to be used by users to query information that will be downloaded or to upload information to the Transmission Provider's OASIS. These processes define the functions that must be supported by an OASIS Node related to the general OASIS, PTP and related ancillary service information.

002-4.3.4.3 Transmission Reservation Reduction (***reduction***)

…..

If required by tariff or regulations, this OASIS Tt~~t~~emplate is also used to document the periods of time when the Transmission Provider reduces the service Curtailment priority for CCO Reservation (i.e., System Impact Study CCO) due to either a change in system conditions or service term over which the priority of service is reduced from Firm Transmission Service priority 7, to Non-Firm Transmission Service priority 6.

……

In response to a ***reduction*** OASIS Template query, each primary record returned (CONTINUATION_FLAG = N) shall include the ASSIGNMENT_REF, CAPACITY_GRANTED and CAPACITY_AVAILABLE in MWs over the interval from START_TIME to STOP_TIME. CAPACITY_GRANTED is derived from the transmission reservation's CAPACITY_GRANTED. CAPACITY_AVAILABLE is derived from the transmission reservation's CAPACITY_GRANTED less all reductions (if any) in reserved capacity (if any) over the interval from START_TIME to STOP_TIME as specified in the CAPACITY_REDUCED (as negative valued MWs) Data Element. REDUCTION_TYPE, REDUCTION_REASON, IMPACTING_REF, CAPACITY_REDUCED, and NERC_CURTAILMENT_PRIORITY shall be null in each primary record returned in the ***reduction*** OASIS Tt~~t~~emplate response; these Data Elements shall be reported in Continuation Records, as appropriate, documenting all

reductions in capacity and/or service Curtailment priority that are in effect over the START_TIME/STOP_TIME Interval.

002-4.3.4.4 System Data (***systemdata***)

….

Narratives related to specific changes in posted TTC/TFC and/or ATC values shall be denoted by the SYSTEM_ATTRIBUTE of ZERO_FATC_NARRATIVE, ZERO_NFATC_NARRATIVE, FATC_CHANGES_NARRATIVE, or NFATC_CHANGE_NARRATIVE, and the specific narrative corresponding to the TTC/TFC/ATC postings shall be placed in the ANNOTATION Data Element. The specific values for TTC and/or ATC are posted under the ***systemdata*** OASIS Ttemplate for the SYSTEM_ATTRIBUTES of TTC, FATC and NFATC, etc.

002-4.3.6.2.1 Renewal Provisions (***rollover***)

The Renewal Provisions **(*rollover*)** OASIS Ttemplate provides users with additional information related to the specific provisions for exercising the right to renewal/rollover the associated Transmission Service reservation.

….

If there is no additional renewal/rollover information associated with a reservation selected via the query parameters, there will be no record returned in the OASIS Ttemplate response for that reservation.

The query parameters below are to be applied in the same way as to the associated reservation Data Elements as defined in the ***transstatus*** OASIS Ttemplate to select the specific reservations whose renewal/rollover information is to be returned.

002-4.3.6.2.2 CCO Provisions (***cco***)

The CCO provisions **(*cco*)** OASIS Ttemplate provides users with additional information related to the specific provisions of a CCO Reservation.

The query parameters associated with this OASIS Ttemplate may be specified by the user to limit the set of service reservations whose CCO provisions are to be returned in the OASIS Ttemplate response.

….

The query parameters below are to be applied in the same way as to the associated reservation Data Elements as defined in the ***transstatus*** OASIS Ttemplate to select the specific reservations whose CCO Reservation information is to be returned.

002-4.3.6.2.3 Coordinated Group Status (***cgstatus)***

The Coordinated Group Status (***cgstatus***) query OASIS Ttemplate provides users with additional information related to a Coordinated Request's associated transmission requests and any reservations, if applicable, that have been submitted as the Coordinated Group.

The query parameters associated with this OASIS Ttemplate may be specified by the user to limit the set of service requests or reservations whose Coordinated Group information is to be returned in the OASIS Ttemplate response.

If there is no Coordinated Group information associated with the request(s) or reservation(s) selected via the query parameters, no records will be returned in the OASIS Ttemplate response for that request/reservation.

002-4.3.10.4 Personnel Transfers (***personnel***)

The Personnel Transfers (***personnel)*** OASIS Template is used to post a notice of a transfer of a transmission function employee to a position as a marketing function employee, or a transfer of a marketing function employee to a position as a transmission function employee, as described in 18 CFR Part 358. The ***personnel*** OASIS Ttemplate is an optional OASIS Ttemplate to be implemented at the Transmission Provider's discretion.

002-4.3.10.5 Discretion (***discretion***)

The Discretion (***discretion)*** OASIS Template is used to post a notice of a waiver of a tariff provision that a Transmission Provider grants in favor of an Affiliate, as described in 18 CFR Part 358. The ***discretion*** OASIS Ttemplate is an optional OASIS Ttemplate to be implemented at the Transmission Provider's discretion.

002-4.3.10.6 Standards of Conduct (***stdconduct***)

The Standards of Conduct (***stdconduct)*** OASIS Template indicates when information is disclosed in a manner contrary to the Standards of Conduct, as described in 18 CFR Part 358. The ***stdconduct*** OASIS Template is an optional OASIS Ttemplate to be implemented at the Transmission Provider's discretion.

002-4.3.11 **OASIS Audit Log**

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*A Transmission Provider is only required to implement the audit log OASIS Ttemplates ***personnelaudit***, ***discretionaudit***, and ***stdconductaudit*** if and when the Transmission Provider also uses the ***personnel***, ***discretion***, ***stdconduct*** OASIS Ttemplates for posting Standards of Conduct information required under 18 CFR Part 358.

002-4.3.11.3.1 ***CSV Response Header Records***

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

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

002-4.3.11.5 Special Audit OASIS Template Considerations

Transoffering

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

Scheduledetail

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

002-4.5.1 **INFO.HTM**

When a regulatory order requires informational postings on OASIS and there is no OASIS S&CP OASIS T~~t~~emplate to support the postings or it is deemed inappropriate to use a OASIS T~~t~~emplate, or the location of the posting has not been specified in Business Practice Standard WEQ-001-13, there shall be a reference in INFO.HTM to the required information, including, but not limited to, references to the following:

NAESB Business Practice Standards WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, Version 2.0

AS_TYPE	ASTYPE	1{ALPHANUMERIC}20	Valid Values: SC RV RF EI SP SU GI DT TL BS {Registered}	SC – Scheduling, system Control and Dispatch RV – Reactive Supply and Voltage Control RF – Regulation and Frequency Response EI – Energy Imbalance SP – Spinning Reserve SU – Supplemental Reserve GI – Generator Imbalance DT – Dynamic Transfer TL – Real power Transmission Loss BS – System Black Start Capability {Registered} – must be registered in the EIR and listed in the ***ancserv*** OASIS Template
CATEGORY	CAT	0{ALPHANUMERIC}25	Valid name from CATEGORY in ***list*** OASIS Template	A name to be used to categorize messages. Valid names would include: want-ad, Curtailment, Outage, OASIS_Maintenance_Outage.
COLUMN_HEADERS	HEADERS	1{ALPHANUMERIC} Limited to all the Data Elements names in one OASIS Template	Headers separated by commas. Limited to valid OASIS Template Data Element names. Must use full Data Element	Example: COLUMN_HEADERS=PATH_NAME,POINT_OF_RECEIPT,POINT_OF_DELIVERY, SOURCE,SINK

			name and not alias.	
DATA	DATA	0{ALPHA}50	Valid values: Any of the valid NITS Query/Response OASIS Data Template names as specified in WEQ-002	Query variable specifying a valid NITS Query/Response OASIS Data Template name whose associated Data Elements are to be returned in the query template response.
DISCRETION_DESCRIPTION	DISCDESC	0{ALPHANUMERIC}1000	Free form text	A detailed description of the waiver being posted. The ***discretion*** OASIS Ttemplate and the related DISCRETION_DESCRIPTION Data Element are an optional implementation at the Transmission Provider's discretion.
ELEMENT_NAME	ELEMENT	1{ALPHANUMERIC}40	Valid OASIS Template element name	OASIS Template element name as indicated in OASIS Data Dictionary.
EMPLOYEE_NAME	EMPNAME	1{ALPHANUMERIC}25	Free form text	Name of person who is transferring from one position to another. The ***personnel*** OASIS Ttemplate and the related EMPLOYEE_NAME Data Element are an optional implementation at the Transmission Provider's discretion.
FACILITY_CLASS	FACLASS	0{ALPHANUMERIC}25	Free form text, for example: TRANSFORMER, LINE, FLOWGATE or as defined in the ***list*** OASIS Template	Type of limiting device such as 'transformer', 'line' or 'Flowgate'
FACILITY_LIMIT_TYPE	FACLIMTYP	0{ALPHANUMERIC}25	Free form text, for example: thermal, stability, voltage or as defined in ***list*** OASIS Template	For example: thermal, stability, voltage
FACILITY_LOCATION	FACLOC	0{ALPHANUMERIC}8	Free form text, for example: INTERNAL EXTERNAL Or as defined in the ***list*** OASIS Template	Location of facility that caused the interruption, either internal to the TP or external to the TP grid.
FORMER_COMPANY	FORMCO	1{ALPHANUMERIC}25	Free form text	Former company of the person who is transferring. The ***personnel*** OASIS Ttemplate and the related FORMER_COMPANY Data Element are an optional implementation at the

				Transmission Provider's discretion.
FORMER_DEPARTMENT	FORMDEPT	1{ALPHANUMERIC}52	Free form text	Former department of the person who is transferring. The ***personnel*** OASIS Ttemplate and the related FORMER_DEPARTMENT Data Element are an optional implementation at the Transmission Provider's discretion.
FORMER_POSITION	FORMPOS	1{ALPHANUMERIC}25	Free form text	Former position held by the person who is transferring. The ***personnel*** OASIS Ttemplate and the related FORMER_POSITION Data Element are an optional implementation at the Transmission Provider's discretion.
INPUT_STATUS	INSTATUS	1{NUMERIC}3	Error number	Value indicating success/failure of OASIS to process the submitted NITS OASIS INPUT Template; 200 = Success. Failure indicates that some portion of the uploaded OASIS INPUT Ttemplate was malformed.
MODIFYING_COMPANY_CODE	MODCODE	1{ALPHANUMERIC}6	Registered company code for a TP, SC or CA	Contains the registered company code that modified the transaction, used in the audit OASIS Templates.
MODIFYING_NAME	MODNAME	0{ALPHANUMERIC}25	Free form text	Contain the name of the person that modified the transaction, used in the audit OASIS Templates.
NERC_CURTAILMENT_PRIORITY	NERCURT	1{INTEGER}1	Integer	One of the NERC Curtailment priorities, documented in ***list*** OASIS Template.
NEW_COMPANY	NEWCO	1{ALPHANUMERIC}25	Free form text	New company of the person who is transferring. The ***personnel*** OASIS Ttemplate and the related NEW_COMPANY Data Element are an optional implementation at the Transmission Provider's discretion.
NEW_DEPARTMENT	NEWDEPT	1{ALPHANUMERIC}52	Free form text	New department of the person who is transferring. The ***personnel*** OASIS Ttemplate and the related NEW_DEPARTMENT Data Element are an optional implementation at the Transmission Provider's discretion.

NEW_POSITION	NEWPOS	1{ALPHANUMERIC}25	Free form text	New position held by the person who is transferring. The ***personnel*** OASIS Ttemplate and the related NEW_POSITION Data Element are an optional implementation at the Transmission Provider's discretion.
OTHER_CURTAILMENT_PRIORITY	OTHCUR	0{ALPHANUMERIC}8	Valid Values: {Registered}	Other than NERC Curtailment priorities, such as regional Curtailment priorities. Suggested format region+number, for example MRO4, WECC7. Documented in ***list*** OASIS Template and registered with central EIR.
PRECONFIRMED	PRECONF	2{ALPHA}3	Valid Values: YES NO	Used by Transmission Customer to preconfirm sale in OASIS Templates ***transrequest*** or ***ancrequest***. If Transmission Customer indicates sale is preconfirmed, then the response is YES and the Transmission Customer does not need to confirm the sale.
RECORD_TYPE	RECTYPE	1{ALPHA}1	Valid Values: I U D	Indicates the type of information reported in a response record generated by an audit OASIS Template. "I" designates information as it was initially inserted (posted) on OASIS; "U" designates information updated (modified) on OASIS; "D" designates deleted information as it appeared on OASIS just prior to being deleted (as appropriate).
REQUEST	REQ	0{ALPHA}50	Valid values: Any of the valid NITS Input/Response OASIS Request Template names as specified in WEQ-002	Query variable specifying a valid NITS Input/Response OASIS Request Template names whose associated Data Elements are to be returned in the query template response.
RESPONSIBLE_PARTY _NAME	PARTNAME	1{ALPHANUMERIC}25	Free form text	The name of the person responsible for granting the waiver. The ***discretion*** OASIS Ttemplate and the related RESPONSIBLE_PARTY_NAME Data Element are an

				optional implementation at the Transmission Provider's discretion.
SECURITY_REF	SECREF	1{ALPHANUMERIC}10	Unique value	Unique value generated by company initiating the security for each security event in the ***security*** OASIS Template.
SERVICE_INCREMENT	SRVINCR	1{ALPHANUMERIC}8	Valid Values: HOURLY DAILY WEEKLY MONTHLY YEARLY {Registered}	The Transmission Service increments provided. Five are pre-defined, while additional increments can be used if they are registered in the EIR and shown in the Transmission Provider's ***list*** OASIS Template.
STANDARDS_OF_CONDUCT_ISSUES	STDISSUE	0{ALPHANUMERIC}800	Free form text	Information disclosures that were in violation of the FERC Standards of Conduct described in 18 CFR, Part 358. This text may include a reference pointer to a more detailed description. The ***stdconduct*** OASIS Template and the related STANDARDS_OF_CONDUCT_ISSUES Data Element are an optional implementation at the Transmission Provider's discretion.
START_TIME	STIME	16{ALPHANUMERIC}16	Valid date and time to seconds: yyyy+mo+dd+hh+mm+ss+tz	Start date and clock time of a service. When used as a Query Variable, it requires the return of all items whose Stop time is after the Start time. Note that for some OASIS Templates when used as a Query Variable the time may be only valid up to the hour, day or month. If more data is given than is valid, the hour, day or month will be used to make the date and time inclusive, i.e. date or time will be truncated to valid hour, day or month.
STOP_TIME	SPTIME	16{ALPHANUMERIC}16	Valid date and time yyyy+mo+dd+hh+mm+ss+tz	Stop date and clock time. When used as a Query Variable, it requires the return of all items which start before the stop time. Note that for some OASIS Templates when used as a Query Variable the time may be only valid up to the hour, day or month. If more

				data is given than is valid, the hour, day or month will be used to make the date and time inclusive, i.e. date or time will be increased to include STOP_TIME.
SYSTEM_ATTRIBUTE	SYSATTR	0{ALPHANUMERIC}20	Valid Values: CBM FTRM NFTRM TTC FATC NFATC FGF NFGF ATC_ANNOTATION ZERO_FATC_NARRATIVE ZERO_NFATC_NARRATIVE FATC_CHANGE_NARRATIVE NFATC_CHANGE_NARRATIVE ZONE_FORECASTED_LOAD SYSTEM_FORECASTED_LOAD NATIVE_FORECASTED_LOAD ZONE_ACTUAL_LOAD SYSTEM_ACTUAL_LOAD NATIVE_ACTUAL_LOAD {Registered}	Type of system data viewed by ***systemdata*** OASIS Template: CBM FTRM – TRM for use in FATC NFTRM – TRM for use in NFATC TTC – Total Transmission Capability FATC – Firm Available Transmission Capability NFATC – Non-firm Available Transmission Capability FGF – Firm Grandfathered firm Transmission Service NFGF – Non-firm Grandfathered Transmission Service ATC_ANNOTATION – Annotation for a change in monthly or yearly posted ATC (no longer used replaced by ZERO_FATC_NARRATIVE, ZERO_NFATC_NARRATIVE, FATC_CHANGE_NARRATIVE, NFATC_CHANGE_NARRATIVE) ZERO_FATC_NARRATIVE – Narrative when a posted firm monthly or yearly ATC value remains unchanged at a value of zero ZERO_NFATC_NARRATIVE – Narrative when a posted non-firm monthly or yearly ATC value remains

				unchanged at a value of zero FATC_CHANGE_NARRATIVE – Narrative when a posted firm monthly or yearly ATC changes as a result of a 10 percent change in TTC/TFC NFATC_CHANGE_NARRATIVE – Narrative when a posted non-firm monthly or yearly ATC changes as a result of a 10 percent change in TTC/TFC ZONE_FORECASTED_LOAD – Anticipated Forecasted Daily Zonal Load SYSTEM_FORECASTED_LOAD – Anticipated Forecasted Daily System-Wide Peak Load
TEMPLATE	TEMPL	1{ALPHANUMERIC}20	Valid name of Template from Business Practice Standard WEQ-002-4.3.1 or from ***list*** OASIS Template	The name of a logical collection of DATA_ELEMENTS in a user's interaction with an OASIS Node.
TS_CLASS	TSCLASS	1{ALPHANUMERIC}20	Valid Values: FIRM NON-FIRM TTC SECONDARY {Registered}	The Transmission Service classes provided. Four are pre-defined, while additional classes can be used if they are registered on www.tsin.com and shown in the Transmission Provider's ***list*** OASIS Template page. SECONDARY is defined as alternate PORs or PODs for POINT_TO_POINT, or as non-designated resources for NETWORK service. TTC is retained as a Valid Value for historical purposes only.
TS_PERIOD	TSPER	1{ALPHANUMERIC}20	Valid Values: ON_PEAK OFF_PEAK FULL_PERIOD	The Transmission Service periods provided. Three are pre-defined, while additional periods can be

			{Registered}	used if they are registered on www.tsin.com and shown in the Transmission Provider's ***list*** OASIS Template.
TS_TYPE	TSTYPE	1{ALPHANUMERIC}20	Valid Values: POINT_TO_POINT NETWORK ATC {Registered}	The Transmission Service types provided. Three are pre- defined, while additional types can be used if they are registered on www.tsin.com and shown in the Transmission Provider's ***list*** OASIS Template. ATC is retained as a Valid Value for historical purposes only.
TS_WINDOW	TSWIND	1{ALPHANUMERIC}20	Valid Values: FIXED SLIDING EXTENDED NEXT_INCREMENT {Registered }	The Transmission Service windows provided. Four are pre-defined, while additional windows can be used if they are registered on www.tsin.com and shown in the Transmission Provider's ***list*** OASIS Template.

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WEQ-013-3 Specific OASIS Template Implementation Pages 47-61

013-2 OASIS TRANSACTION PROCESSING

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a. The ***transrequest*** and ***ancrequest*** OASIS Ttemplates shall be used by the Transmission Customer to enter a transaction request for specific Transmission Services or ancillary services from a specified Seller. All pertinent transaction-specific information must be provided in the OASIS Ttemplate Data Elements.
b. The ***transstatus*** and ***ancstatus*** OASIS Ttemplates shall be used by both Transmission Customer and Seller to query for the current transaction information (e.g., STATUS). Alternatively, the Transmission Customer may request dynamic notification per Business Practice Standard WEQ-002-4.2.10.3 whenever the transaction data is changed.

c. The ***transsell*** and ***ancsell*** OASIS Ttemplates shall be used by the Seller to indicate to the Transmission Customer whether the request is acceptable or not by setting the transaction STATUS to one of **RECEIVED, INVALID, STUDY, COUNTEROFFER, CR_COUNTEROFFER, ACCEPTED, CR_ACCEPTED, REFUSED, SUPERSEDED, DECLINED, DISPLACED, ANNULLED,** or **RETRACTED**. A Transmission Provider as the Seller may use the ***transsell*** *and* ***ancsell*** OASIS Ttemplates to act on requests or may use proprietary software solutions to perform this function in a similar manner.

d. The ***transcust*** and ***anccust*** OASIS T~~t~~emplates shall be used by the Transmission Customer to indicate to the Seller whether they wish to negotiate, confirm or withdraw the transaction by setting the transaction STATUS to one of **REBID, CONFIRMED,** or **WITHDRAWN.**

e. The ***transassign*** and ***ancassign*** OASIS T~~t~~emplates shall be used by the Seller to notify the Transmission Provider of the transfer of rights from the Seller to the Transmission Customer consummated off the OASIS Node.

Exhibit 1 Transaction OASIS Template Usage Diagram

013-2.1 TRANSACTION REQUEST TYPES

The following are the valid OASIS transaction request types (OASIS T~~t~~emplate Data Element REQUEST_TYPE) that may be submitted by the Transmission Customer unless otherwise noted, along with a brief description of their intended use:

013-2.3 BASIC OASIS TRANSACTION HANDLING

Requests to reserve or purchase Transmission Service or ancillary service shall be submitted to OASIS by the Transmission Customer via the ***transrequest*** or ***ancrequest*** OASIS T~~t~~emplates.

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Once successfully submitted on OASIS, the Seller may take any of the following actions via the ***transsell/ancsell*** OASIS T~~t~~emplates:

- Acknowledge receipt by setting STATUS to RECEIVED or STUDY
- Deny the request by setting STATUS to INVALID, DECLINED, or REFUSED
- Approve the request by setting STATUS to ACCEPTED, CR_ACCEPTED, COUNTEROFFER or CR_COUNTEROFFER

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Once the Seller approves the request, the Transmission Customer may take any of the following actions via the ***transcust/anccust*** OASIS T~~t~~emplates:

- Withdraw the request
- Continue negotiation of the request by setting STATUS to REBID
- Complete the request by setting STATUS to CONFIRMED

013-2.4.1 **Displacement – No Right of First Refusal**

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If only a portion of the confirmed reservation's capacity is required to accommodate the higher priority request, the Transmission Provider shall document the recall of reserved capacity from

the lower priority confirmed reservation by incrementing the IMPACTED counter on that reservation and posting on OASIS the amount and time frames over which that reservation's capacity was reduced, i.e., a partial displacement. The Transmission Customer may view all impacts to existing Transmission Service reservations (e.g., partial displacements, secondary sales, etc.) using the ***reduction*** OASIS T~~t~~emplate.

013-2.4.2 **Displacement – With Right of First Refusal**

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If the existing Transmission Customer elects to meet the terms and conditions of the competing request, that Transmission Customer shall submit a new MATCHING reservation request using the ***transrequest*** OASIS T~~t~~emplate. The specific requirements associated with submission of MATCHING requests are detailed in Business Practice Standard WEQ-013-2.6.3.

013-2.5 TRANSMISSION PROVIDER RECALLS

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The Transmission Provider shall provide a mechanism to post on OASIS any such reductions or recalls in reserved capacity. The Transmission Customer shall be notified of any and all such reductions in reserved capacity by the incrementing of the IMPACTED counter in association with those reservations that are reduced; the IMPACTED flag is viewable with the ***transstatus*** OASIS T~~t~~emplate. Specific information regarding the exact nature of each reduction in the reserved capacity under a given Transmission Service reservation shall be posted and viewable with the ***reduction*** OASIS T~~t~~emplate.

A specific example of a Transmission Provider initiated recall of reserved capacity is the implementation of a partial displacement of a Transmission Service reservation. In this instance, the Transmission Customer has not elected (or was not required to be offered) to match the terms of a higher priority, competing request. The Transmission Provider recalls that capacity necessary to accommodate the higher priority request from the existing lower priority reservation. The IMPACTED counter of that reservation is incremented, and a query using the ***reduction*** OASIS T~~t~~emplate for that reservation would show the Transmission Customer the amount and time-frame over which the Transmission Customer's reserved capacity was recalled by the Transmission Provider.

Interruption of Transmission Service, where that interruption directly impacts the rights of the Transmission Customer to schedule any service under that reservation, is another example of an impact to reserved capacity that would be posted as a Transmission Provider initiated recall of reserved capacity. Secondary market sales of Transmission Service rights are not examples of a Transmission Provider initiated recall of reserved capacity, but the impact of any such sales shall also be returned in response to execution of the ***reduction*** OASIS T~~t~~emplate.

The Transmission Provider may elect to post recalls of reserved capacity using the OASIS REQUEST_TYPE of RECALL. Documenting Transmission Provider initiated recalls of capacity with a recall request is optional; posting the impacts of those recalls to be made available under the ***reduction*** OASIS T~~t~~emplate is mandatory. If the recall request is used by

the Transmission Provider, its use must be implemented in compliance with the Business Practices for recall requests.

013-2.6 TRANSACTION SPECIFIC HANDLING

The following Business Practice Standards WEQ-013-2.6.1 through WEQ-013-2.6.4.1 identify specific OASIS Data Elements and processing requirements that must be implemented by OASIS and/or associated back-end support systems. The results of all transaction processing shall be viewable by all appropriate entities via the ***transstatus/ancstatus*** OASIS T~~t~~emplates and corresponding OASIS user interface.

013-2.6.1 **ORIGINAL Requests**

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ROLLOVER_WAIVED	If the Transmission Customer does not wish a Long-Term Firm Point-to-Point Transmission Service request to be evaluated for conveyance of rollover rights, the Transmission Customer must submit the request with the ROLLOVER_WAIVED data element set to 'Y' in the ***transrequest*** OASIS T~~t~~emplate.
CG_STATUS	If the Transmission Customer wishes this request to be a Coordinated Request associated with a Coordinated Group, the Transmission Customer must submit the request with the CG_STATUS data element set to PROPOSED in the ***transrequest*** OASIS T~~t~~emplate.

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The Transmission Customer may submit a time varying profile of capacity as allowed by the Transmission Provider's Business Practice by repeating the OASIS T~~t~~emplate Data Elements of BID_PRICE, CAPACITY_REQUESTED, START_TIME and STOP_TIME in template continuation records. The segments of any submitted profile must not overlap in time.

,…

If the Transmission Customer does not wish a long-term firm PTP Transmission Service request to be evaluated for conveyance of rollover rights, the Transmission Customer must submit the request with the ROLLOVER_WAIVED data element set to Y in the ***transrequest*** OASIS T~~t~~emplate.

If the Transmission Customer wishes this request to be a Coordinated Request associated with a Coordinated Group, the Transmission Customer must submit the request with the CG_STATUS data element set to "PROPOSED" in the ***transrequest*** OASIS Ttemplate. Additional requirements for handling Coordinated Requests are specified in Business Practice Standard WEQ-013-2.6.9.

013-2.6.1.1 Offering of Partial Service

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The Transmission Customer shall recognize the offer of Partial Service by CAPACITY_GRANTED not being equal to CAPACITY_REQUESTED and the request STATUS of COUNTEROFFER or CR_COUNTEROFFER. The Transmission Customer may elect to set the request STATUS to CONFIRM, WITHDRAW, or REBID for the Partial Service using the ***transcust*** OASIS Ttemplate. To rebid for Partial Service the Transmission Customer shall specify the revised START_TIME, STOP_TIME, CAPACITY_REQUESTED and BID_PRICE values and set the request STATUS to REBID using the ***transcust*** OASIS Ttemplate. OASIS shall restrict CAPACITY_REQUESTED on a rebid to not exceed the Seller's most recent CAPACITY_GRANTED over time.

013-2.6.1.2 Negotiation of Price

Negotiation of price is initiated by the Transmission Customer submitting a service request (via ***transrequest/ancrequest*** OASIS Ttemplates) with a BID_PRICE that is different (higher or lower) from the currently posted offer price, or the tariff rate, for that service. The following negotiation process is required where the Seller is the Transmission Provider. Resales or Transfers between Transmission Customers may use this process, but there is no obligation on the (Re)Seller to offer a negotiated rate to other Transmission Customers.

If the Seller determines that the BID_PRICE is acceptable, the following actions must be taken (via ***transsell/ancsell*** OASIS Ttemplates):

- Update the currently posted offer price for the service requested and all other applicable services offered as dictated by current discounting policy (e.g., all unconstrained paths to the same POD) to match BID_PRICE;
- Update the request's NEGOTIATED_PRICE_FLAG to L or H if the BID_PRICE was lower than or higher than, respectively, the posted price when the request was submitted;
- Set the OFFER_PRICE equal to the BID_PRICE;
- Set the CAPACITY_GRANTED appropriately (if left null or undefined, OASIS shall set CAPACITY_GRANTED equal to CAPACITY_REQUESTED when STATUS is set to ACCEPTED or CR_ACCEPTED);
- Set the request STATUS to ACCEPTED or CR_ACCEPTED (or COUNTEROFFER or CR_COUNTEROFFER if offering Partial Service)

The Transmission Customer may then confirm the purchase or withdraw the request by updating the request STATUS (via ***transcust/anccust*** OASIS Ttemplates).

If the Seller determines that the BID_PRICE is unacceptable, and negotiation of price is not going to be entertained, the Seller shall set the request STATUS to DECLINED (via

transsell/ancsell OASIS Ttemplates):

If the Seller elects to enter into price negotiation, the following actions must be taken (via ***transsell/ancsell*** OASIS Ttemplates):

- If the price to be counter offered by the Transmission Provider to the Transmission Customer is different than the currently posted offer price:
  - Update the currently posted offer price for the service requested and all other applicable services offered as dictated by current discounting policy (e.g., all unconstrained paths to the same POD) to match the price to be counteroffered;
  - Update the request's NEGOTIATED_PRICE_FLAG to L or H if the price to be counter offered is lower than or higher than, respectively, the posted price when the request was submitted;
- Set the OFFER_PRICE and CAPACITY_GRANTED appropriately;
- Set the request STATUS to COUNTEROFFER or CR_COUNTEROFFER.

The Transmission Customer may then confirm the purchase, withdraw the request, or propose a new BID_PRICE by performing the following (via ***transcust/anccust*** OASIS Ttemplates):

- Update the request BID_PRICE appropriately;

Set the request STATUS to REBID or CONFIRMED.

013-2.6.1.3 Rollover Rights

For Transmission Services that have ongoing rollover or renewal rights, the Transmission Provider shall document those rights and any limitations over time through the ***rollover*** OASIS Ttemplate Data Elements RENEWAL_DUE_TIME, ROLLOVER_ELIGIBLE, ROLLOVER_START_TIME, ROLLOVER_STOP_TIME, and ROLLOVER_CAPACITY. The Transmission Provider must also flag that the Transmission Service request/reservation has associated rollover rights by setting the ***transstatus*** OASIS Ttemplate PRIMARY_PROVIDER_PROVISIONS Data Element to Y. The ROLLOVER_ELIGIBLE Data Element is equivalent to the Capacity Eligible for Rollover or conveyance of rollover rights to a qualified Redirect on a Firm basis; the ROLLOVER_CAPACITY Data Element is equivalent to the remaining Unexercised Rollover Rights available over time.

Continuation records shall be used if the ROLLOVER_CAPACITY value changes as a function of time by listing each applicable time interval and capacity eligible for rollover/renewal in the ROLLOVER_START_TIME, ROLLOVER_STOP_TIME and ROLLOVER_CAPACITY Data Elements. The first value for ROLLOVER_START_TIME shall be set to the value of the latest STOP_TIME value associated with the request/reservation as shown in the ***transstatus*** OASIS Ttemplate response, (i.e., ***rollover*** OASIS Ttemplate response records begin at the end of the Transmission Service requested/reserved). If there is no limitation on rollover rights, ROLLOVER_STOP_TIME shall be null and the ROLLOVER_CAPACITY shall indicate the capacity eligible for rollover for all future time.

On confirmation of any Renewal request or request to Redirect on a Firm basis with rollover rights, the values for the ROLLOVER_ELIGIBLE, ROLLOVER_START_TIME, ROLLOVER_STOP_TIME, and ROLLOVER_CAPACITY Data Elements shall be updated and returned in response to the ***rollover*** OASIS Ttemplate query.

013-2.6.1.4 CCO

For Transmission Services that are subject to a CCO Reservations, the Transmission Provider shall set the PRIMARY_PROVIDER_PROVISIONS Data Element to Y and provide documentation on the nature of the CCO such that this information may be queried and viewed using the ***cco*** OASIS Ttemplate. Prior to or upon confirming a Transmission Service reservation with a CCO, the Transmission Provider shall make available the information required in the ***cco*** OASIS Ttemplate CONDITIONAL_CURTAILMENT_OPTION, SERVICE_DESCRIPTION and REASSESSMENT_END_TIME_Data Elements. REASSESSMENT_END_TIME must reflect the date and time that the current CCO conditions may be subject to change as a result of a Biennial Reassessment performed by the Transmission Provider. If the CCO Reservation is not subject to a Biennial Reassessment or is shorter than two years in duration, REASSESSMENT_END_TIME shall be null.

If the CCO Reservation is subject to the Number-of-Hours Criteria (CONDITIONAL_CURTAILMENT_OPTION = "HOURS"), the Transmission Provider must indicate the maximum number of actual hours that service may be curtailed at the Conditional Curtailment Priority Level over a specified measurement interval set by the CONDITIONAL_START_TIME/CONDITIONAL_STOP_TIME Data Elements. If there is more than one such interval during the current service period up to the next REASSESSMENT_END_TIME, each such interval shall be returned in ***cco*** OASIS Ttemplate continuation records containing the CONTINUATION_FLAG, ASSIGNMENT_REF, CONDITIONAL_START_TIME, CONDITIONAL_STOP_TIME, MAXIMUM_HOURS and ACCUMULATED_HOURS Data Elements.

The Transmission Provider shall update the ACCUMULATED_HOURS Data Element with the current cumulative number of hours service under the CCO Reservation was actually curtailed at the Conditional Curtailment Priority Level for that interval. Once the accumulation CONDITIONAL_START_TIME/CONDITIONAL_STOP_TIME interval has expired, the final ACCUMULATED_HOURS over that interval shall be retained and returned in the ***cco*** OASIS Ttemplate response as the historical record of Curtailments made against the CCO Reservation over time.

For CCO Reservations subject to Biennial Reassessment, the Transmission Provider shall update any new accumulation interval and/or change in maximum Curtailment hours through the end of the next reassessment interval by updating the REASSESSMENT_END_TIME, CONDITIONAL_START_TIME, CONDITIONAL_STOP_TIME, MAXIMUM_HOURS and ACCUMULATED_HOURS Data Elements returned in the response to a query issued for the ***cco*** OASIS Ttemplate. This information shall be provided at the same time that the reassessment study report is issued to the Transmission Customer,

If the CCO Reservation is subject to the System-Conditions Criteria (CONDITIONAL_CURTAILMENT_OPTION = "CONDITIONS"), the Transmission Provider may, at their option, return information on the accumulated number of hours service was actually curtailed using the corresponding ***cco*** OASIS Ttemplate Data Elements. For these CCO Reservations, the MAXIMUM_HOURS Data Element will be returned as a null value.

Each confirmed PART_ TRANSFER or FULL_TRANSFER reservation made against a CCO Reservation shall also be a CCO Reservation. Upon acceptance of a full Transfer of a CCO Reservation, the Transmission Provider shall set the PRIMARY_PROVIDER_PROVISIONS

Data Element to "Y" for the Transfer, populate the ***cco*** OASIS Ttemplate and assign the ACCUMULATED_HOURS of the Parent Reservation to the Transfer. Each subsequent Curtailment shall be accumulated against the Transfer only. Upon acceptance of a partial Transfer of a CCO Reservation, the Transmission Provider shall set the PRIMARY_PROVIDER_PROVISIONS Data Element to "Y" for the Transfer, populate the ***cco*** OASIS Ttemplate and copy the ACCUMULATED_HOURS of the Parent Reservation to the Transfer. Each subsequent Curtailment shall be accumulated against the Parent Reservation and the Transfer.

If the CCO Reservation is subject to a Resale or a short-term Redirect on a firm basis where the CCO criteria is to be applied to the Redirect service, all Curtailment accounting information shall be accumulated against Parent Reservation which was resold or redirected as if all service scheduled under the resold or redirected reservation(s) were scheduled against the Parent Reservation. The Transmission Provider shall set PRIMARY_PROVIDER_PROVISIONS to "Y" in each confirmed Resale or Redirect, if applicable, reservation made against capacity granted under a CCO Reservation. In response to a query issued for the ***cco*** OASIS Ttemplate, the ***cco*** OASIS Ttemplate response shall be identical for each of the applicable Redirect and/or Resale reservations as that returned for the Parent CCO Reservation.

013-2.6.2 RENEWAL Requests

….

ROLLOVER_WAIVED	If the Transmission Customer does not wish a Long-Term Firm Point-to-Point Transmission Service request to be evaluated for conveyance of rollover rights, the Transmission Customer must submit the request with the ROLLOVER_WAIVED data element set to 'Y' in the ***transrequest*** OASIS Ttemplate.
CG_STATUS	If the Transmission Customer wishes this request to be a Coordinated Request associated with a Coordinated Group, the Transmission Customer must submit the request with the CG_STATUS data element set to PROPOSED in the ***transrequest*** OASIS Ttemplate.

….

If the Transmission Customer does not wish a long-term firm PTP Transmission Service request to be evaluated for conveyance of rollover rights, the Transmission Customer must submit the request with the ROLLOVER_WAIVED Data Element set to 'Y' in the ***transrequest*** OASIS Ttemplate.

If the Transmission Customer wishes this request to be a Coordinated Request associated with a Coordinated Group, the Transmission Customer must submit the request with the CG_STATUS data element set to "PROPOSED" in the ***transrequest*** OASIS Ttemplate. Additional requirements on the handling of Coordinated Requests are specified in Business Practice Standard WEQ-013-2.6.9.

013-2.6.3 MATCHING Requests

….

CG_STATUS	If the Transmission Customer wishes this request to be a Coordinated Request associated with a Coordinated Group, the Transmission Customer must submit the request with the CG_STATUS data element set to PROPOSED in the ***transrequest*** OASIS Ttemplate.

If the Transmission Customer wishes this request to be a Coordinated Request associated with a Coordinated Group, the Transmission Customer must submit the request with the CG_STATUS data element set to "PROPOSED" in the ***transrequest*** OASIS Ttemplate. Additional requirements on the handling of Coordinated Requests are specified in Business Practice Standard WEQ-013-2.6.9.

013-2.6.5.1 Redirect on a Firm Basis

A Transmission Customer holding confirmed firm PTP rights may request the use of those rights on alternate PORs and/or PODs on a firm basis by submission of a Redirect request to the Transmission Provider as Seller. The following information must be submitted by the Transmission Customer in the Redirect request via the ***transrequest*** OASIS Ttemplate.

….

CG_STATUS	If the Transmission Customer wishes this request to be a Coordinated Request associated with a Coordinated Group, the Transmission Customer must submit the request with the CG_STATUS data element set to PROPOSED in the

	transrequest OASIS T~~t~~emplate.

….

The impact of the Redirect transaction on the reservation(s) identified by RELATED_REF shall be posted and viewable using the ***reduction*** OASIS T~~t~~emplate.

OASIS or Transmission Provider procedures shall also apply any outstanding conditions that may exist from the Parent CCO Reservation to the Redirect reservation, if applicable, (e.g., Number-of-Hours Criteria or System-Conditions Criteria) in accordance with Business Practice Standards WEQ-001-21.5.2.2.1 and WEQ-013-2.6.1.4 and any outstanding conditions shall be viewable using the ***cco*** OASIS T~~t~~emplate.

If the Redirect is eligible for the conveyance of rollover/renewal rights, these rights shall be communicated through the ***rollover*** OASIS T~~t~~emplate Data Elements RENEWAL_DUE_TIME, ROLLOVER_ELIGIBLE, ROLLOVER_START_TIME, ROLLOVER_STOP_TIME, and ROLLOVER_CAPACITY. Conveyance of rollover rights to the Redirect request/reservation may have an impact on those rights held on the RELATED_REF reservation. These impacts on the RELATED_REF reservation shall be documented through an update to the ***rollover*** OASIS T~~t~~emplate Data Elements ROLLOVER_ELIGIBLE, ROLLOVER_START_TIME, ROLLOVER_STOP_TIME, and ROLLOVER_CAPACITY associated with the RELATED_REF.

If the Transmission Customer does not wish a firm request to Redirect on a firm basis to be evaluated for conveyance of rollover rights, the Transmission Customer must submit the request with the ROLLOVER_WAIVED Data Element set to 'Y' in the ***transrequest*** OASIS T~~t~~emplate.

If the Transmission Customer wishes this request to be a Coordinated Request associated with a Coordinated Group, the Transmission Customer must submit the request with the CG_STATUS data element set to "PROPOSED" in the ***transrequest*** OASIS T~~t~~emplate. Additional requirements on the handling of Coordinated Requests are specified in Business Practice Standard WEQ-013-2.6.9.

013-2.6.5.2 Redirect on a Non-Firm Basis

A Transmission Customer holding confirmed firm PTP rights may request the use of those rights on alternate PORs and/or PODs on a non-firm basis by submission of a Redirect request to the Transmission Provider as Seller. The following information must be submitted by the Transmission Customer in the Redirect request via the ***transrequest*** OASIS T~~t~~emplate.

….

The impact of the Redirect transaction on the reservation(s) identified by RELATED_REF shall be posted and viewable using the ***reduction*** OASIS T~~t~~emplate.

013-2.6.6 **Relinquish Requests**

The Relinquish request is submitted in association with a Redirect on a non-firm basis to indicate the Transmission Customer's desire to return the capacity rights held on the Redirect to the Parent Reservation specified in the RELATED_REF of that Redirect request. The following are the specific requirements for the Relinquish request submitted via the ***transrequest*** OASIS Ttemplate.

013-2.6.7.1 Resale on OASIS

Resale transactions conducted on OASIS shall adhere to the basic OASIS request processing requirements where the Reseller is identified as the Seller and the Assignee identified as the Transmission Customer.

The Assignee (Transmission Customer) initiates the Resale of scheduling rights by submitting the following required information on OASIS via the ***transrequest*** OASIS Ttemplate. Data Elements not listed are optional. There shall be no requirement imposed by OASIS that the Reseller post any corresponding offer of Transmission Service for sale on that OASIS.

….

The impact of the Resale transaction on the reservation(s) identified by REASSIGNED_REF shall be posted and viewable using the ***reduction*** OASIS Ttemplate.

OASIS or Transmission Provider procedures shall also apply any outstanding conditions that may exist from the Reseller's reservation to the Assignee's reservation (e.g., Number-of-Hours Criteria or System-Conditions Criteria) in accordance with Business Practice Standard WEQ-013-2.6.1.4 and any outstanding conditions shall be viewable using the ***cco*** OASIS Ttemplate.

013-2.6.7.2 RESALE off OASIS

Resale transactions arranged between Reseller and Assignee off OASIS must be documented on OASIS by the Reseller using the ***transassign*** OASIS Ttemplate. Transactions arranged off OASIS do not follow the basic request processing steps and shall be posted directly as confirmed transactions.

….

The impact of the Resale transaction on the reservation(s) identified by REASSIGNED_REF shall be posted and viewable using the ***reduction*** OASIS Ttemplate.

OASIS or Transmission Provider procedures shall also apply any outstanding conditions that may exist from the Reseller's reservation to the Assignee's reservation (e.g., Number-of-Hours Criteria or System-Conditions Criteria) in accordance with Business Practice Standard WEQ-013-2.6.1.4 and any outstanding conditions shall be viewable using the ***cco*** OASIS Ttemplate.

013-2.6.8.1 FULL_TRANSFER - Transfers of All Capacity

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The Transmission Provider may post a FULL_TRANSFER request directly on OASIS on

behalf of the original Transmission Customer and Assignee after confirming the transaction with both parties using the ***transassign*** OASIS Ttemplate. The information required to be posted shall be identical to that posted for FULL_TRANSFERs conducted on OASIS.

On confirmation of the FULL_TRANSFER, the IMPACTED attribute will be incremented for each of the Reseller's reservations referenced by the REASSIGNED_REF Data Elements and the resulting impacts on each REASSIGNED_REF's reserved capacity will be viewable with the ***reduction*** OASIS Ttemplate. OASIS must also update all subordinate Resale, Redirect, etc., transactions impacting the REASSIGNED_REF transaction(s) to reflect the transfer of those obligations to the Assignee under the new FULL_TRANSFER reservation.

013-2.6.8.2 PART_TRANSFER - Transfer of Partial Capacity

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On confirmation of the PART_TRANSFER, the IMPACTED attribute will be incremented for each of the original Transmission Customer's reservations referenced by the REASSIGNED_REF Data Elements and the resulting impacts on each REASSIGNED_REF's reserved capacity will be viewable with the ***reduction*** OASIS Ttemplate.

013-2.6.9 Coordinated Requests

….

First, the Transmission Customer must submit each transmission request to be considered as a Coordinated Request using the ***transrequest*** OASIS Ttemplate with the CG_STATUS data element set to the value of PROPOSED. On successful submission, OASIS shall set the CG_DEADLINE data element to QUEUE_TIME plus 24 hours which may be viewed using the ***transstatus*** OASIS Ttemplate. This deadline timestamp reflects the time the Transmission Customer has to submit all transmission requests for consideration to the various Transmission Providers that service is to be coordinated on, and to identify those requests as a Coordinated Group associated with each individual Coordinated Request. All Coordinated Requests must be submitted with PRECONFIRMED set to YES.

The identity of each Coordinated Request that comprises the Coordinated Group is submitted by the Transmission Customer via the ***cgupdate*** OASIS Ttemplate. One or more Coordinated Requests may be specified in the ***cgupdate*** OASIS Ttemplate submission using continuation records. Multiple submissions of the ***cgupdate*** OASIS Ttemplate may be made on OASIS to successively add additional Coordinated Requests to the Coordinated Group. Up to the CG_DEADLINE timestamp or when the Transmission Customer sets the Coordinated Request CG_STATUS to ATTESTED, the Transmission Customer may add, modify, or delete Coordinated Requests from the Coordinated Group. For a given Coordinated Request on a given Transmission Provider, as identified by the OASIS assigned ASSIGNMENT_REF data element, the Coordinated Group consists of all other Coordinated Requests submitted to the same or other Transmission Provider's within the 24 hour submission deadline. That is, the Coordinated Group associated with a given Coordinated Request will not include that Coordinated Request; submission of a record to the Transmission Provider where the ASSIGNMENT_REF refers to the same request as the CR_PRIMARY_PROVIDER_CODE and CR_ASSIGNMENT_REF data elements will be

returned as an error.

The identification of the Coordinated Requests that comprise the Coordinated Group are added to the group by specifying the request's CR_DISPOSITION with a value of PENDING. A request that has already been added to the Coordinated Group by mistake or that is withdrawn from consideration as a Coordinated Request prior to the CG_DEADLINE may be deleted from the group by submitting the ***cgupdate*** OASIS Ttemplate with the CR_PRIMARY_PROVIDER_CODE and CR_ASSIGNMENT_REF set to refer to the Coordinated Request to be deleted and specifying CR_DISPOSITION with the value of DELETED.

To meet the contiguity requirements for a Coordinated Group, existing reservations may be associated with the Coordinated Group by specifying the CR_DISPOSITION of CONFIRMED on submission of the reservation's identification via the ***cgupdate*** OASIS Ttemplate.

Once all Coordinated Requests are submitted to their respective Transmission Provider's OASIS nodes, and each Coordinated Request has their associated Coordinated Group information set in OASIS, the Transmission Customer must set each Coordinated Request's CG_STATUS to ATTESTED using the ***transcust*** OASIS Ttemplate. This action must be performed prior to expiration of the CG_DEADLINE, and indicates that the Transmission Customer has attested that the Coordinated Group meets the contiguity requirements specified in Business Practice Standard WEQ-001-23.2.1.

013-3 SPECIFIC OASIS TEMPLATE IMPLEMENTATION

013-3.1 REGISTERED OASIS TEMPLATE DATA ELEMENTS

013-3.2 *scheduledetail*

The ***scheduledetail*** OASIS Ttemplate shall be used to query specific information posted by the Transmission Provider related to the scheduled usage of reserved Transmission Service.

….

SECURITY_REF	Optional; If the reliability adjustment was the result of a security event that is posted on OASIS via the ***security*** OASIS Ttemplate, this shall be set to the OASIS unique identifier assigned to that posting
INITIATING_PARTY RESPONSIBLE_PARTY PROCEDURE_NAME PROCEDURE_LEVEL FACILITY_LOCATION FACILITY_NAME FACILITY_CLASS FACILITY_LIMIT_TYPE	Optional; If the reliability adjustment was the result of a security event that is posted on OASIS via the ***security*** OASIS Ttemplate, these Data Elements will be reported as they appear in that associated security event posting

ANNOTATION	

013-3.3 ***systemdata***

The ***systemdata*** OASIS Ttemplate is designed to present time series data in an efficient form. It is an extensible template as the Data Elements SYSTEM_ELEMENT_TYPE and SYSTEM_ATTRIBUTE may take on Transmission Provider specific registered values for posting of data that is not already defined in the OASIS Data Dictionary.

013-3.3.1 ATC Related Query/Response Requirements

….

Posting of ATC component data and narratives via the ***systemdata*** OASIS Ttemplate shall comply with all applicable regulations and Business Practices.

The following are the ***systemdata*** OASIS Ttemplate Data Element requirements for providing ATC component data, i.e., TTC, CBM, FTRM, NFTRM, FATC or NFATC, FGF, or NFGF to the user:

….

The following are the ***systemdata*** OASIS Ttemplate Data Element requirements for providing a brief, but specific, narrative explanation of the reason for a change in the monthly or yearly firm or non-firm ATC value on a constrained Posted Path when the monthly or yearly ATC value changes as a result of a 10 percent or greater change in the related posted TTC or TFC.

….

The following are the ***systemdata*** OASIS Ttemplate Data Element requirements for providing a brief, but specific, narrative associated with yearly or monthly ATC values when either the posted firm or non-firm ATC remains unchanged at a value of zero (0) for six (6) months or longer.

013-3.3.2 **System Load Related Query/Response Requirements**

….

The following table shows an example of the ***systemdata*** OASIS Ttemplate Data Element usage for providing information on load related data:

013-3.4 ***security***

The ***security*** OASIS Ttemplate is used to provide information related to changes in the transmission system that may impact reliability. The bulk of the Data Elements that comprise this template are identified as free-form text in the OASIS Data Dictionary to provide Transmission Providers with flexibility in posting different types of information in a structured fashion compatible with their operations and Business Practices. .Usage of the Data Elements within the ***security*** OASIS Ttemplate for providing information that may be made available by

the Transmission Provider are provided as examples only.

013-3.4.1 Outage Query/Response Requirements

The following is an example of the suggested usage of the ***security*** OASIS Ttemplate Data Elements for providing information related to Transmission Provider posting of outages. Note that posting of transmission related outages on OASIS is at the discretion of the Transmission Provider.

013-3.4.2 Curtailment Event Query/Response Requirements

The following is an example of the suggested usage of the ***security*** OASIS Ttemplate Data Elements for providing information related to Transmission Provider posting of system conditions that may result in the Curtailment or interruption of Transmission Service. The example shown illustrates the data provided for a NERC TLR related event. Note that the actual Curtailment or impact of these events on schedules or Transmission Service reservations will be posted on OASIS and made available via the ***scheduledetail*** or ***reduction*** OASIS Ttemplates.

013-3.5 *transoffering*

The ***transoffering*** OASIS Ttemplate allows the Transmission Customer to selectively query for Transmission Service offers posted by both the Transmission Provider and Resellers. Resellers control how their offerings are presented to the Transmission Customer through the specification of an OFFER_INCREMENT. Transmission Provider postings shall always have OFFER_INCREMENT set equal to SERVICE_INCREMENT.

Transmission Service rights sold by the Reseller must correspond with the original rights acquired from the Transmission Provider. There is, however, no restriction on the term/increment of service that may be resold. The OFFER_INCREMENT Data Element controls when a Resellers capacity posted for Resale will be presented to the Transmission Customer via the ***transoffering*** OASIS Ttemplate.

….

When queried by the Customer with a specified SERVICE_INCREMENT query parameter, OASIS shall return in the ***transoffering*** OASIS Template response all posted offers where SERVICE_INCREMENT or OFFER_INCREMENT matches any of the specified SERVICE_INCREMENT query values.

013-3.6 *transpost/transupdate*

The ***transpost/transupdate*** OASIS Ttemplates allows a Transmission Customer (Reseller) to post or modify an offer to resell their reserved capacity on OASIS in a manner comparable to the offerings posted by the Transmission Provider. The service offered for Resale is dictated by the service held by the Transmission customer as defined in the SERVICE_INCREMENT, TS_CLASS, TS_TYPE, TS_PERIOD, TS_WINDOW, and TS_SUBCLASS Data Elements. However, the Transmission Customer may offer that service in any arbitrary increment of whole hours from hourly, to daily, to monthly, etc.

The OFFER_INCREMENT Data Element controls when the Reseller's Transmission Service offering will be returned to a user submitting the ***transoffering*** OASIS Ttemplate. For example, to post MONTHLY FIRM service reserved from the Transmission Provider as an HOURLY offering, the SERVICE_INCREMENT Data Element will be MONTHLY to correspond to the reserved service being resold and the OFFER_INCREMENT would be submitted as HOURLY. When queried by a user with SERVICE_INCREMENT=HOURLY, the ***transoffering*** OASIS Ttemplate would return all qualifying posted offerings from the Transmission Provider where SERVICE_INCREMENT=HOURLY and any resale offerings posted by Resellers where the OFFER_INCREMENT=HOURLY. To post that monthly capacity on a daily basis, the Reseller would submit another Transmission Service offering specifying the OFFER_INCREMENT=DAILY.

The following table shows the specific template Data Element usage for the ***transpost/transupdate*** OASIS Ttemplates:

013-3.7 ***transstatus***

The ***transstatus*** OASIS Ttemplate provides the Transmission Customer with a view of transactions submitted on OASIS. OASIS shall be responsible for merging any transaction profile data submitted by the Transmission Customer (START_TIME, STOP_TIME, CAPACITY_REQUESTED, and BID_PRICE) or the Seller (START_TIME, STOP_TIME, CAPACITY_GRANTED, and OFFER_PRICE) into a single set of time profile data records consisting of START_TIME, STOP_TIME, CAPACITY_REQUESTED, BID_PRICE, CAPACITY_GRANTED, OFFER_PRICE, and CEILING_PRICE to be returned in the ***transstatus*** OASIS Ttemplate response.

013-3.8 ***reduction***

The ***reduction*** OASIS Ttemplate provides the Transmission Customer with a view of transactions or Transmission Provider actions which impact either the capacity available on a given Transmission Service reservation or the service Curtailment priority in effect for the reservation. Capacity impacts are due to transactions such as Redirects, Resales, Transfers, recalls, etc.; Curtailment priority impacts are due to criteria established in granting long-term firm service where firm Curtailment priority cannot be granted for all periods or under certain specific operating conditions as specified in the Transmission Customer's service agreement.

For a given Transmission Service request, there may never be two ***reduction*** OASIS Ttemplate response records that overlap in time. For any given interval in time, all transactions or Transmission Provider actions that impact the Transmission Service request over that interval shall be returned in one or more continuation records.

….

If the Transmission Provider uses a Transmission Provider specific registered value for REDUCTION_TYPE, the registered value and a full description of how the value is used and the information returned in the ***reduction*** OASIS Ttemplate response must be posted on the Transmission Provider's OASIS Home Page.

An example of the ***reduction*** OASIS Ttemplate response is provided in Business Practice Standard WEQ-013-C Example 8.

Example 4 - Example of Aggregating Purchased Services for Resale using Reassignment

The following examples do not show the complete OASIS Ttemplate information, but only show the values assigned to those Data Elements in the OASIS Ttemplate that are important to the example.

a. Transmission Customer #1, "BestE" requests the purchase of 20 MW DAILY FIRM PTP for May 7th and 8th for $1.00/MWday from Transmission Provider AAA (***transrequest*** OASIS Template).

TEMPLATE=transrequest
CUSTOMER_CODE=BestE (Implied by the registered entity submitting the OASIS Ttemplate)

….

b. Transmission Customer #1 purchases an additional 70 MW of DAILY FIRM PTP on the same path for May 8th for $1.05/MWday (***transrequest*** OASIS Template).
TEMPLATE=transrequest
CUSTOMER_CODE=BestE (Implied by the registered entity submitting the OASIS Ttemplate)

….

c. Transmission Customer #1 becomes Reseller #1 and posts an offer of Transmission Service of 50 MW of their DAILY FIRM PTP rights purchased above for Resale on an Hourly basis on May 8th from 7 a.m. to 11 p.m. at $.90/MW-hour.

TEMPLATE=transpost
SELLER_CODE=BestE (Implied by the registered entity submitting the OASIS Ttemplate)

….

d. Transmission Customer #2 “Whlsle” then requests purchase of 35 MW firm from Reseller #1 from 8 a.m. to 5 p.m. for $0.90/MW-hour (***transrequest*** OASIS Template).

TEMPLATE=transrequest
CUSTOMER_CODE=Whlsle
SELLER_CODE=BestE (Implied by the registered entity submitting the OASIS Ttemplate)

….

e. Seller (Reseller #1) informs the Transmission Provider of the reassignment of the previous Transmission Service rights when the Seller accepts the Transmission Customer purchase request (***transsell*** OASIS Template).

TEMPLATE=transsell

SELLER_CODE=BestE (Implied by the registered entity submitting the OASIS Ttemplate)

Example 5 - File Examples of the Use of Continuation Records

a. **Basic Continuation Records**

The first example of the use of Continuation Records is for the ***transrequest*** OASIS Ttemplate submitted by a Transmission Customer, "MOP" for purchase of a Transmission Service reservation spanning 16 hours from 06:00 to 22:00 with "ramped" demand at beginning and end of time period. Two additional reservation requests are also submitted in this request prior to and following the profile to demonstrate the handling of ASSIGNMENT_REF by the OASIS Node. The last request is for a purchase from a Reseller, "EFG".

….

b. **Submission of Reassignment Information - Case 1:**

In the prior example (last Data Record in ***transrequest*** OASIS Template) a Resale reservation request was submitted to the Reseller "EFG" by the Transmission Customer for 20MW of DAILY FIRM PTP scheduling rights from 04:00 to 16:00. Assume that the Reseller has previously reserved service for the CEF-ECS path for DAILY FIRM PTP in amount of 50 MW on 4/23 under ASSIGNMENT_REF=23877019, and another 10 MW on April 23, 2007, under ASSIGNMENT_REF=23877880. Reseller must designate which Transmission Service rights are to be reassigned to Transmission Customer to satisfy the 20MW from 04:00 to 16:00. This reassignment information is conveyed by Reseller using the ***transsell*** OASIS Ttemplate when the reservation request is accepted. At the Seller's discretion, rights are assigned for the first four hours of the Resale from the first reservation (ASSIGNMENT_REF=23877019). The balance of the Resale is supported by 10 MWs from the second reservation first (ASSIGNMENT_REF=23877880) with the balance taken up by the first reservation (ASSIGNMENT_REF=23877019). This split of reassignment information is conveyed in "continuation" records via the ***transsell*** OASIS Ttemplate Data Elements REASSIGNED_REF, REASSIGNED_CAPACITY, REASSIGNED_START_TIME, and REASSIGNED_STOP_TIME.

….

c. **Submission of Reassignment Information - Case 2:**

If the Resale transaction from the previous example were conducted off-OASIS, the Seller, "EFG", would use the ***transassign*** OASIS Ttemplate to post the transaction to OASIS.

….

d. **Query of Transmission Service Reservation Status:**

The following is a hypothetical response to a ***transstatus*** OASIS Template query that might be delivered for reservations starting on April 23, 2007.

Example 6 - Examples of Negotiation of Price and Partial Service Offer

Example 6a - Negotiation with Preconfirmation

a. The Transmission Customer submits a preconfirmed Transmission Service request using the ***transrequest*** OASIS Ttemplate. Initially, the STATUS is set to QUEUED by the OASIS Node.

b. The Seller has the option of setting STATUS via the ***transsell*** OASIS Ttemplate to one of the following: INVALID, RECEIVED, STUDY, COUNTEROFFER, CR_COUNTEROFFER, ACCEPTED, CR_ACCEPTED, DECLINED, or REFUSED.

c. The Seller has the option of entering a CAPACITY_GRANTED and setting the STATUS to COUNTEROFFER or CR_COUNTEROFFER via the ***transell*** OASIS Ttemplate if the Seller can only provide Partial Service.

d. If the Seller sets STATUS to ACCEPTED or CR_ACCEPTED (and, as required by Business Practice Standard WEQ-013-2.2, the OASIS Node forces the Seller to set OFFER_PRICE equal to BID_PRICE as a condition to setting STATUS to ACCEPTED or CR_ACCEPTED) and CAPACITY_GRANTED is equal to CAPACITY_REQUESTED, the OASIS Node will immediately set STATUS to CONFIRMED, except where the STATUS is CR_ACCEPTED the OASIS Node shall wait to set the transaction's STATUS to CONFIRMED. (Business Practice Standard WEQ-013-2.2 requires the OASIS Node to set a null CAPACITY_GRANTED equal to CAPACITY_REQUESTED when STATUS is set to ACCEPTED or CR_ACCEPTED.)

e. The Transmission Customer may withdraw request via ***transcust*** OASIS Ttemplate at any time up to point where the Seller sets STATUS to ACCEPTED or CR_ACCEPTED.

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

Example 6b - Negotiations without Preconfirmation

a. The Transmission Customer submits a Transmission Service reservation request with the BID_PRICE less than the CEILING_PRICE via the ***transrequest*** OASIS Ttemplate. Initially the STATUS is set to QUEUED by the OASIS Node.

b. The Seller has the option of setting the STATUS via the ***transsell*** OASIS Ttemplate to one of the following: INVALID, RECEIVED, STUDY, ACCEPTED, DECLINED, COUNTEROFFER, or REFUSED. If the STATUS is set to INVALID (due to invalid entries in the request), DECLINED (due to the Seller determining that the proposed price is not acceptable and further negotiations are not desired), or REFUSED (due to the unavailability of the requested service), the Transmission Service reservation request is terminated.

c. The Seller has the option of entering a CAPACITY_GRANTED and setting the STATUS to COUNTEROFFER via the ***transell*** OASIS Ttemplate if the Seller can only provide Partial Service.

d. If the Seller set the STATUS to RECEIVED or STUDY, and determines that the BID_PRICE is too low, the Seller sets the OFFER_PRICE to the price desired, and sets the STATUS to COUNTEROFFER via the ***transsell*** OASIS T~~t~~emplate.

e. The Transmission Customer agrees to the OFFER_PRICE, sets the BID_PRICE equal to the OFFER_PRICE, and sets the STATUS to CONFIRMED via the ***transcust*** OASIS T~~t~~emplate.

f. The OFFER_PRICE and CAPACITY_GRANTED with the STATUS of CONFIRMED locks in the terms of the reservation.

Example 6c - Multiple Step Negotiations

a. The Transmission Customer submits a Transmission Service reservation request with the BID_PRICE less than the CEILING_PRICE via the ***transrequest*** OASIS T~~t~~emplate. Initially the STATUS is set to QUEUED by the OASIS Node.

b. The Seller has the option of setting the STATUS via the ***transsell*** OASIS T~~t~~emplate to one of the following: INVALID, RECEIVED, STUDY, ACCEPTED, CR_ACCEPTED, DECLINED, COUNTEROFFER, CR_COUNTEROFFER, or REFUSED. If the STATUS is set to INVALID, DECLINED, or REFUSED, the Transmission Service reservation request is terminated.

c. The Seller has the option of entering a CAPACITY_GRANTED and setting the STATUS to COUNTEROFFER or CR_COUNTEROFFER via the ***transell*** OASIS T~~t~~emplate if the Seller can only provide Partial Service. If ATC changes before the request reaches the STATUS of CONFIRMED, Seller may change the CAPACITY_GRANTED.

d. The Seller determines that the BID_PRICE is too low, sets the OFFER_PRICE to the desired value, and sets the STATUS to COUNTEROFFER or CR_COUNTEROFFER via the ***transsell*** OASIS T~~t~~emplate.

e. The Transmission Customer responds to the new OFFER_PRICE with an updated BID_PRICE and sets the STATUS to REBID for re-evaluation by the Seller.

f. The Seller determines that the BID_PRICE now is acceptable, and sets the STATUS to ACCEPTED or CR_ACCEPTED via the ***transsell*** OASIS T~~t~~emplate. The transition to ACCEPTED or CR_ACCEPTED state requires the OFFER_PRICE to be set to the BID_PRICE: accepting a reservation with an OFFER_PRICE different from BID_PRICE would require the STATUS be set to COUNTEROFFER or CR_COUNTEROFFER rather than ACCEPTED or CR_ACCEPTED (see Business Practice Standard WEQ-013-4.1.6.3.c).

g. The Transmission Customer agrees to the OFFER_PRICE and sets the STATUS to CONFIRM via the ***transcust*** OASIS T~~t~~emplate.

h. The OFFER_PRICE and CAPACITY_GRANTED with the STATUS as CONFIRMED locks in the terms of the reservation.

Example 6d - Negotiations Declined by Seller

a. The Transmission Customer submits a Transmission Service reservation request with the BID_PRICE less than the CEILING_PRICE via the ***transrequest*** OASIS Template. Initially the STATUS is set to QUEUED by the OASIS Node.

b. The Seller has the option of setting the STATUS via the ***transsell*** OASIS Template to one of the following: INVALID, RECEIVED, STUDY, ACCEPTED, CR_ACCEPTED, DECLINED, COUNTEROFFER, CR_COUNTEROFFER, or REFUSED. If the STATUS is set to INVALID, DECLINED, or REFUSED, the Transmission Service reservation request is terminated.

c. The Seller determines that the BID_PRICE is too low, sets OFFER_PRICE to his desired value, and sets STATUS to COUNTEROFFER or CR_COUNTEROFFER via the ***transsell*** OASIS Template.

d. The Transmission Customer responds to OFFER_PRICE with updated BID_PRICE and sets the STATUS to REBID via the ***transcust*** OASIS Template for re-evaluation by Seller.

e. The Seller breaks off all further negotiations by setting the STATUS to DECLINED, indicating that the price is unacceptable and that he does not wish to continue negotiations.

Example 6e - Negotiations Withdrawn by Transmission Customer

a. The Transmission Customer submits a Transmission Service reservation request with the BID_PRICE less than the CEILING_PRICE via the ***transrequest*** OASIS Template. Initially the STATUS is set to QUEUED by the OASIS Node.

b. The Seller has the option of setting the STATUS via the ***transsell*** OASIS Template to one of the following: INVALID, RECEIVED, STUDY, ACCEPTED, CR_ACCEPTED, DECLINED, COUNTEROFFER, CR_COUNTEROFFER, or REFUSED. If the STATUS is set to INVALID, DECLINED, or REFUSED, the Transmission Service reservation request is terminated.

c. The Seller has the option of entering a CAPACITY_GRANTED and setting the STATUS to COUNTEROFFER or CR_COUNTEROFFER via the ***transell*** OASIS Template if the Seller can only provide Partial Service.

d. The Seller determines that the BID_PRICE is too low, sets the OFFER_PRICE to his desired value, and sets the STATUS to COUNTEROFFER or CR_COUNTEROFFER via the ***transsell*** OASIS Template.

e. The Transmission Customer responds to the OFFER_PRICE with an updated BID_PRICE and sets the STATUS to REBID for re-evaluation by Seller.

f. The Seller determines that the BID_PRICE is still too low, sets the OFFER_PRICE to

another value, and sets STATUS to COUNTEROFFER or CR_COUNTEROFFER via the ***transsell*** OASIS T~~t~~emplate.

g. The Transmission Customer breaks off all further negotiations, either because the OFFER_PRICE or CAPACITY_GRANTED are unacceptable, by setting STATUS to WITHDRAWN (or the Transmission Customer/Seller could go through additional iterations of REBID/COUNTEROFFER/CR_COUNTEROFFER until negotiations are broken off or the reservation is confirmed).

Example 6f - Negotiations Superseded by Higher Priority Reservation

a. The Transmission Customer submits a Transmission Service reservation request with the BID_PRICE less than the CEILING_PRICE via the ***transrequest*** OASIS T~~t~~emplate. Initially the STATUS is set to QUEUED by the OASIS Node.

b. The Seller has the option of setting the STATUS via the ***transsell*** OASIS T~~t~~emplate to one of the following: INVALID, RECEIVED, STUDY, ACCEPTED, CR_ACCEPTED, DECLINED, COUNTEROFFER, CR_COUNTEROFFER, or REFUSED. If the STATUS is set to INVALID, DECLINED, or REFUSED, the Transmission Service reservation request is terminated.

c. If the Seller determines that another reservation has higher priority and must displace this request, he sets the STATUS of this request to SUPERSEDED and the negotiations are terminated.

d. However, if desired and permitted by the tariff, the Seller may set the STATUS of a request in any of these previous states (including COUNTEROFFER, CR_COUNTEROFFER, ACCEPTED, and CR_ACCEPTED) to COUNTEROFFER or CR_COUNTEROFFER with an OFFER_PRICE which could avoid the request being superseded, thus allowing the Transmission Customer the choice of being SUPERSEDED or accepting the proposed OFFER_PRICE.

Example 7 - Audit OASIS Template Examples

The following examples are included to show the general type of audit report responses that could be expected to be returned by implementations of the audit reporting OASIS T~~t~~emplates as documented above.

….

Example 7b – Reservations

….

First, this example shows the handling of continuation records which conveyed a time varying demand of 50 MW on August 1, 2007, 75 MW on August 18, 2007, and 100 MW on August 19, 2007. This demand profile was initially entered with the original reservation request (***transrequest*** OASIS T~~t~~emplate) at 12:15 on August 15, 2007, by Alan Trader.

Example 8 - Reservation Reductions

The following is an example of the ***reduction*** ***OASIS T***~~t~~emplate response format for a reservation, 123456, for one day of service at 50 MWs. Assume that 1) the Transmission Customer has redirected 20 MWs for that day on reservation 987654, 2) resold 10 MWs during the off-peak hours on reservation 345678, and 3) had service starting at 16:00 reduced in priority for two hours.

5. Reason for of Minor Correction/Clarification:

To make consistency changes to the NAESB OASIS Business Practice Standards.

Appendix 5 – NAESB WEQ Executive Committee Meeting Minutes
Approving NAESB Wholesale Electric Quadrant Minor Corrections
December 20, 2012

Appendix 5 contains the meeting minutes of the NAESB Wholesale Electric Quadrant Executive Committee and the action taken by the Wholesale Electric Quadrant Executive Committee to approve the following minor corrections:

Appendix No.	**NAESB WEQ Executive Committee Meeting Minutes**
Appendix 5	MC12032, MC12034, MC12035 and MC12036 as approved by the WEQ Executive Committee on October 23, 2012. Meeting Minutes: http://www.naesb.org/weq/weq_ec.asp

Appendix 6 – Notice to WEQ Members of Executive Committee Adoption of Minor Corrections
December 20, 2012

Appendix 6 contains the correspondence sent to all Wholesale Electric Quadrant members notifying them of the Executive Committee action taken on the minor corrections, requesting comments that opposed the minor corrections, and informing them of future actions and timelines related to the minor corrections.

Appendix No.	**Correspondence/Notice**
Appendix 6	Minor Corrections MC12032, MC12034, MC12035 and MC12036 – Request for Comments due November 12, 2012: http://www.naesb.org/pdf4/weq_mc103012reqcom.doc No Comments Received

Appendix 7 contains the excerpt from the NAESB Operating Procedures detailing the procedures to be followed for minor clarifications and corrections to existing NAESB WEQ Business Practice Standards.

Procedures for Minor Corrections as excerpted from the NAESB Operating Procedures

D. Minor Clarifications and Corrections to Standards

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

1. Processing of Requests

The executive director shall promptly notify the EC and any appropriate subcommittee(s) of the receipt of the request. The members of the applicable quadrant's EC shall promptly determine whether the request meets the definition of a minor clarification or correction. Through the decision of the vice chair of the applicable quadrant, this determination may be delegated to one of the quadrant's subcommittees, with the concurrence of the subcommittee chair, in which case the subcommittee shall make a prompt decision.

If the request is determined to meet the definition of minor clarification or correction, the applicable quadrant's EC, with input from any subcommittee(s) to which the request has been forwarded, shall act on the request within one month of its receipt. A meeting to discuss the request is not required; the decision may be made by notational vote. A simple majority of the votes received shall determine the outcome. The members of the applicable quadrant's EC shall be given at least three working days to consider and vote on the request.

2. Public Notice

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

3. Final Disposition of Approved Requests

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

review process of publication of a new version and are categorized as clarifications under (b) or (c) above[2], the proposed effective date may be (i) two weeks from the date of public notice, following simple majority approval by the applicable Quadrant(s) EC(s) of the shortened effective date, or (ii) one month from the date of the public notice For all others, the proposed effective date of the minor clarification or correction shall normally be one month from the date of the public notice upon simple majority approval of the applicable Quadrant(s) EC(s).

[2] Minor clarifications and corrections to existing standards include: (a) clarifications or corrections made by a regulatory agency to standards that are of a jurisdictional nature, or by the American National Standards Institute or its successor; (b) clarifications or corrections to the format, appearance, or descriptions of standards in standards documentation; (c) clarifications or corrections to add code values to tables; and (d) clarifications and corrections that do not materially change a standard.

NORTH AMERICAN ENERGY STANDARDS BOARD
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January 29, 2013
Filed Electronically

Ms. Kimberly Bose
Secretary
Federal Energy Regulatory Commission
888 First Street N.E., Room 1A
Washington, D.C. 20585

RE: Submittal of Modifications to the NAESB Public Key Infrastructure Standards and Other Standards to support the Public Key Infrastructure (Docket Nos. RM05-5-000 and RM05-5-022)

Dear Ms. Bose:

The North American Energy Standards Board ("NAESB") herewith submits this report to the Federal Energy Regulatory Commission ("FERC" or "Commission") regarding modifications to the NAESB Public Key Infrastructure ("PKI") standards ("WEQ-012") and other related standards to support WEQ-012. These standards modifications are the result of the effort described in the "North American Energy Standards Board Status Report to FERC Regarding Public Key Infrastructure (PKI) Efforts" (Docket Nos. RM05-5-000 and RM05-5-022) filed with the Commission on November 30, 2012.[1] The standards modifications included in this report affect the NAESB WEQ-012 PKI standards, NAESB WEQ-000 Abbreviations, Acronyms, and Definition of Terms, the NAESB WEQ-001 Open Access Same-time Information Systems (OASIS) standards, the NAESB WEQ-002 OASIS Standards and Communication Protocols standards, the NAESB WEQ-003 OASIS Data Dictionary standards, the NAESB WEQ-004 Coordinate Interchange standards and the NAESB WEQ-013 OASIS Implementation Guide. In addition, to support the PKI standards development effort, modifications were made to the NAESB WEQ-013 OASIS Implementation Guide the NAESB Electronic Tagging Functional Specification and the NAESB Accreditation Requirements for Certification Authorities Specification and the NAESB Authorized Certification Authority Process were created. The final standards modifications developed as part of the effort were ratified by the membership on December 27, 2012.[2] We are extremely appreciative of the time, knowledge and industry leadership provided by all participants, both members and non-members that contributed to the development of these standards.

The cover letter, report and enclosures are being filed electronically in Adobe Acrobat® Print Document Format (.pdf). All of the documents are 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 PKI standards or any other NAESB work products.

Respectfully submitted,

Rae McQuade

Ms. Rae McQuade
President & COO, North American Energy Standards Board

[1] North American Energy Standard Board Status Report to FERC Regarding Public Key Infrastructure (PKI) Efforts (Docket No. RM05-5-022), *available at*: http://www.naesb.org/pdf4/ferc113012_naesb_pki.pdf (submitted November 30, 2012).

[2] The NAESB standards referenced in this report are reasonably available to the public through multiple methods. To access the standards at no cost, NAESB will provide a limited copyright waiver for evaluation purposes using a software product called Lock Lizard (http://www.locklizard.com). To request a waiver, please contact the NAESB office or follow the instructions in the following document: http://www.naesb.org/pdf/ordrform.pdf.

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cc with 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 R. 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 Commission
Mr. David Morenoff, Acting General Counsel, Federal Energy Regulatory Commission

Mr. Mason Emnett, Associate Director, Office of Energy Policy and Innovation, 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

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, Standards, North American Electric Reliability Corporation

Enclosures (all documents noted in the appendices are available publicly on the NAESB web site – www.naesb.org):

Appendix A	NAESB WEQ Public Key Infrastructure (PKI) Subcommittee, NAESB WEQ OASIS Subcommittee and NAESB Joint Electric Scheduling Subcommittee Meeting Minutes Links
Appendix B	Executive Committee Meeting Minutes, Comments, Voting Records Links and Availability of Transcripts
Appendix C	Ratification Ballots and Results Links
Appendix D	2012 Wholesale Electric Quadrant Annual Plan
Appendix E	NAESB Process for Standards Development

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Standards for Business Practice and Communication Protocols for Public Utilities	**)** **)** **)**	**Docket No. RM05-5-000** **Docket No. RM05-5-022**

REPORT OF THE NORTH AMERICAN ENERGY STANDARDS BOARD

The North American Energy Standards Board ("NAESB") is voluntarily submitting this report to the Federal Energy Regulatory Commission ("FERC" or the "Commission") in the above referenced docket to inform the Commission of the finalization of the standards development effort described in the "North American Energy Standards Board Status Report to FERC Regarding Public Key Infrastructure ("PKI") Efforts" (Docket Nos. RM05-5-000 and RM05-5-022) filed with the Commission on November 30, 2012.[1] The report includes a summary of the changes that resulted from this effort to the Version 003 of the NAESB Wholesale Electric Quadrant ("WEQ") business practice standards that were filed with Commission on September 18, 2012.[2] The standards can be downloaded from the NAESB home page (www.naesb.org).[3]

As noted in the November 30, 2012 status report, the NAESB PKI standards development effort has not only resulted in revisions to the NAESB WEQ-012 PKI standards but additionally includes several modifications to NAESB WEQ-000 (Abbreviations, Acronyms, and Definition of Terms), the NAESB WEQ-001 (Open Access Same-time Information Systems (OASIS)) standards, the NAESB WEQ-002 (OASIS Standard and Communication Protocols) standards, the NAESB WEQ-003 (OASIS Data Dictionary) standards, the NAESB WEQ-004 (Coordinate Interchange) standards and NAESB WEQ-013 (OASIS Implementation Guide). These additional modifications were undertaken as part of the NAESB full staffing process[4] at the request of the Wholesale Electric Quadrant ("WEQ") Executive Committee and were coordinated between the NAESB PKI Subcommittee and the OASIS Subcommittee and Joint Electric Scheduling Subcommittee ("JESS") in the last quarter of 2012. The full staffing process was employed to ensure that the applicability of the WEQ-012 PKI standards to specific business transactions had been fully defined and that the modifications necessary to enable a standard and consistent method for secured access to OASIS and e-Tag applications through a PKI security scheme had been established and is present in the NAESB standards.

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[1] North American Energy Standard Board Status Report to FERC Regarding Public Key Infrastructure (PKI) Efforts (Docket No. RM05-5-022), *available at*: http://www.naesb.org/pdf4/ferc113012_naesb_pki.pdf (submitted November 30, 2012).

[2] North American Energy Standards Board – Version 003 of the NAESB Wholesale Electric Quadrant Business Practice Standards (Docket No. RM05-5-022), *available at*: http://www.naesb.org/pdf4/ferc_091812_weq_version003_report.pdf (submitted September 18, 2012).

[3] The NAESB standards referenced in this report are reasonably available to the public through multiple methods. To access the standards at no cost, NAESB will provide a limited copyright waiver for evaluation purposes using a software product called Lock Lizard (http://www.locklizard.com). To request a waiver, please contact the NAESB office or follow the instructions in the following document: http://www.naesb.org/pdf/ordrform.pdf

[4] NAESB Full Staffing Process, *available at*: http://www.naesb.org/misc/full_staffing_description.docx.

In addition to the modifications to the NAESB standards noted above, actions on supporting specifications, and other documentation had to be taken to implement the WEQ-012 PKI standards and initiate a PKI security scheme. These actions included the creation of the NAESB Authorized Certification Authority Process[5] adopted by the Board of Directors on September 22, 2011, with revisions adopted on September 20, 2012, the creation of the NAESB Accreditation Requirements for Authorized Certification Authorities Specification ("Accreditation Specification") approved by the WEQ Executive Committee on August 21, 2012,[6] and adoption of modifications to the Electronic Tagging Functional Specification Version 1.8.1.[7] While these actions were necessary to support the WEQ-012 PKI standards and a PKI security scheme for certain business transactions, these documents are not included in this report, as they were not adopted as NAESB standards. A description of these supporting documents and the modifications made to existing documents in support of the NAESB PKI effort has been provided in the November 30, 2012 report to the Commission.

As stated in the report,

> "The existing WEQ-012 standards developed in 2006 and adopted by the Commission in 2008,[8] were drafted to provide cybersecurity standards for use in commercial transactions – namely OASIS based transactions, and to support the transition of the North American Electric Reliability Corporation ("NERC") Transmission System Information Network ("TSIN") registry from NERC to NAESB. The registry is a tool that serves as a central repository of information required for commercial transactions involving the scheduling of power through electronic tagging in the e-Tag system. Through discussions between NERC and NAESB leadership, it was determined that the registry would be more appropriately maintained by NAESB given the tool's commercial function. After an extended period of planning, NERC and NAESB, through the JESS subcommittee, drafted a functional specification for the development of the Electric Industry Registry ("EIR"), which would serve as the tool to replace the NERC TSIN, and issued a request for proposal[9] for an EIR registry administrator to facilitate the transition. After evaluating the proposal, the NAESB Managing Committee and NERC leadership selected Open Access Technology International, Inc. ("OATI") to serve as the registry administrator in the summer of 2010.
>
> A requirement of the functional specification for the EIR was that it employ a PKI security scheme, which necessitates the use of digital certificates issued by certification authorities. To facilitate the transfer, NAESB leadership recognized that action would need to be taken to develop

[5] NAESB Authorized Certification Authority Process, *available at*: http://www.naesb.org/pdf4/certification_process.docx (adopted September 20, 2012)

[6] NAESB Accreditation Requirements for Authorized Certification Authorities Specification, *available at*: http://www.naesb.org/pdf4/certification_specifications.docx (adopted August 21, 2012)

[7] NAESB WEQ Electronic Tagging Functional Specification, Version 1.8.1.1, *available at*: http://www.naesb.org/member_login_check.asp?doc=weq_etag_specification_v1811_112712.pdf (adopted November 27, 2012)

[8] The FERC adopted NAESB standards in FERC Order No. 676-C on July 21, 2008 and the order can be access from the FERC web site or through this link: http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20080721-3055

[9] Request for Proposal, *available at*: http://www.naesb.org/pdf4/tsin_registry_rfp_022210.pdf

> a program to approve certificate authorities as NAESB Authorized Certification Authorities ("ACA") and to modify the WEQ-012 PKI standards to reflect updates to technology and current market conditions related to the secure transfer of information. To accomplish this, the NAESB Board Certification Program Committee was reactivated in April 2011 to develop a program for the authorization of certificate authorities and the WEQ EC [Executive Committee] created the PKI Subcommittee in August 2011 to review and revise the WEQ-012 PKI standards."

These activities have led to the creation and modification of the supporting documents listed above, as wells as, modifications to the NAESB WEQ-000, WEQ-001, WEQ-002, WEQ-003, WEQ-004, WEQ-012 and WEQ-013 standards that are the subject of this report.

Background Information

NAESB's efforts to craft cyber-security standards for the WEQ were founded in an initiative of the OASIS Standards Collaborative started in 2001 to bring an open, multi-vendor, interoperable method for authentication of access to industry software applications. Initially, the scope was limited to securing access to the OASIS and electronic tagging applications; however, it was anticipated that other industry applications, such as regional energy markets, might leverage this infrastructure to provide a standardized method for securing cyber-assets. The key to this initiative was the establishment of a standard set of requirements for the issuance of electronic digital certificates used to authenticate a user's identity. It was intended that a user with an electronic certificate from a given issuing certification authority, be able to use that trusted certificate across all OASIS and electronic tagging implementations and not require transmission customers to acquire and manage multiple credentials from different sources, as may be required by each individual OASIS node or electronic tagging service for secured access. Without the establishment of clear requirements that must be met by any issuer of digital certificates, that trust could not be attained across the industry.

With the advent of open standards for implementation of OASIS and e-Tag services, the need for a single common repository, the EIR (originally the NERC TSIN registry), was recognized to facilitate all market participants' management and use of the information required to conduct wholesale electric transactions through OASIS.[10] Without the EIR, market participants would have been required to gather and maintain information from multiple sources, possibly in varied electronic or non-electronic formats, in order to conduct business and schedule energy deliveries across the interconnected electric transmission system. The information in the EIR is key to the exchange of data in the electric industry and clearly must be protected from potential fraudulent or malicious entry or modification of data.

Given the importance and inter-play of OASIS, electronic tagging, and the EIR, a common PKI standard used to secure access was deemed a significant benefit over simple user name and password authentication in common use. This PKI program provides assurance that the party initiating a data exchange is positively identified by their electronic certificate, the data exchanged is encrypted and unaltered in transit, and provides the initiating

[10] Open Access Same-Time Information System and Standards of Conduct, 18 C.F.R. 37.5 (2000); 65 Fed. Reg. 17370, 17377 (March 31, 2000).

party assurance that the counter-party is the intended recipient of the information exchanged, through mutual authentication. This mutual authentication process allows two entities or computers, in this case, the end entity and the service provider operating the system, to authenticate their identities to one another through challenge-response protocols. The standards that follow support a public/private key cryptography security system that has been endorsed by the industry.

NAESB WEQ-012 PKI Standards Modifications

The WEQ-012 PKI standards modifications were developed by the PKI Subcommittee over the course of 10 months from September 2011 to July 2012 through sixteen meetings and conference calls. As explained in the November 30, 2012 status report, the previous version of the WEQ-012 PKI standards were revised to redact requirements that are specifically applicable to certificate authorities and to update the content of the standards to incorporate technological advancements that have taken place since the standards' adoption in 2006. The WEQ-012 PKI standards as revised and included in this report are intended to apply to end entities implementing PKI transactions, which can include utilities and independent grid operators/regional transmission organizations ("ISOs/RTOs"). The requirements included in the previous version of the WEQ-012 PKI standards that are applicable to certificate authorities have been removed and incorporated into the NAESB Accreditation Specification. This direction was pursued by the PKI Subcommittee for two purposes; first to clarify responsibilities and obligations between end entities and service providers, in recognition that certificate authorities are not typically utilities or ISOs/RTOs and are normally vendors or service providers; and second, to ensure that modifications to the Accreditation Specification that may be needed in response to a security threat may be expedited by employing the NAESB process for adoption of specifications. The revised WEQ-012 PKI standards describe the minimum authentication requirements that end entities must meet when conducting transactions under the NAESB Business Practice Standards defined in WEQ-001, WEQ-002, WEQ-003, WEQ-004 and WEQ-013. The standards also require that end entities engaged in activities required by the WEQ-012 PKI standards be registered in the NAESB EIR and engage certificates issues by a NAESB approved ACA. These standards modifications were adopted by the WEQ Executive Committee on August 21, 2012 and were ratified by the membership on October 4, 2012.

NAESB WEQ-000 and WEQ-002 Standards Modifications

During the August 21, 2012 WEQ Executive Committee meeting, the Executive Committee members directed the JESS and OASIS Subcommittee to work jointly with the PKI Subcommittee to determine what modifications to the OASIS suite of standards and the Coordinate Interchange standards would be necessary to implement the WEQ-012 standard and provide a method for secured access to OASIS and Electronic Tagging (e-Tag) applications. To meet the directives of the Executive Committee, the OASIS Subcommittee met jointly with the PKI Subcommittee over the course of two meetings to adopt a recommendation proposing modifications to WEQ-000 and WEQ-002. The recommendation provided technical standards that support the implementation of WEQ-012 and requires transmission service information providers to verify certain information through the Electric Industry Registry before establishing a valid user account on OASIS and specifies that a subscriber maintain a digital certificate issued by a NAESB ACA. The recommendation also updated the WEQ-002 standards to reflect

the transfer of the NERC TSIN registry to the NAESB EIR and proposed that the two acronyms be added to WEQ-000 to support the standards. The WEQ Executive Committee considered and approved the recommendation, as revised during the meeting in response to the comments, on October 23, 2012 and the recommendation was ratified by the membership on November 28, 2012.

NAESB WEQ-001, WEQ-003 and WEQ-004 Standards Modifications

Also in response to the August 21, 2012 directive from the NAESB WEQ Executive Committee, The JESS met jointly with the PKI Subcommittee over the course of three meetings to develop a recommendation which proposed the addition of a single standard to WEQ-004 which requires all e-Tag communications be secured using digital certificates issued by a NAESB ACA in accordance with the WEQ-012 standards. This recommendation was posted for a thirty day formal comment period and received a single set of comments that noted that non-substantive consistency changes would need to be made to a number of other standards to reflect the adoption of the updated 1.8.1.1 version of the Electronic Tagging Functional Specification. In response, the JESS provided a set of late comments proposing consistency modifications to WEQ-000, WEQ-001, WEQ-002, WEQ-003 and a modification to WEQ-013. The WEQ Executive Committee adopted the recommendation as proposed in the late comments of the JESS on November 27, 2012 and the standards modifications were ratified by the membership on December 28, 2012.

Supporting Documentation

As previously noted, the WEQ-012 PKI standards apply to utilities and ISOs/RTOs, and may apply to other end entities seeking use of PKI security. There are three sets of documentation that provide context and support for the WEQ-012 PKI standards and related standards modifications (WEQ-000, WEQ-001, WEQ-002, WEQ-003, WEQ-004 and WEQ-013): (1) Electronic Tagging Functional Specification 1.8.1.1, (2) Accreditation Specification, and (3) NAESB ACA Process. These documents are not considered standards by NAESB but were all amended or created in 2012 to support the WEQ-012 PKI standards:

- The Electronic Tagging Functional Specification 1.8.1.1 was modified and adopted by the WEQ Executive Committee on November 27, 2012 to support the WEQ-012 PKI standards and secured data exchange between e-Tag services.
- The Accreditation Specification applies to entities seeking to become a NAESB approved ACA, which to this date, has not been a utility or ISO/RTO – the typical ACA in this context is a service provider to the energy market. However, utilities or ISO/RTO are not precluded from becoming a NAESB approved ACA should they so choose. The Accreditation Specification describes the requirements of certificates that are to be issued by ACAs and includes the object identifiers specifying the assurance level of each certificate provided by the American National Standard Institute.
- The NAESB ACA Process defines how a certificate authority may become a NAESB approved ACA. The process is intended to apply to certificate authorities seeking approval by NAESB and will apply to existing

NAESB ACAs once NAESB begins accepting the required documentation from the certificate authorities that are currently in a pending status.

Conclusion

The purpose of the WEQ-012 PKI and related standards is to provide utilities and ISOs/RTOs with a uniform set of requirements for the use of protection by a PKI scheme for commercial transactions concerning the electronic scheduling of wholesale electricity. The purpose of the Accreditation Specifications and the NAESB ACA Process is to provide the mechanism by which a certificate authority can be accredited and issue certificates in support of the WEQ-012 PKI standards. As can been seen from the description of the standards and supporting documentation, the standards are distinct from the supporting specifications and accreditation program to ensure that the entities to which the standards apply are separate from the service providers who issue certificates.

Following is a table that outlines the standards created or modified to maintain standard communication protocols and cyber security business practices. These NAESB WEQ Business Practice Standards are now final actions and are available on the NAESB website.

Final Actions 2012 WEQ Annual Plan Item 4 – Develop and/or maintain standard communication protocols and cyber-security business practices as needed:

4(a) – Develop Public Key Infrastructure (PKI) standards for OASIS – Ratified November 28, 2012

4(b) – Develop Industry Implementation Plan for meeting PKI Standard requirements for e-Tagging (Part 1) – Ratified December 28, 2012.

4(c) i-iii/R11014/R11015 – Develop modifications for WEQ-012 (PKI) standards as needed to reflect current market conditions (Part 2) – Ratified October 4, 2012.

STANDARD NUMBER	DESCRIPTION/TOPIC	ACTION
WEQ-000	**Abbreviations, Acronyms, and Definition of Terms**	
WEQ-000-1	HTTPS – Hypertext Transport Protocol Secure	Add Abbreviation/Acronym
	TLS – Transport Layer Security	Add Abbreviation/Acronym
WEQ-000-2	Accreditation Specification	Add Definition of Term
	Interchange Authority (IA) Service Entity	Modify Definition of Term
WEQ-001	**Open Access Same-Time Information Systems (OASIS)**	
WEQ-001-10.8	Requirements for Dealing with Redirects on a Non-firm Basis	Modify Standard
WEQ-002	**Open Access Same-Time Information Systems (OASIS) Business Practice Standards and Communication Protocols (S&CP)**	
WEQ-002-2.3	Communication Standards Required	Modify Standard
WEQ-002-3.1	Registration and Login Requirements	Modify Standard
WEQ-002-4.2.1.1	OASIS Node Names	Modify Standard
WEQ-002-4.2.1.2	OASIS Node and Transmission Provider Home Directory	Modify Standard
WEQ-002-4.2.8.2	Transmission Customer Company Information	Modify Standard
WEQ-002-5.1	Security	Modify Standard
WEQ-002-5.1.1	Secured Access to OASIS Information	Add Standard
WEQ-002-5.1.2	OASIS Template Security	Add Standard
WEQ-002-5.1.3	OASIS Template Browser-based Security	Add Standard

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STANDARD NUMBER	DESCRIPTION/TOPIC	ACTION
WEQ-003	**Open Access Same-Time Information Systems (OASIS) Data Dictionary Business Practice Standards**	
	SCHEDULE_PRIORITY	Modify Element
	TRANSACTION_ID	Modify Element
	TRANSACTION_TYPE	Modify Element
WEQ-004	**Coordinate Interchange**	
WEQ-004-2		Modify Standard
WEQ-004-2.3		Add Standard
WEQ-004-A	Appendix A - e-Tagging Service Performance Requirements and Failure Procedures	Modify Appendix
WEQ-012	**Public Key Infrastructure (PKI) Business Practice Standards**	
WEQ-012-1	Introduction	Modify Standard
WEQ-012-1.1	Overview	Modify Standard
WEQ-012-1.2	RESERVED - Identification	Modify Standard
WEQ-012-1.2.1	RESERVED – Certificate Class Identification	Modify Standard
WEQ-012-1.2.2	RESERVED – Certificate Class Hierarchy	Modify Standard
WEQ-012-1.3	RESERVED – Community and Applicability	Modify Standard
WEQ-012-1.3.1	RESERVED – Certificate Authorities	Modify Standard
WEQ-012-1.3.2	RESERVED -RAs	Modify Standard
WEQ-012-1.3.3	End Entities	Modify Standard
WEQ-012-1.3.4	Applicability	Modify Standard
WEQ-012-1.4	RESERVED – Obligations	Modify Standard
WEQ-012-1.4.1	RESERVED – Certificate Authority Obligations	Modify Standard
WEQ-012-1.4.2	RESERVED – RA Obligations	Modify Standard
WEQ-012-1.4.3	End Entity Obligations	Modify Standard
WEQ-012-1.4.4	Relying Party Obligations	Modify Standard
WEQ-012-1.4.5	RESERVED – Repository Obligations	Modify Standard
WEQ-012-1.5	RESERVED	Deleted Standard
WEQ-012-1.7	Confidentiality	Modify Standard
WEQ-012-1.8	Intellectual Property Rights	Modify Standard
WEQ-012-1.9	Initial Registration	Modify Standard
WEQ-012-1.9.1	Types of Names	Modify Standard
WEQ-012-1.9.3	RESERVED – Method to Prove Possession of Private Key	Modify Standard
WEQ-012-1.9.4	RESERVED – Authentication of Organization Identity	Modify Standard
WEQ-012-1.9.5	RESERVED – Authentication of Individual	Modify Standard

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STANDARD NUMBER	DESCRIPTION/TOPIC	ACTION
	Identity	
WEQ-012-1.10	RESERVED – Routine Rekey	Modify Standard
WEQ-012-1.11	RESERVED – Certificate Application	Modify Standard
WEQ-012-1.12	RESERVED – Certificate Issuance	Modify Standard
WEQ-012-1.13	RESERVED – Certificate Acceptance	Modify Standard
WEQ-012-1.14	RESERVED – Certificate Suspension and Revocation	Modify Standard
WEQ-012-1.15	RESERVED – CRL Issuance Frequency and Validity Period	Modify Standard
WEQ-012-1.16	RESERVED – CRL Checking Requirements	Modify Standard
WEQ-012-1.17	RESERVED – Special Requirements for Key Compromise	Modify Standard
WEQ-012-1.18	RESERVED – Security Audit Procedures	Modify Standard
WEQ-012-1.18.1	RESERVED – Types of Events Recorded	Modify Standard
WEQ-012-1.18.2	RESERVED – Frequency of Log Processing	Modify Standard
WEQ-012-1.18.3	RESERVED – Audit Log Retention	Modify Standard
WEQ-012-1.19	RESERVED – Record Archival	Modify Standard
WEQ-012-1.19.1	RESERVED – Types of Events Recorded	Modify Standard
WEQ-012-1.19.2	RESERVED – Retention Period for Archive	Modify Standard
WEQ-012-1.19.3	RESERVED – Protection of Archive	Modify Standard
WEQ-012-1.19.4	RESERVED – Archive Backup Procedures	Modify Standard
WEQ-012-1.19.5	RESERVED – Requirements for Time-stamping of Records	Modify Standard
WEQ-012-1.19.6	RESERVED – Procedures to Obtain and Verify Archive	Modify Standard
WEQ-012-1.19.7	RESERVED – Key Changeover	Modify Standard
WEQ-012-1.19.8	RESERVED – Certificate Authority Termination	Modify Standard
WEQ-012-1.20	RESERVED – Physical, Procedural, and Personnel Security Controls	Modify Standard
WEQ-012-1.21	RESERVED – Physical Controls	Modify Standard
WEQ-012-1.21.1	RESERVED – Site Location and Construction	Modify Standard
WEQ-012-1.21.2	RESERVED – Physical Access	Modify Standard
WEQ-012-1.21.3	RESERVED – Power and Air Conditioning	Modify Standard
WEQ-012-1.21.4	RESERVED – Cabling and Network Devices	Modify Standard
WEQ-012-1.22	RESERVED – Procedural Controls	Modify Standard
WEQ-012-1.22.1	RESERVED – Trusted Roles	Modify Standard
WEQ-012-1.22.2	RESERVED – Number of Persons Required Per Task	Modify Standard

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STANDARD NUMBER	DESCRIPTION/TOPIC	ACTION
WEQ-012-1.22.3	RESERVED – Identification and Authentication for Each Role	Modify Standard
WEQ-012-1.23	RESERVED – Key Pair Generation, Installation, and Management	Modify Standard
WEQ-012-1.23.1	RESERVED – Certificate Authority Key Pair Generation	Modify Standard
WEQ-012-1.23.2	RESERVED – Key Delivery to Certificate Issuer	Modify Standard
WEQ-012-1.23.3	RESERVED – Key Sizes	Modify Standard
WEQ-012-1.23.4	RESERVED – Private Key Protection	Modify Standard
WEQ-012-1.23.5	RESERVED – Usage Periods for Public and Private Keys	Modify Standard
WEQ-012-1.24	RESERVED – Computer Security Controls	Modify Standard
WEQ-012-1.25	RESERVED – Network Security Controls	Modify Standard
WEQ-012-1.26	RESERVED – Certificate Profile	Modify Standard
WEQ-012-1.26.1	RESERVED – Version Numbers	Modify Standard
WEQ-012-1.26.2	RESERVED – Certificate Extensions	Modify Standard
WEQ-012-1.26.3	RESERVED – CP Object Identifier	Modify Standard
WEQ-012-1.26.4	Subject Alternate Name	Modify Standard
WEQ-012-1.26.5	RESERVED – CRL Distribution Point	Modify Standard
WEQ-013	**Open Access Same-Time Information Systems (OASIS) Implementation Guide**	
WEQ-013-3.2	*scheduledetail*	Modify Standard

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Appendix A: NAESB WEQ Public Key Infrastructure (PKI) Subcommittee, NAESB WEQ OASIS Subcommittee and NAESB Joint Electric Scheduling Subcommittee (JESS) Meeting Minutes Links
January 29, 2013

APPENDIX A – NAESB WEQ PUBLIC KEY INFRASTRUCTURE (PKI) SUBCOMMITTEE, NAESB WEQ OASIS SUBCOMMITTEE AND NAESB JOINT ELECTRIC SCHEDULING SUBCOMMITTEE (JESS) MEETING MINUTES LINKS			
DATE OF MEETING	MEETING LOCATION	MEETING MINUTES	NUMBER OF PARTICIPANTS
September 22, 2011	NAESB WEQ PKI Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_pki_092211dm.doc Attachment to Minutes: http://www.naesb.org/member_login_check.asp?doc=weq_pki_092211a1.docx	21
October 20, 2011	NAESB WEQ PKI Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_pki_102011dm.doc Attachment to Minutes: http://www.naesb.org/pdf4/weq_pki_102011a1.docx	12
November 10, 2011	NAESB WEQ PKI Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_pki_111011dm.doc	16
December 8, 2011	NAESB WEQ PKI Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_pki_120811dm.doc Attachment to Minutes: http://www.naesb.org/pdf4/weq_pki_120811a1.docx	15
January 4, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_pki_010412dm.doc Attachment to Minutes: http://www.naesb.org/pdf4/weq_pki_010412a1.docx	19
January 26, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_pki_012612dm.doc	14
February 16, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_pki_021612dm.doc	14

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DATE OF MEETING	MEETING LOCATION	MEETING MINUTES	NUMBER OF PARTICIPANTS
March 8, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_pki_030812dm.doc Attachment to Minutes: http://www.naesb.org/pdf4/weq_pki_030812a1.docx	16
April 26, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_pki_042612dm.doc Attachment to Minutes: http://www.naesb.org/pdf4/weq_pki_042612a1.docx	14
May 31, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_pki_053112dm.doc Attachment to Minutes: http://www.naesb.org/pdf4/weq_pki_053112a1.docx	20
June 14, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_pki_061412dm.doc Attachment to Minutes: http://www.naesb.org/pdf4/weq_pki_061412a1.docx	14
July 3, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_pki_070312dm.doc Attachment to Minutes: http://www.naesb.org/pdf4/weq_pki_070312a1.doc	9
July 9, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes http://www.naesb.org/pdf4/weq_pki_070912dm.doc Attachment to Minutes: http://www.naesb.org/pdf4/weq_pki_070912a1.doc	13
August 28, 2012	NAESB Joint WEQ OASIS and WEQ PKI Subcommittees	Meeting Minutes: http://www.naesb.org/pdf4/weq_oasis_pki082812fm.doc	24

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DATE OF MEETING	MEETING LOCATION	MEETING MINUTES	NUMBER OF PARTICIPANTS
September 7, 2012	NAESB WEQ OASIS Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_oasis090712fm.doc Attachments to Minutes: http://www.naesb.org/pdf4/weq_oasis090712a1.doc http://www.naesb.org/pdf4/weq_oasis090712a2.doc http://www.naesb.org/member_login_check.asp?doc=weq_oasis090712a3.doc	16
October 2, 2012	NAESB WEQ JESS Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_jess100212fm.doc	11
October 4, 2012	NAESB WEQ JESS Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_jess100412fm.doc	9
October 11, 2012	NAESB WEQ OASIS Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_oasis101112fm.doc Attachments to Minutes: http://www.naesb.org/pdf4/weq_oasis101112a1.doc http://www.naesb.org/member_login_check.asp?doc=weq_oasis101112a2.doc http://www.naesb.org/member_login_check.asp?doc=weq_oasis101112a3.doc	8
November 7, 2012	NAESB WEQ JESS Subcommittee	Meeting Minutes: http://www.naesb.org/pdf4/weq_jess110712fm.doc	6

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Appendix B: Executive Committee Meeting Minutes, Comments, Voting Records Links and Availability of Transcripts
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APPENDIX B – EXECUTIVE COMMITTEE MEETING MINUTES, COMMENTS, VOTING RECORDS LINKS AND AVAILABILITY OF TRANSCRIPTS			
DATE	LINK TO EXECUTIVE COMMITTEE MINUTES AND VOTING RECORDS	LINK TO COMMENTS	AVAILABILITY OF TRANSCRIPTS[1]
August 21, 2012	NAESB WEQ Executive Committee Meeting - Colorado Springs, CO WEQ EC Meeting Minutes: http://www.naesb.org/pdf4/weq_ec082112fm.docx Attachments to Meeting Minutes: http://www.naesb.org/member_login_check.asp?doc=weq_ec082112a2.docx http://www.naesb.org/member_login_check.asp?doc=weq_ec082112a3.docx http://www.naesb.org/member_login_check.asp?doc=weq_ec082112a4.doc http://www.naesb.org/member_login_check.asp?doc=weq_ec082112a5.doc	Request for Comments on Recommendation WEQ 2012 Annual Plan Item 4.c.i-ii / R11014 / R11015 (Part 1): http://www.naesb.org/pdf4/weq_062512_reqcom.doc Comments Submitted by the WEQ Standards Review Subcommittee: http://www.naesb.org/pdf4/weq_062512_weq_srs.doc Comments Submitted by ERCOT and MISO: http://www.naesb.org/pdf4/weq_062512_ercot_miso.docx Comments on Recommendation Submitted by JT Wood, Southern Company: http://www.naesb.org/pdf4/weq_062512_southern_recommendation.doc Comments on Accreditation Requirements Attachment Submitted by JT Wood, Southern Company: http://www.naesb.org/pdf4/weq_062512_southern_attachment.docx Comments Submitted by T. Ruser, OATI: http://www.naesb.org/pdf4/weq_062512_oati.pdf Late Comments Submitted by the WEQ PKI Subcommittee: http://www.naesb.org/pdf4/weq_062512_weq_pki_late.docx Request for Comments on Recommendation WEQ 2012 Annual Plan Item 4.c.i-ii / R11014 / R11015 (Part 2): http://www.naesb.org/pdf4/weq_071012_reqcom.doc Comments Submitted by J. Buccigross, Group 8760 LLC: http://www.naesb.org/pdf4/weq_071012_group8760llc.doc Comments Submitted by the WEQ Standards Review Subcommittee: http://www.naesb.org/pdf4/weq_071012_weq_srs.docx	Jill Vaughan, CSR: 281-853-6807

[1] The Federal Energy Regulatory Commission and other regulatory agencies may contact the NAESB office to obtain electronic copies of the transcripts. All others can contact the transcription service and order the transcripts for a nominal fee.

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DATE	LINK TO EXECUTIVE COMMITTEE MINUTES AND VOTING RECORDS	LINK TO COMMENTS	AVAILABILITY OF TRANSCRIPTS[1]
		Comments Submitted by JT Wood, Southern Company (to redline recommendation): http://www.naesb.org/pdf4/weq_071012_southern_to_redline.doc Comments Submitted by JT Wood, Southern Company (to clean recommendation): http://www.naesb.org/pdf4/weq_071012_southern_to_clean.doc Comments Submitted by the IRC Standards Review Committee (PJM, NYISO, ISONE, IESO, ERCOT, MISO, SPP): http://www.naesb.org/pdf4/weq_071012_irc_standards_review_committee.docx Comments Submitted by T. Ruser, OATI: http://www.naesb.org/pdf4/weq_071012_oati.pdf Late Comments Submitted by the WEQ Joint Electric Scheduling Subcommittee: http://www.naesb.org/pdf4/late_weq_071012_weq_jess.doc Late Comments Submitted by the WEQ PKI Subcommittee: http://www.naesb.org/pdf4/weq_071012_weq_pki_late.doc	

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DATE	LINK TO EXECUTIVE COMMITTEE MINUTES AND VOTING RECORDS	LINK TO COMMENTS	AVAILABILITY OF TRANSCRIPTS[1]
October 23, 2012	NAESB WEQ Executive Committee Meeting - Richmond, VA WEQ EC Meeting Minutes: http://www.naesb.org/pdf4/weq_ec102312dm.docx Attachments to Meeting Minutes: http://www.naesb.org/member_login_check.asp?doc=weq_ec102312a2.doc http://www.naesb.org/member_login_check.asp?doc=weq_ec102312a3.doc	Request for Comments on Recommendation WEQ 2012 Annual Plan Item 4.a: http://www.naesb.org/pdf4/weq_090712_reqcom.doc Comments Submitted by the WEQ Standards Review Subcommittee: http://www.naesb.org/pdf4/weq_090712_weq_srs.doc Comments Submitted by Bonneville Power Administration: http://www.naesb.org/pdf4/weq_090712_bpa.doc Comments Submitted by E. Cardone, NYISO: http://www.naesb.org/pdf4/weq_090712_nyiso.docx Comments Submitted by M. Colby, PJM: http://www.naesb.org/pdf4/weq_090712_pjm.doc Comments Submitted by P. Sorenson, OATI: http://www.naesb.org/pdf4/weq_090712_oati.doc Late Comments Submitted by the WEQ OASIS Subcommittee on the Recommendation: http://www.naesb.org/pdf4/weq_090712_oasis_late.doc Late Comments Submitted by the WEQ OASIS Subcommittee on the NYISO Comments: http://www.naesb.org/pdf4/weq_090712_oasis_on_nyiso_late.docx Late Comments Submitted by the WEQ OASIS Subcommittee on the OATI Comments: http://www.naesb.org/pdf4/weq_090712_oasis_on_oati_late.doc Late Comments Submitted by the WEQ OASIS Subcommittee on the PJM Comments: http://www.naesb.org/pdf4/weq_090712_oasis_on_pjm_late.doc Late Comments Submitted by the WEQ OASIS Subcommittee on the SRS Comments: http://www.naesb.org/pdf4/weq_090712_oasis_on_srs_late.doc Late Comments Submitted by the WEQ OASIS Subcommittee on the BPA Comments: http://www.naesb.org/pdf4/weq_090712_oasis_on_bpa_late.doc	Jill Vaughan, CSR: 281-853-6807

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APPENDIX B – EXECUTIVE COMMITTEE MEETING MINUTES, COMMENTS, VOTING RECORDS LINKS AND AVAILABILITY OF TRANSCRIPTS			
DATE	LINK TO EXECUTIVE COMMITTEE MINUTES AND VOTING RECORDS	LINK TO COMMENTS	AVAILABILITY OF TRANSCRIPTS[1]
November 27, 2012	NAESB WEQ Executive Committee Notational Ballot: http://www.naesb.org/pdf4/weq_ec111412ballot.docx Results: http://www.naesb.org/pdf4/weq_ec111412results.docx	Request for Comments on Recommendation WEQ 2012 Annual Plan Item 4.b (Part 1 and Part 2): http://www.naesb.org/pdf4/weq_100512_reqcom.doc Part 1 and Part 2 Comments Submitted by the WEQ Standards Review Subcommittee: http://www.naesb.org/pdf4/weq_100512_weq_srs.doc Late Part 1 Comments Submitted by the NAESB WEQ Joint Electric Scheduling Subcommittee: http://www.naesb.org/member_login_check.asp?doc=weq_100512_weq_jess_part1_late.doc Late Part 2 Recommendation from WEQ JESS - November 13, 2012: http://www.naesb.org/member_login_check.asp?doc=weq_jess_part2_late_rec_111312.doc Late Part 2 Attachment Comments Submitted by the NAESB WEQ Joint Electric Scheduling Subcommittee: http://www.naesb.org/member_login_check.asp?doc=weq_100512_weq_jess_part2_late.doc	No transcripts provided

Report of the North American Energy Standards Board – Enclosures
NAESB Wholesale Electric Quadrant Public Key Infrastructure (PKI) Standards

Appendix C: Links to Ratification Ballot and Ratification Results
January 29, 2013

APPENDIX C – RATIFICATION BALLOT AND RATIFICATION RESULTS			
DATE OF RATIFICATION	RATIFICATION BALLOT	RESULTS	FINAL ACTIONS
September 4, 2012	Ratification Ballot due October 4, 2012: http://www.naesb.org/member_login_check.asp?doc=weq_rat090412ballot.doc Recommendation: 2012 WEQ Annual Plan Item No. 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)) as approved by the WEQ EC on August 21, 2012: http://www.naesb.org/member_login_form.asp?doc=weq_rat090412_weq_2012ap4ci-ii_r11014_r11015_rec.doc	Ratification Tally: http://www.naesb.org/member_login_check.asp?doc=rat_weq100412tally.xls Comments Submitted by Bonneville Power Administration on 2012 WEQ Annual Plan Item No. 4.c.i-ii/R11014/R11015: http://www.naesb.org/pdf4/weq_rat100412_bpa.doc	2012 WEQ Annual Plan Item No. 4.c.i-ii/R11014/R11015 (Part 2) Final Action - Ratified October 4, 2012: http://www.naesb.org/member_login_form.asp?doc=fa_weq_2012_ap4ci-ii_r11014_r11015.doc
October 30, 2012	Ratification Ballot due November 28, 2012: http://www.naesb.org/member_login_check.asp?doc=weq_rat103012ballot.doc Recommendation: 2012 WEQ Annual Plan Item 4.a - Develop Public Key Infrastructure (PKI) Standards for OASIS as revised and approved by the WEQ Executive Committee on October 23, 2012: http://www.naesb.org/member_login_check.asp?doc=weq_rat103012_weq_2012_ap4a_rec_redline.doc (Redline) http://www.naesb.org/member_login_check.asp?doc=weq_rat103012_weq_2012_ap4a_rec_clean.doc (Clean)	Ratification Tally: http://www.naesb.org/member_login_check.asp?doc=rat_weq112812tally.xls	2012 WEQ Annual Plan Item 4.a - Develop Public Key Infrastructure (PKI) Standards for OASIS - Ratified November 28, 2012: http://www.naesb.org/member_login_form.asp?doc=fa_weq_2012_ap4a.doc
November 28, 2012	Ratification Ballot due December 28, 2012: http://www.naesb.org/member_login_check.asp?doc=weq_rat112812ballot.doc Recommendation: 2012 WEQ Annual Plan Item 4.b, Part 1 - Develop Public Key Infrastructure (PKI) Standards Requirements for e-Tagging (Part 1) as approved by the WEQ Executive Committee via notational ballot on November 27, 2012: http://www.naesb.org/member_login_check.asp?doc=weq_rat112812_weq_2012_ap4b_rec_redline.doc (Redline) http://www.naesb.org/member_login_check.asp?doc=weq_rat112812_weq_2012_ap4b_rec_clean.doc (Clean)	Ratification Tally: http://www.naesb.org/member_login_check.asp?doc=rat_weq122812tally.xls	2012 WEQ Annual Plan Item 4.b, Part 1 - Develop Public Key Infrastructure (PKI) Standards Requirements for e-Tagging (Part 1) - Ratified December 28, 2012: http://www.naesb.org/member_login_form.asp?doc=fa_weq_2012_ap4b_part1.doc

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	Item Description	Completion[1]	Assignment[2]
1	**Develop business practices standards as needed to complement reliability standards**		
	Develop business practice standards to support and complement NERC reliability standards, NERC policies and NERC standards authorization requests (SARs) using the NERC/NAESB Coordination Joint Standards Development Process as appropriate. Current NAESB activities underway to develop business practice standards that are supportive of this annual plan item are:		
	a) Parallel Flow Visualization/Mitigation for Reliability Coordinators in the Eastern Interconnection – Permanent Solution[1] Note: Consideration should be given to provisional item 4. Work is being coordinated with the NERC IDC Working Group. Status: Started	1st Q, 2013	BPS
	b) Perform consistency review of WEQ-008 Transmission Loading Relief Business Practice Standards and develop recommendation.[2]	2013	BPS
	c) Disturbance Control Standard (DCS) (BAL-002) Coordination with NERC Project 2010-14.1 Phase 1 of Balancing Authority Reliability-based Controls: Reserves Status: Monitor.	2013	BPS/TIMTF
	d) Coordinate with NERC on changes to the definition of Bulk Electric System NERC Project 2010-17 Definition of Bulk Electric System. Status: Completed. Subcommittee approved recommendation to forward to Executive Committee on January 17, 2012.	2nd Q, 2012	SRS
	e) Revise TLR level 5 to be treated similarly to TLR Level 3 in terms of treating the next hour allocation separately from that of current hour. (R11020) Status: Not Started	2013	BPS
2	**Develop business practice standards in support of the FERC RM05-25-000 and RM05-17-000 (OATT Reform)[3]**		
	a) Develop version 2 business practice standards to better coordinate the use of the transmission system among neighboring transmission providers. Status: Underway Request R050004 was expanded to include the Order No. 890 (Docket Nos.RM05-17-000 and RM02-25-000), (Order No. 890-A (Docket Nos. RM05-17-001, 002 and RM05-25-001, 002), and Order No. 890-B (Docket Nos. RM05-17-03 and RM05-25-03) "Preventing Undue Discrimination and Preference in Transmission Services"		
	i) Group 3: Network Service On OASIS[4]		

[1] See AP Item 3.iv., Completion dates may be revisited contingent upon NERC-NAESB coordination of implementation related to parallel flow visualization

[2] In some sections of WEQ 008 it appears that the standards are applicable to all of the Interconnections and other it appears that the standards are only applicable to the Eastern Interconnection. The title indicates the standards are applicable to the Eastern Interconnection.

[3] FERC Order No. 890, issued February 16, 2007 can be accessed from the following link - http://www.naesb.org/doc_view4.asp?doc=ferc021607.doc

[4] Several group 3 items may be removed from this plan if the 4th quarter completion dates are met.

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	Item Description	Completion[1]	Assignment[2]
	1) Use of OASIS to Make Electronic Requests to Designate and Terminate Network Resource	4th Q, 2011	OASIS
	Status: Completed		
	2) Ability to Query Requests to Designate and Terminate Network Resources and Allow for Queries of All Information Provided with Designation Requests	4th Q, 2011	OASIS
	Status: Completed		
	3) Masking of Designated Network Resource Operating Restrictions and Generating Cost Information	4th Q, 2011	OASIS
	Status: Completed		
	4) Procedural Requirements for Submitting Designations over new OASIS Functionality	4th Q, 2011	OASIS
	Status: Completed		
	5) Specify How Designated Network Service Informational Postings are Posted on OASIS	4th Q, 2011	OASIS
	Status: Completed		
	6) Develop standards for the treatment of OASIS Requests when the Customer Fails to Provide the Necessary Attestation	4th Q, 2011	OASIS
	Status: Completed		
	7) Procedural Requirements for Submitting Both Temporary and Indefinite Terminations of Network Resources	4th Q, 2011	OASIS
	Status: Completed		
	8) Procedures for Submitting and Processing Requests for Concomitant Evaluations of Transmission Requests and Temporary Terminations	4th Q, 2011	OASIS
	Status: Completed		
ii)	Group 4: Pre-Emption; Request No. R05019		
	1. Pre-Emption	1st Q, 2013	OASIS
	Status: Started		
	2. Request No. R05019	1st Q, 2013	OASIS
	Status: Started		

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	Item Description	Completion[1]	Assignment[2]
iii)	Group 6: Miscellaneous (Paragraph 1627[5] of FERC Order No. 890)		
1)	Paragraphs 1627 of Order 890 – Posting of additional information on OASIS regarding firm transmission curtailments Status: Not Started	TBD (follows the completion of AP 1(a))	OASIS
2)	Redispatch Cost Posting to allow for posting of third party offers of planning redispatch services. Status: Not Started	TBD (follows the completion of AP 1(a))	OASIS
b)	Develop the needed business practices to support existing Request No. R05004: The processing of transmission service requests, which use TTC/ATC/AFC, in coordination with NERC changes to MOD 001 where the allocation of flowgate capability based on historical Network Native Load impacts the evaluation of transmission service requests, requiring the posting of those allocation values in conjunction with queries of service offerings on OASIS Status: Completed	4th Q, 2011	OASIS
3	**Develop business practices standards to improve the current operation of the wholesale electric market and develop and maintain business practice and communication standards for OASIS and Electronic Scheduling**		
a)	Develop and/or maintain business practice standards as needed for OASIS and electronic scheduling. Specific items to address include:		
i)	Network Services: Determine and develop needed business practice standards or other support is needed to support use of OASIS for Network Service transactions (R04006E). (Related to AP 2(a)(iii) and AP 2(a)(i)) Status: Completed	4th Q, 2011	OASIS
ii)	Registry (TSIN): Determine and develop needed business practice standards to support the registry functions currently supported by NERC (R04037, R06027) Status: Underway, probably will not complete by 4th Q and may need to be added back into the 2013 Annual Plan.	4th Q, 2012	JESS

[5] Paragraph 1627 of FERC Order No. 890, issued February 16, 2007: We agree with suggestions for the posting of additional curtailment information on OASIS and, therefore, require transmission providers, working through NAESB, to develop a detailed template for the posting of additional information on OASIS regarding firm transmission curtailments. Transmission providers need not implement this new OASIS functionality and any related business practices until NAESB develops appropriate standards. These postings must include all circumstances and events contributing to the need for a firm service curtailment, specific services and customers curtailed (including the transmission provider's own retail loads), and the duration of the curtailment. This information is in addition to the Commission's existing requirements: (1) when any transmission is curtailed or interrupted, the transmission provider must post notice of the curtailment or interruption on OASIS, and the transmission provider must state on OASIS the reason why the transaction could not be continued or completed; (2) information to support any such curtailment or interruption, including the operating status of facilities involved in the constraint or interruption, must be maintained for three years and made available upon request to the curtailed or interrupted customer, the Commission's Staff, and any other person who requests it; and, (3) any offer to adjust the operation of the transmission provider's system to restore a curtailed or interrupted transaction must be posted and made available to all curtailed and interrupted transmission customers at the same time.

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		Item Description	Completion[1]	Assignment[2]
iii)		Registry (TSIN): Transition the TSIN Registry from NERC to NAESB as the enhanced Electric Industry Registry (EIR). Status: Completed.	4th Q, 2012	NAESB/NERC Administration, JESS
iv)		Make remaining incremental enhancements to OASIS as an outgrowth of the NAESB March 29, 2005 conference on the future of OASIS (R05026). Scoping statement completed by SRS. There were a number of assignments from the Standards Request. The outstanding items are included below:		
	1)	Eliminate Masking of TSR tag source and sink when requested status is denied, withdrawn refused, displaced, invalid, declined, annulled or retracted Status: Not Started	2013	OASIS
	2)	Initiate standard that eliminates the disparity of posting "sensitive" information. This standard should also include procedures of user certification that allows access to this class of information. Status: Underway (upon further development of this item by NAESB, a completion date will be determined)	2013	OASIS
	3)	Enhance the TSR result postings to allow showing of (i) limiting transmission elements and (ii) available generation dispatch options that would allow acceptance of reservation request. Status: Not Started (upon initiation of this item by NAESB, a completion date will be determined)	2013	OASIS
v)		Review and correct WEQ-004 Coordinate Interchange Business Practice Standard as needed based on activities in NERC Project 2008-12, Coordinate Interchange Standards Revisions and supporting EOP-002-2 R4 and R6.[6] Status: Underway. Completion date dependent upon coordination activities with NERC, and Project 2008-12 is delayed by NERC due to other higher priority development. It is expected that NERC will begin its effort in 2nd Q 2013.	2014	JESS
b)		Review e-Tag specifications and make modifications as needed for:		
	i)	Supporting Network Integration Transmission Service standards	TBD	JESS
	ii)	Consistency and clarifications	TBD	JESS
	iii)	Regional Implementations supporting WECC efforts (probably of most impact to the appendices in the e-Tag specifications)	TBD	JESS
c)		Requirements for OASIS to use data in the Electric Industry Registry (R12001) Status: Not started	TBD	OASIS

[6] See AP Item 1.a.iv, Completion dates may be revisited contingent upon NERC-NAESB coordination of implementation related to parallel flow visualization.

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	Item Description	Completion[1]	Assignment[2]
4.	Develop and/or maintain standard communication protocols and cyber-security business practices as needed.		
a)	Develop PKI standards for OASIS. Status: Completed	4th Q, 2012	PKI/OASIS
b)	Develop Industry Implementation Plan for meeting PKI Standard requirements for e-tagging. Status: Completed	4th Q, 2012	PKI/JESS
c)	Develop modifications for WEQ-012 as needed to reflect current market conditions		
i)	Authorized Certification Authority Standard and Credentialing Practice (R11014) Status: Completed Part 1 was voted out of subcommittee on June 14, 2012. Part 2 was voted out of subcommittee on July 9, 2012.	3rd Q, 2012	PKI
ii)	Technology Review and Upgrade for NAESB Public Key Infrastructure Standard WEQ-012 (R11015). Status: Completed Part 1 was voted out of subcommittee on June 14, 2012. Part 2 was voted out of subcommittee on July 9, 2012.	3rd Q, 2012	PKI
iii)	Review and develop standards as needed to support adequate session encryption (SSL/TLS issues: US-Cert Vulnerability Note VU#864643) Status: Not Started	2013	PKI
d)	Review WEQ standards for impact of XML vulnerability exploits and make modifications as needed to standards and functional specifications	TBD	PKI/JESS
5	**Maintain existing body of Version 3.x standards**		
a)	Consistent with ¶51 of FERC Order No. 890-A, add AFC and TFC values to the "System_Attribute" data element of the NAESB Standard WEQ-003: OASIS S&CP Data Dictionaries. (R08011) Status: Underway, probably will not complete by 4th Q and may need to be added back into the 2013 Annual Plan.	4th Q, 2012	OASIS
b)	Correct WEQ 013-2.6.7.2. – Resale off OASIS (R08027) Status: Not Started	TBD	OASIS
c)	Add language to WEQ-001-4 Online Negotiation and Confirmation process to clarify Table 4-3 (R09003) Status: Started	1st Q, 2013	OASIS
d)	Create a new OASIS mechanism that allows for the merger of like reservations without the use of the resale mechanism (R09015) Status: Not Started	TBD	OASIS
e)	Develop standards to support crediting redirect requests with the capacity of the parent reservation (BPA Comments) Status: Completed	TBD	OASIS

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	Item Description	Completion[1]	Assignment[2]
f)	Modify WEQ Business Practice Standard 013-2.6.8.1 FULL_TRANSFER-Transfers of All Capacity and WEQ Business Practice Standard 013-2.6.8.2 – PART_TRANSFER-Transfer of Partial Capacity. (R11022) Status: Completed	1st Q, 2012	OASIS
6.	**Develop Smart Grid Wholesale and Retail Electric Standards -** The wholesale and retail demand response work groups and the Smart Grid task force should actively and timely communicate and coordinate work products to ensure consistency between the three work groups. Each work group should take into account the work products developed by the other.		
a)	Develop standards to support PAP 10 – Standards Energy Usage Information, Phase 2, Harmonization with CIM and SEP 2.0 Status: Underway, dependent on discussions with CIM and SEP 2.0	4th Q, 2012	Joint WEQ/REQ PAP 10 SGS Subcommittee
7.	**Develop or modify standards to Support FERC Order No. 676-E, (Docket No. RM 05-5-013)**		
a)	Develop standards to support the Transmission Provider right to reassess the availability of conditional firm (See ¶ 72[7]) Status: Started, probably will not complete by 4th Q and may need to be added back into the 2013 Annual Plan.	4th Q, 2012	OASIS

[7] 72. However, we reiterate here the Commission's finding in Order No. 890 that a transmission provider is permitted to extend its right to reassess the availability of conditional firm service. Since the Version 002.1 Standards do not specifically address this issue, we would ask the industry, working through NAESB, to continue to look at additional business practice standards facilitating a transmission provider's extension of its right to perform a reassessment

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1 **Develop business practices standards as needed to complement NERC reliability standards**

a) Develop and or modify business practices related to support of NERC effort on the NERC Resources and Transmission Adequacy (NERC Project 2009-05 Resource Adequacy Assessments). NERC expects work on this project to start in third quarter 2014.

b) Determine any needed NAESB action in support of the Interchange Distribution Calculator (IDC) and develop any necessary standards.

c) Develop complementary standards that align with NERC Project 2008-01 Voltage and Reactive Planning and Control. A SAR was finalized in April 2011. NERC project is expected to begin in first quarter 2013.

d) Develop, modify or delete business practices to support Time Error, Automatic Generation Control (AGC), and Inadvertent Accounting (BAL-004, BAL-005, and BAL-006) resulting from the NERC field test under NERC project (NERC Project 2010-14.2 Phase 2 of Balancing Authority Reliability-based Controls: Time Error, AGC, and Inadvertent). NERC expects this project to start in second quarter 2013. The NERC project may impact WEQ-006 Manual Time Error Correction and WEQ-007 Inadvertent Interchange Payback.

e) Develop complementary standards that align with NERC Project 2010-4 Demand Data. The NERC project may impact WEQ-015 Business Practices for Measurement and Verification of Wholesale Electricity Demand Response.

f) Coordinate with NERC on the functional model glossary revisions NERC Project 2010-08 Functional Glossary Model Revisions. NERC expects this project to start in fourth quarter 2014. The NERC project may impact WEQ-000 Abbreviations, Acronyms, and Definition of Terms.

g) Coordinate with NERC on NERC Project 2012-05 ATC Revisions - Order 729. NERC expects this project to start in third quarter 2014. The NERC project may impact the WEQ-001 Open Access Same-Time Information Systems (OASIS) Standards, WEQ-002 OASIS Standards and Communication Protocol (S&CP), WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, and WEQ-013 OASIS Implementation Guide.

h) Coordinate with NERC on NERC Project 2012-08 Glossary Updates. NERC has not established a start date for this project. The NERC project may impact WEQ-000 Abbreviations, Acronyms, and Definition of Terms

i) Coordinate with NERC on NERC Project 2012-09 IRO Review. NERC has not established a start date for this project. The NERC project may impact WEQ-008 Transmission Loading Relief – Eastern Interconnection Standards.

j) Coordinate with NERC on NERC Project 2012-15 Flow Limited Paths. NERC has not established a start date for this project. The NERC project may impact the WEQ-001 Open Access Same-Time Information Systems (OASIS) Standards, WEQ-002 OASIS Standards and Communication Protocol (S&CP), WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, and WEQ-013 OASIS Implementation Guide.

2 **Gas/Electric Coordination**

a) Review and develop standards as needed and requested based on the National Petroleum Council (NPC) findings as communicated by the NAESB Board of Directors, government agencies or reliability organizations, as applicable. (9-15-11 NPC Report: Transmittal Letter, Preface, and Executive Summary, Ch 1:Resource and Supply, Ch 2: Operations and Environment, Ch 3: Demand, Ch 4: Carbon and Other End-Use Emissions, Ch 5: Macroeconomics, Ap A: Request Letters, Description of the NPC, and NPC membership roster, Ap B: Study Group Rosters , Ap C: Additional Materials Available Electronically)

b) Conduct assessment to determine if Electric Industry Requirements documented in WEQ-011 Gas / Electric Coordination should be considered reliability requirements and transition to NERC.

3 **Optional work to extend existing standards**

a) Prepare recommendations for future path for TLR[8] (Phase 2) in concert with NERC, which may include alternative congestion management procedures[9]. Work on this activity is dependent on completing 2010 WEQ Annual Plan 1.a (Parallel Flow Visualization/Mitigation for Reliability Coordinators in the Eastern Interconnection - Phase 1).

[8] Phase 2 of the Parallel Flow Visualization looks at developing options for and reporting of the most cost effective alternatives to achieve curtail obligations assigned during Phase 1."

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b) Develop needed business practice standards for organization/company codes for NAESB standards – and address current issues on the use of DUNs numbers. Common code usage is linked to the transition of the Registry from NERC to NAESB.

c) Develop business practices for allocating capacity among requests received during a submittal window Order 890-A (Docket Nos. RM05-17-001, 002 and RM05-25-001, 002 - Paragraph 805)[10].

4 **Pending Regulatory or Legislative Action**

a) Determine NAESB action needed to support FERC Action Plan for Smart Grid Technology.

b) Develop business practice standards for cap and trade programs for greenhouse gas.

c) Develop standards as needed based on FERC Order No. 1000. (NAESB Analysis of FERC Order No. 1000)

d) Develop standards as needed in support of Variable Energy Resources (VERs) final order (RM10-11-000). (NAESB Comments 3-2-11, FERC NOPR RM10-11-000, FERC Final Order No. 764, Docket No. RM10-11-000[11])

[9] For additional information, please see comments submitted by PJM and Midwest ISO for this Annual Plan Item: http://www.naesb.org/pdf3/weq_aplan102907w1.pdf.

[10] 805. The Commission recognizes that developing methods to allocate capacity among requests received during a submittal window may require detailed procedures, particularly when transmission requests received simultaneously exceed available capacity. As the Commission explained in Order No. 890, however, we believe that each transmission provider is in the best position to develop allocation procedures that are suitable for its system. This does not preclude transmission providers from working through NAESB to develop standardized practices, as suggested by Southern. For example, as we pointed out in Order No. 890, allocation methods such as that used by PJM to allocate monthly firm point-to-point transmission service could provide useful guidance in developing general allocation procedures.

[11] For FERC Final Order No. 764, Docket No. RM10-11-000, specifically paragraph nos. 146 and 182 should be reviewed:

146. The Commission concludes that an independent review of NERC standards and NAESB business practices is not necessary prior to the implementation of intra-hour scheduling. As noted by NERC, several entities currently offer intra-hour scheduling without any apparent conflict with Reliability Standards. NERC comments that it does not believe there are any existing standards that prohibit industry from implementing intra-hour scheduling, and no commenters have pointed to specific NAESB business practices that prevent industry from implementing intra-hour scheduling. The Commission therefore concludes that it is not necessary to delay adoption of the intra-hour scheduling requirements of this Final Rule pending further review of NERC Reliability Standards and NAESB business practices. To the extent industry believes it is beneficial to refine one or more existing NERC Reliability Standards or NAESB business practices to reflect intra-hour scheduling, stakeholders can use existing processes to pursue such refinements.

182. Some commenters request that the Commission standardize protocols for reporting meteorological or forced outage data required by this Final Rule. The Proposed Rule did not contain standard protocols for data reporting and, as a result, the merits of such a requirement have not been fully addressed in the record. Whether standardization of data communications would facilitate or hinder development of power production forecasting may implicate a variety of data and communications issues that would benefit from broad industry input through standards development processes such as those used by NAESB and other organizations.

WHOLESALE ELECTRIC QUADRANT EXECUTIVE COMMITTEE AND SUBCOMMITTEE STRUCTURE

NAESB WEQ EC and Active Subcommittee Leadership:

Executive Committee (EC): Kathy York (Chair) and James Castle (Vice Chair)
Standards Review Subcommittee (SRS): Narinder Saini, Ed Skiba
Interpretations Subcommittee: Ed Skiba
Business Practices Subcommittee (BPS) & Time and Inadvertent Management Task Force (TIMTF): Ed Skiba, Narinder Saini
Open Access Same Time Information System (OASIS) Subcommittee: Paul Sorenson, J.T. Wood, Alan Pritchard
Joint Electric Scheduling Subcommittee (JESS): Bob Harshbarger (NAESB), Clint Aymond (NERC)
Demand Side Management-Energy Efficiency (DSM-EE) REQ/WEQ Subcommittee: Ruth Kiselewich (Retail), Roy True and Paul Wattles (WEQ)
Public Key Infrastructure (PKI) Subcommittee: Jim Buccigross

Inactive Subcommittees:
e-Tariff Joint WEQ/WGQ Subcommittee (e-Tariff): Jane Daly (WEQ), Keith Sappenfield (WGQ)

(**) The Smart Grid Standards Subcommittee is a joint group of the retail electric and wholesale electric quadrants with other standards development groups such as OASIS (Organization for the Advancement of Structured Information Standards, not Open Access Same Time Information Systems related to NAESB standards and FERC actions), CalConnect, FIX and UCAIug, among others. Direction may be given from NIST, DoE or FERC and the group reports jointly to the NAESB Board Smart Grid Strategic Steering Committee and the WEQ and REQ ECs. The group is chaired by Joe Zhou, Wayne Longcore and Robert Burke.

(***) The PAP 10 Smart Grid Standards Subcommittee is a joint group of the retail electric and wholesale electric quadrants with other standards development groups such as OASIS, UCAIug, OpenADE, ZigBee, ASHRAE, EIS Alliance, NARUC and includes other groups. Direction may be given from NIST, DoE or FERC and the group reports jointly to the NAESB Board Smart Grid Strategic Steering Committee and the WEQ and REQ ECs. The group is chaired by Phil Precht, Cathy Wesley, Sharon Dinges, David Kaufman, Brad Ramsay, Tobin Richardson and Ed Koch.

End Notes WEQ 2012 Annual Plan:

[1] Dates in the completion column are by end of the quarter for completion by the assigned committee, sub-committee or task force. The dates do not necessarily mean that the standards are fully staffed to be implementable by the industry, and/or ratified by membership. If one item is completed earlier than planned, another item can begin earlier and possibly complete earlier than planned. There are no begin dates on the plan.

[2] The assignments are abbreviated. The abbreviations and sub-committee structure can be found at the end of the annual plan document.

The NAESB Standards Development Process

NAESB is focused on proposing, considering, and adopting voluntary standards and model business practices that will have a significant and lasting impact on all aspects of the natural gas and electricity marketplaces. As a result of the standards NAESB adopts, it is expected that the industry will operate more efficiently and effectively, benefiting both the industry and its customers. At the same time, it must be acknowledged that NAESB standards may constitute a change in the way parties do business, with an accompanying effect on the use and allocation of resources.

NAESB's policy is to move at a deliberate pace, consistent with its annual plan(s), thus permitting those affected by its standards, especially those standards adopted as regulations by the Federal Energy Regulatory Commission (FERC) or other regulatory bodies, to assimilate them as part of their business practices. To this end, NAESB will carefully consider whether proposed standards are both timely and necessary. In particular, it will try to avoid adopting and implementing new standards, however beneficial, before the industry is able to reasonably make use of them.

The standards development process is governed by the annual plan, and items can be included in the plan or modified only with Board approval. The plan typically reflects requests from NAESB members, government agencies, and other interested parties. In approving the annual plan, the Board considers the availability of resources, including the NAESB budget and staff and the availability of industry volunteers. New requests received throughout the year are either considered part of the existing annual plan or as new items that require Board approval.

The standards development process begins with an annual plan item or a triaged and approved request. Triage is a process used by each quadrant of the Executive Committee (EC) to determine whether a request is within scope, which quadrant(s) it applies to, which subcommittee(s) it should be referred to, and what priority it should be assigned. Triage is carried out by EC members appointed by the EC chair. Triage recommendations are submitted to the en banc EC and require EC approval, and may also require Board approval if there are scope questions or if a modification of the annual plan is required.

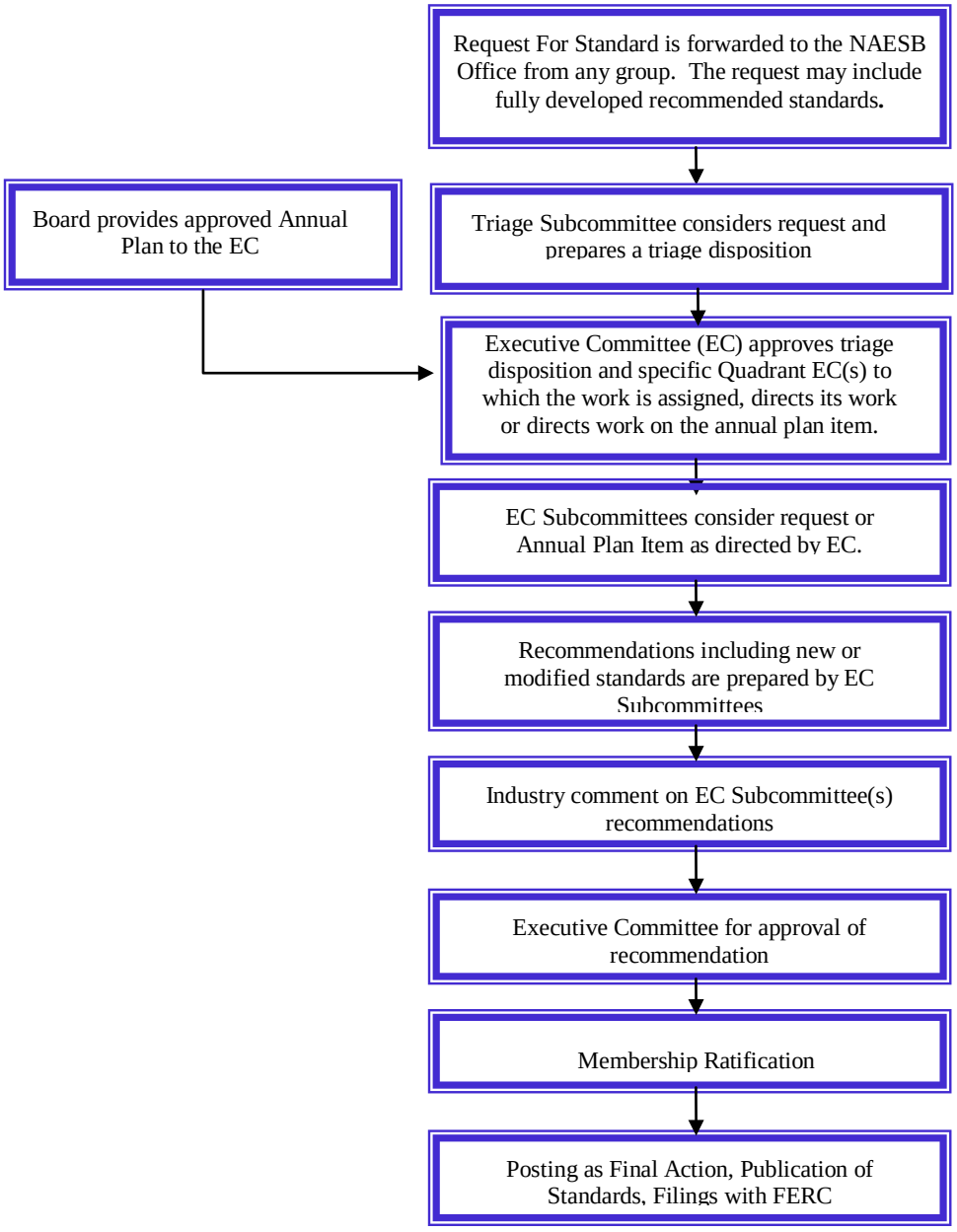
Once the triage process is completed, the subcommittees—more than one are normally involved in standards recommendations—review the request, compare it to existing standards, and prepare recommendations that may take the form of new or modified standards or interpretations. Participation in EC subcommittees is open to any interested party regardless of membership status. All subcommittee participants may vote; voting is balanced by segment and quadrant. All votes are public.

When the recommendation is complete, it is made available for a thirty-day industry comment period. The recommendation and comments are then forwarded to the EC, which considers the recommendation, makes any changes it deems necessary, and takes a vote. A recommendation must receive an affirmative vote of at least 67 percent from each applicable quadrant EC and 40 percent from each of the segments of the applicable quadrant(s).

After passage by the EC, the recommendation must be ratified by the NAESB members. An affirmative vote of 67 percent of the members of the applicable quadrant(s) is required for ratification. After ratification, standards and modifications are considered final actions and will be published in the next version of NAESB standards.

All NAESB quadrants follow the same development process described herein. The process has been followed by the WGQ since 1994 and has been used to develop more than five hundred standards that have been incorporated by reference into federal regulations.

North American Energy Standards Board
Standards Development Process Flow Chart



Flexibility

NAESB recognizes that flexibility is necessary as standards are developed to address regional concerns or to incorporate variances to accommodate operational or structural differences. Several WEQ standards incorporate regional or operational differences for both Version 0 and Version 1. There is a high threshold for incorporating such variances in a standard; the subcommittee(s) in drafting the standard, the EC in approving the subcommittee recommendation, and the membership in approving the standard must all agree that such variance is necessary. Nonetheless, NAESB procedures are well suited to take into account operational and regional differences.

Transparency

All NAESB meetings are open for attendance and participation by any interested party, with the exception of executive sessions of the Board or Managing Committee for purposes of discussing personnel, compensation or legal issues. Meeting announcements and agendas are posted in advance to permit the widest possible participation. Conference-calling capability is available for all meetings and web casting is available for most. Those intending to attend a meeting in person or by telephone are asked to notify NAESB by a specific date to permit adequate meeting planning.

Transcripts are made of all Board of Directors and EC meetings, and may also be made of other meetings that are expected to be controversial. Transcripts are maintained in the NAESB office and are provided to regulatory agencies for their internal use. All other interested parties can purchase transcripts from the relevant transcription service.

Coordination with NERC

For business practice standards development for the WEQ, if it is determined by NERC and NAESB Executive Management that joint development is needed by NERC and NAESB, the NERC-NAESB Coordination Joint Development Process is implemented.[1] This process requires that the appropriate NAESB Subcommittee and NERC Standards drafting team work together to develop reliability standards and business practices.

The Joint Interface Committee of NAESB, NERC and the ISO-RTO Council ("JIC") was dissolved as part of the agreement to create the Independent Grid Operator segment of the WEQ. The joint development process between NAESB and NERC is being used to ensure appropriate coordination. The ISOs and RTOs have strong decision-making roles in both NERC and NAESB, and thus with the use of the joint development process, the JIC was no longer necessary.

Accessibility of Standards and Work Products

The NAESB standards and protected work products are accessible to members at no cost as a benefit of their membership. Non-members can purchase the standards as a full version, or they can purchase individual final actions. Non-members can also access the standards at no cost by requesting an evaluation copy. NAESB standards and protected work products are copyrighted. Non-members can download a NAESB materials order form from the NAESB web site for ordering standards or for instructions on accessing standards for evaluation.

[1] The NERC-NAESB Coordination Joint Development Process was submitted to the Commission on February 17, 2006 in Attachment C of the Progress Report on NAESB Activities impacting Docket No. RM05-5-000, "Standards for Business Practices and Communication Protocols for Public Utilities": http://www.naesb.org/doc_view2.asp?doc=ferc021706.pdf.

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 Order[1] (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]

[1] This order was entered on June 24, 2009, at Docket No. M-2009-2092655.
[2]Implementation 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.[7] 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.[8] The following parties filed comments: the Demand Response and Smart Grid Coalition[9] (DRSG); Duquesne; the Energy Association of Pennsylvania (EAP); the Electronic Data Exchange Working Group Leadership[10] (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.

[7] *See 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.[11] "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

[11]Preliminary 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.[13] 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

[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.
[13] Tentative 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.[15] 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.[16] 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.
[15]Duquesne Comments at 5.
[16]FirstEnergy Comments at 3.
[17]EAP Comments at 4.
[18]EDEWG 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.[19] 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 participationin 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]

[19]PECO Comments at 3 and 4.
[20]PECO Reply Comments at 1.
[21]PPL Comments at 5 and 6.
[22]PPL 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]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.[25] 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.[26] 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.[27] 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.[28]

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

[24]Tentative Order at 5.
[25]DRSG Comments at 1 and 2.
[26]Duquesne Comments at 5 and 6.
[27]EAP Comments at 5.
[28]EDEWG 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.[31] 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]

[30]PPL Comments at 7.
[31]PECO Comments at 5.
[32]PECO 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

[34]Tentative 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]

[35]Duquesne Comments at 6 and 7.
[36]DRSG Comments at 1 and 2.
[37]EAP Comments at 5 and 6.
[38]FirstEnergy 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.[39] 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.[40] FirstEnergy Solutions supports PECO's suggestion for additional input from EGSs to determine whether certain functionalities are even desired.[41]

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.
[40] PECO Reply Comments at 2.
[41] FirstEnergy Solutions Reply Comments at 4.
[42] PPL 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.[43] 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.

[43]*See 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.[47] 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.
[45]Duquesne Comments at 7.
[46]DRSG Comments at 2.
[47]Tentative Order at 6 and 7.
[48]EAP 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.[50] 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.[51]

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

[49]EDEWG Leadership Comments at 3.
[50]PECO Comments at 8 and 9.
[51]PECO 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 PAP20[54] 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.

[52]PPL Comments at 10 and 11.
[53]FirstEnergy 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]

[55]Tentative 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

[56]Tentative Order at 9 and 10.
[57]Duquesne Comments at 8.
[58]DRSG 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]

[59]DRSG Comments at 3.
[60] EAP Comments at 6-9.
[61]EDEWG 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

[62]FirstEnergy Comments at 8-10.
[63]PECO Comments at 9 and 10.
[64]PECO Comments at 11 and 12.
[65]PECO 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 standardsand 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

[66]PPL Comments at 11-15.
[67]FirstEnergy 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 Button[71] 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

[68]For 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.
[69]PECO 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.

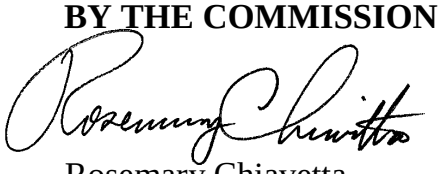
3. That the Electronic Data Exchange Working Group shall convene a web-portal working group including all electric distribution companies required to submit smart meter technology and implementation plans and other interested stakeholders to develop a standardized solution for the acquisition of historical 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 capabilitiesinto 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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via posting

TO: NAESB Web Site for Posting

RE: Notes from the NAESB Advisory Council Meeting – February 2, 2013

DATE: February 8, 2013

NORTH AMERICAN ENERGY STANDARDS BOARD ADVISORY COUNCIL MEETING NOTES
Renaissance Washington Hotel – Washington, DC
February 2, 2013 – 4:00 PM to 6:00 PM Eastern

1. Welcome

Mr. Ellsworth opened the meeting and welcomed the Advisory Council members and observers. Mr. Ellsworth reminded the participants that the NAESB antitrust and other meeting policies are in effect. Mr. Booe reviewed the antitrust guidance that was provided in the meeting materials. The Advisory Council and other participants introduced themselves. Mr. Ellsworth reviewed the agenda[1] and Mr. Pearce moved to adopt it as drafted. Mr. Freitas seconded the motion and the motion passed without opposition.

2. Update on Quadrant Activities and Strategic Direction

Mr. Ellsworth noted that the Annual Plans for the Wholesale Electric Quadrant (WEQ)[2], Wholesale Gas Quadrant (WGQ)[3] and Retail Quadrants[4] were included in the meeting materials and asked representatives from each quadrant to provide a summary of their respective activities.

Ms. York provided a review of the function of the NAESB Annual Plans and how they are developed. She stressed how NAESB and the North American Electric Reliability Corporation (NERC) work collaboratively on many standards. She also reviewed the activities of the WEQ and noted the many standards development efforts underway including the FERC Order No. 890 related Preemption and Competition standards effort and the Parallel Flow Visualization standards effort. For the Parallel Flow Visualization project, she noted that the group should be collecting informal industry comments that should point towards a completion this year. She also noted the Public Key Infrastructure standards development activities that concluded in 2012 and publication of Version 3.0 of the WEQ standards. Version 3.0 of the standards, because of the inclusion of standards that support network integration transmission functions, more than doubled the number of standards from the prior version. The standards have been provided to the FERC for its consideration.

Mr. Minneman reviewed the activities of the Retail Quadrants including the heavily attended Energy Efficiency and Smart Grid Data Privacy meetings. He added that significant effort is being spent to revise the retail standards to make them more user friendly, as they were in many cases, developed more than 10 years ago. Data privacy is taking a strong role for standards development this year, based on work done over the last 18 months. Standards to support development of smart grid applications continues to be a focal point for 2013 as well. He stated that the Retail Quadrant is scheduled to publish Version 2.1 of the Retail Quadrant standards mid-year.

[1] The agenda along with hyperlinks to meeting materials is available through the following hyperlinks: http://www.naesb.org/pdf4/advisory020213a.docx, http://www.naesb.org/pdf4/advisory020213materials.docx

[2] The 2013 WEQ Annual Plan can be found through the following hyperlink: http://www.naesb.org/pdf4/weq_2013_annual_plan.docx

[3] The 2013 WGQ Annual Plan can be found through the following hyperlink: http://www.naesb.org/pdf4/wgq_2013_annual_plan.docx

[4] The 2013 Retail Annual Plan can be found through the following hyperlink: http://www.naesb.org/pdf4/retail_2013_annual_plan.docx

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Ms. Davis reviewed the activities of the WGQ including standards modifications in response to Federal Energy Regulatory Commission (FERC) Order No. 587-V, the development of a natural gas liquids contract and the development of a standards matrix to facilitate the use of the WGQ standards and review them by topic. Many of the standards cross multiple interests, so the matrix can be a valuable tool in determining which standards are associated with which business topic. It is likely that several standards will be revised or deleted based on the review and creation of the matrix.

3. Gas-Electric Harmonization (GEH) Activities

Ms. Crockett reviewed the activities of the NAESB Gas-Electric Harmonization Committee in 2012 and the adoption of the NAESB Gas-Electric Harmonization Report on September 20, 2012 by the Board of Directors. The report was developed in response "Prudent Development – Realizing the Potential of North America's Abundant Natural Gas and Oil Resources" study issued by the National Petroleum Council (NPC) and resulted in the addition of three provisional annual plan items for the wholesale gas and electric quadrants. The NAESB report has been provided to the Department of Energy, the FERC, the National Association of Regulatory Utility Commissioners, the North American Electric Reliability Corporation and energy organizations. Mr. Freitas and Mr. Gee confirmed that gas-electric harmonization issues and the possibility of standards development are still being considered by the Board of Directors, which is evidenced by the inclusion of items on the annual plans for provisional efforts in 2013. The Board of Directors is delaying any action by NAESB on GEH as the FERC has work underway in technical conferences and several of the ISOs have projects underway with their stakeholders. Ms. Crockett stated that Skipping Stone developed a white paper titled "Synchronizing Natural Gas and Power Markets – A Series of Proposed Solutions" and asked Mr. Lander to present it to the Advisory Council.[5]

Mr. Lander stated that the white paper was developed at the request of the Skipping Stone Board of Directors to present solutions to the identified coordination challenges the two markets are currently facing. The white paper proposed that firm power be redefined on a fuel neutral basis so that so that firm power sold on the day-ahead market is supported by physical sources of generation. The paper also proposed to eliminate operational and economic issues concerning the timing of the gas and electric markets scheduling and closing times by offering more gas nomination periods, raising the priority of secondary firm service above interruptible and creating two east/west energy sync zones. Finally, the white paper offered solutions to communication issues faced by the markets by sharing information that already exists in the two sectors. The participants asked Mr. Lander questions about his proposed solutions and provided feedback concerning how the markets would be affected, both on a operational and economic level.

Mr. Lander stated that the white paper was jointly developed with a demand response expert and that the impact of demand response programs may help to reduce coordination issues. Ms. McQuade noted a recent article that reported a utility in Germany has reduced the production of gas fired generation as result of the success of demand response and energy efficiency programs. Ms. Cross noted that a focus on operational reserves would be beneficial. There was general discussion on the impact on investors, the differences in implementation by organized markets and by vertically integrated companies, and the impact of changing schedules to support an east/west model..

Mr. Ellsworth asked Mr. Lander how NAESB, NERC and FERC would be impacted by the proposal. Mr. Lander responded that implementation of the proposed solutions would require regulatory action by the FERC before NAESB and NERC could determine how to proceed. He stated that most of what he proposed are business activities but do have impacts on reliability. Mr. Ellsworth thanked Mr. Lander for his proposal and suggested participants with additional questions or recommendations contact Mr. Lander offline. The presentation and white paper can be accessed from the NAESB web site.

[5] The white paper and presentation are posted on the NAESB web site for the Advisory Council page and can be accessed from the following links: - http://www.naesb.org/pdf4/advisory020213_lander_presentation.pdf and - http://www.naesb.org/misc/skipping_stone_geh_white_paper_jan2013.pdf

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4. Smart Grid, Data Privacy and the Green Button Initiative

Mr. Booe provided an update of NAESB's activities related to the NAESB Energy Usage Information Model, the Energy Service Provider's Interface (ESPI) standard and its relationship to the Green Button initiative and the Data Privacy standard. NAESB continued participation throughout 2012 in the activities of the Smart Grid Interoperability Panel (SGIP), primarily through involvement in priority action plan 20 which is dedicated to the proliferation of the Green Button and evolution of the ESPI standard. The Green Button initiative was created by the Office of Science and Technology Policy in early 2012 to encourage U.S. utilities to make their customers energy usage information easily available through a downloadable format on their websites. The NAESB standard has served as the basis for the Green Button applications adopted by the participating utilities. It defines a communications protocol and a schema for the exchange of the usage information, which builds upon our Energy Usage Information Model

Through priority action plan 20 the SGIP has informally asked NAESB to consider making the schema contained in the standard freely available without restriction and to internationalize the standard by publication through an international standards body. The SGIP contends that these actions are necessary for the continued success of the Green Button by allowing application developers easier access the schema and making the standard more appealing to the international community. NAESB has requested that the SGIP offer a value proposition and that the requests be made formally by both the SGIP and NIST at its senior executive level. Mr. Booe also noted that the SGIP is in the process of transforming from a government supported organization to an independently funded private entity.

Mr. Boswell explained that the request from NIST and the SGIP, if submitted, will be made at a time when NAESB is taking steps to more actively protect its copyright and enhance membership benefits. Mr. Booe stated that NAESB recently submitted a report to the FERC reminding the industry of the NAESB copyright policy and will soon institute a non-member meeting attendance fee for participation in NAESB meetings. In addition, the NAESB website is undergoing changes that will require a member log-in and password to access historical information on the various subcommittee webpages. The participants supported these actions and discussed the importance of maintaining the NAESB business model currently in place.

5. Retail Quadrants Restructuring and Support for State Initiatives

Mr. Minneman reviewed the proposal of the Retail Structure Review Committee adopted by the Board of Directors during the December Board meeting. The proposal was developed at the request of the Board to address concerns about the failure of the retail quadrants meeting minimum membership requirements of the NAESB bylaws. The proposal recommends that the committee begin the process of merging the two quadrants and adjusting the segments preserve the existing membership and leadership. The current recommendation under consideration by the Retail Structure Review Committee proposes that the merged quadrant consist of four segments representing (1) electric utilities, (2) electric service providers/suppliers (3) electric end users/public agencies and (4) gas market participants. Mr. Minneman stated that the change to the structure should not have a major impact on current members and will continue to balance the interests of the market within the quadrant. He also stated that the merger of the quadrants will be an interim solution in place for two years, and will be reevaluated by the Board after the two year period before instituting the changes in the governing documents.

6. Cybersecurity Activities

Ms. McQuade stated that NAESB provided a status report to the FERC on November 30, 2012 describing the NAESB Public Key Infrastructure (PKI) standards development efforts and a subsequent report on January 29, 2013 with the resulting standards. She also stated that NAESB is in the process of developing two fact sheets, one for the wholesale gas market and one for the wholesale electric market, that provide a description of the NAESB cybersecurity standards. She noted the participation of Annie McIntyre and Annabelle Lee and thanked them for their contributions. Ms. McIntyre stated that fact sheets will be very informative and helpful to the industry and displays NAESB's long term involvement in cybersecurity issues. Ms. Lee stated that the fact sheets are very timely given the request for information issued by Senators Markey and Waxman and the draft Executive Order currently

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under consideration by the Administration. Ms. Hummel stated that the NAESB standards and fact sheets also parallel with the activities of the Department of Energy as they meet with industry leadership to develop verification and authentication procedures to protect access to information. Ms. McQuade noted that the report addresses gas-electric coordination issues and the need for cohesive security solutions so that potential vulnerabilities in one market do not create risk in the other market. Mr. Freitas stated that the Department of Energy supports NAESBs activities related to cybersecurity and that NAESB's response to the surety assessment provided by Sandia National Laboratory was very beneficial to the industry.

7. New Business

Mr. Ellsworth asked if there was any new business that anyone would like to discuss. Ms. Ogg recommended that NAESB pursue the involvement of the Commodities Futures Trading Commission in NAESB activities during 2013 in response to the implementation of the Dodd-Frank Act. The participants supported her recommendation. Mr. DeBoissiere stated that he would like to nominate Mr. Ellsworth to continue as the NAESB Advisory Council Chair for 2013 and Mr. Pearce seconded the nomination. Mr. Ellsworth was unanimously re-elected to his position as Chair.

8. Adjourn

The meeting was adjourned at 6:05 PM Eastern by consensus.

9. Attendance

Advisory Council Members in Attendance

Vicky Bailey	BHMM Energy Services, LLC, FERC Commissioner Emeritus, IN PUC Commissioner Emeritus, formerly Assistant Secretary for the DOE
Diane Barney	New York State Department of Public Service
Gregory Brazaitis	Energy Transfer Equity
Lorraine Cross	Cross & Company
Bruce Ellsworth, Chair	New York State Reliability Council
Alex DeBoissiere	UIL Holdings Corporation
Christopher Freitas	Department of Energy
Wayne Gardner	Commissioner, Pennsylvania Public Utility Commission
Robert Gee	The Gee Strategies Group, formerly Assistant Secretary DOE, Chairman Emeritus, PUC of TX
Charles Gray	NARUC
Robert Keating	ANGA, Commissioner Emeritus of MA DPU
Annabelle Lee	Electric Power Research Institute
Annie McIntyre	Ardua Strategies, formerly Sandia National Laboratories
Joelle Ogg	DC Energy
Thomas Pearce	Ohio Public Utilities Commission
Timothy Simon	Commissioner Emeritus, California Public Utilities Commission
Marc Spitzer	Steptoe and Johnson, LLC and Commissioner Emeritus, FERC

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Board Members and Speakers in Attendance

Valerie Crockett	Tennessee Valley Authority
Dale Davis	Williams Gas Pipeline
Greg Lander	Capacity Center
Jim Minneman	PPL Solutions, LLC
Mark Stultz	BP Energy
Kathy York	Tennessee Valley Authority

Guests in Attendance

Kim Barrow	Pennsylvania Public Utility Commission
Kathryn Burch	Spectra Energy
Dr. Holmes Hummel	U.S. Department of Energy
Nancy Johnson	U.S. Department of Energy
Paul Roberti	Commissioner, RI PUC
Holly Rachel Smith	NARUC

NAESB Staff in Attendance

Jonathan Booe	NAESB Vice President
Bill Boswell	NAESB General Counsel
Rae McQuade	NAESB President
Veronica Thomason	NAESB Executive Assistant and Office Manager

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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 Meetings

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)	Location and Host TBD
October 22-24	Executive Committee (WEQ, Retail, WGQ)	Host Dominion, Richmond, VA

Notes:

1. The Retail Executive Committee meetings will be held by conference call and web cast unless otherwise determined by the retail leadership.
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.