



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

NAESB BOARD OF DIRECTORS MEETING ASSEMBLED MEETING MATERIALS

MARCH 25, 2010



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

NAESB BOARD OF DIRECTORS MEETING
Marriott IAH Airport Hotel, Houston, Texas -- Ballroom B
Thursday, March 25 -- 9:00 a.m. to 1:00 pm Central

TABLE OF CONTENTS

#	Agenda Item/Material (provided also as hyperlinks for editable documents)	Page
	Resources Committee Meeting	
	Continental Breakfast	
1.	Welcome	
a)	Antitrust Guidelines http://www.naesb.org/misc/antitrust_guidance.doc (Guidance)	1
b)	Welcome to Board members, guests: http://www.naesb.org/pdf4/bod_terms.pdf (Roster)	2
2.	Adoption of the Agenda and Minutes	
a)	Agenda Adoption - http://www.naesb.org/pdf4/bd032510a.doc (Agenda)	8
b)	Adoption of Draft Minutes – December 10, 2009 - http://www.naesb.org/pdf4/bd121009dm.doc (Draft Minutes)	15
3.	Membership and Financial Report	
a)	Membership Report- http://www.naesb.org/misc/membership_update_chart_03212010.pdf , http://www.naesb.org/misc/membership_report_030910.doc (Membership Profile and Report)	23
b)	Financial Report for 2009 YE & 2010 YTD - http://www.naesb.org/misc/financial_profiles_0310.ppt , http://www.naesb.org/misc/financial_report_032610.doc (Financial Profile and Report)	35
4.	Reports from Board Committees	
a)	Resources – http://www.naesb.org/pdf4/board_resource032510w1.pdf (Resources Report)	45
b)	Managing Committee – http://www.naesb.org/pdf4/managing021510notes.doc (Managing Committee Report), http://www.naesb.org/pdf4/managing031710notes.doc (Resolution)	82
c)	Critical Infrastructure Committee - http://www.naesb.org/pdf4/critical_inf032210a.doc (First Meeting Agenda)	84
d)	Retail Restructuring Committee	
5.	Report from the Advisory Council - http://www.naesb.org/pdf4/advisory021310notes.doc (Minutes)	87
6.	Special Report on Smart Grid Efforts from Toby Considine and the links to the natural gas market	
7.	Updates on specific efforts:	
a)	Publications – http://www.naesb.org/misc/retail_publication_schedule_031510.doc (Retail Version 1.2), http://www.naesb.org/misc/weq_publication_schedule_031510.doc (WEQ Version 2.2) and http://www.naesb.org/misc/wgq_publication_schedule_031510.doc (WGQ Version 2.0)	91
b)	Update on Order 890 efforts – http://www.naesb.org/pdf4/update031010w2.xls (Report)	97
c)	Update on Demand Response and Demand Side Management	



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

NAESB BOARD OF DIRECTORS MEETING
Marriott IAH Airport Hotel, Houston, Texas -- Ballroom B
Thursday, March 25 -- 9:00 a.m. to 1:00 pm Central

TABLE OF CONTENTS

#	Agenda Item/Material (provided also as hyperlinks for editable documents)	Page
d)	Smart Grid Update - http://www.naesb.org/pdf4/update031010w8.doc (PAP Draft Recommendations and Phase 2 Report)	101
e)	RFP Status for the Electric Industry Registry - http://www.naesb.org/pdf4/update031010w5.pdf (RFP)	103
8.	2010 Executive Committee Reports	
a)	Review of 2010 WGQ Annual Plan and vote to adopt with any revisions made during the meeting - http://www.naesb.org/pdf4/wgq_ec020410a2.doc (WGQ Annual Plan)	153
b)	Review of 2010 Retail Annual Plan and vote to adopt with any revisions made during the meeting - http://www.naesb.org/pdf4/retail_ec020310a2.doc (Retail Annual Plan)	157
c)	Review of 2010 WEQ Annual Plan and vote to adopt with any revisions made during the meeting - http://www.naesb.org/pdf4/weq_ec020210a3.doc (WEQ Annual Plan)	163
9.	Plan for June 2010 Board Meeting	
10.	Old and New Business	
a)	Liaisons with external groups: FERC, NARUC, NERC, Other Groups	
b)	Board Meeting Schedule for 2010 – http://www.naesb.org/misc/2010_schedule.pdf (Calendar), http://naesb.org/pdf4/naesb_bulletin_vol3_issue1.pdf (Newsletter)	175 176
11.	Adjourn	



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

NAESB ANTITRUST GUIDELINES STATEMENT

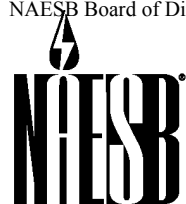
ANTITRUST GUIDELINES

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

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

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

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



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

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

PRODUCERS SEGMENT		TERM END:
Richard D. Smith	Regulatory & Compliance Manager, Noble Energy Inc.	12-31-2010
Mark Stultz	Vice President - Policy and Regulatory Affairs, US America Gas and Power, BP Energy Company	12-31-2011
Keith Sappenfield	Regional Director – US Regulatory Affairs, EnCana Oil & Gas (USA), Inc.	12-31-2011
Randy E. Parker	Global Regulatory Advisor, ExxonMobil Gas and Power Marketing Company	12-31-2010
Pete Frost	Director - Regulatory Affairs, ConocoPhillips Gas and Power Marketing	12-31-2011
PIPELINE SEGMENT		
Cathie Legge	Manager – Customer Service, Alliance Pipeline, LP	12-31-2010
Bill Grygar	Vice President, Panhandle Eastern Pipe Line	12-31-2010
Susanna B. Barry	Vice President – Commercial Operations, Tennessee Gas Pipeline Company	12-31-2010
V A C A N C Y		12-31-2009
Richard Kruse	Senior Vice President, Spectra Energy Transmission	12-31-2009
LOCAL DISTRIBUTION COMPANY (LDC) SEGMENT		
Craig Colombo	Energy Trader III, Dominion Resources	12-31-2010
Adrian Chapman	Vice President - Regulatory Affairs & Energy Acquisition, Washington Gas	12-31-2010
V A C A N C Y		12-31-2011
Mike Novak	Asst. General Manager, National Fuel Gas Distribution Corporation	12-31-2011
Lee Stewart	Senior Vice President, Gas Transmission, Southern California Gas Company	12-31-2011
END USERS SEGMENT		
Valerie Crockett	Senior Program Manager - Energy Markets & Policy, Tennessee Valley Authority	12-31-2010
Timothy W. Gerrish	Director of Origination-Energy Marketing and Trading, Florida Power & Light	12-31-2010
Tina Burnett	Natural Gas Resources Administrator, The Boeing Company	12-31-2010
Lori-Lynn C. Pennock	Senior Fuel Supply Analyst, Salt River Project	12-31-2011
Jim Templeton	Principal, Comprehensive Energy Services	12-31-2011
SERVICES SEGMENT		
Steve Abbey	Manager of Regulatory Affairs - Marketing Department, Anadarko Energy Services Company	12-31-2010
Rusty Braziel	Managing Director, Bentek Energy, LLC	12-31-2010
Jim Buccigross	Vice President Energy Industry Practice, 8760 Inc.	12-31-2011
Paul Kahler	Midstream Regulatory Advisor, Cenovus Energy Inc.	12-31-2011
Lori Leeder	Relationship Manager/Business Development – Asset Optimization, Vega Energy Partners, Ltd	12-31-2010



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

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

SERVICE PROVIDERS/SUPPLIERS SEGMENT		TERM END:
V A C A N T		12-31-2011
Jim Minneman	Controller, PPL Solutions LLC	12-31-2011
J Cade Burks	Executive Vice President of ista	12-31-2010
Austin Morris	Managing Partner – Energy, SunGard Consulting Services, LLC	12-31-2010
UTILITIES SEGMENT		
David Koogler	Director – State Regulation, Dominion Virginia Power	12-31-2011
Dennis Derricks	Director Regulatory Policy and Analysis, Wisconsin Public Service Corporation	12-31-2011
Ruth Kiselewich	Director - Demand Side Management Programs, Baltimore Gas & Electric Company	12-31-2010
Debbie McKeever	Market Advocate, Oncor	12-31-2010
END USERS/PUBLIC AGENCIES SEGMENT		
V A C A N C Y		12-31-2011
V A C A N C Y		12-31-2011
James P. Cargas	Senior Assistant City Attorney, City of Houston	12-31-2010
V A C A N C Y		12-31-2010



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

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

TRANSMISSION SEGMENT		TERM END:	SUBSEGMENT:
Dan Klempel	Director Transmission Regulatory Compliance, Basin Electric Power Cooperative	12-31-2011	Muni/Coop
Chuck Feagans	Senior Manager, Reliability Policy, Tennessee Valley Authority	12-31-2010	Fed/State/Prov.
John E. Lucas	Director - Transmission Policy and Services, Southern Company Transmission	12-31-2010	IOU
V A C A N C Y		12-31-2011	at large
Jill Horswell	Director Transmission, Southern California Edison	12-31-2010	at large
Edward J. Davis	Policy Consultant, Entergy Services, Inc.	12-31-2011	at large
V A C A N C Y		12-31-2011	At-Large
GENERATION SEGMENT			
Douglas L. Curry	Administrator and CEO, Lincoln Electric System	12-31-2011	Muni/Coop
Belinda Thornton	General Manager - Energy Origination, Tennessee Valley Authority	12-31-2010	Fed/State/Prov.
Lou Oberski	Director – Electric Market Policy, Dominion Resources Services, Inc.	12-31-2010	IOU
V A C A N C Y		12-31-2011	IOU
V A C A N C Y		12-31-2011	Merchant
Gloria Godson	Vice President Energy Policy, Conectiv Energy Supply, Inc.	12-31-2010	Merchant
Shah Hossain	Senior Regulatory Specialist, Westar Energy, Inc.	12-31-2011	at large
MARKETERS/BROKERS SEGMENT			
Roy True	Manager of Regulatory and Market Affairs, ACES Power Marketing	12-31-2010	Muni/Coop
Jeff Ackerman	Manager - Colorado River Storage Project Energy Management and Marketing Office, Western Area Power Administration	12-31-2011	Fed/State/Prov.
Gavin Cunningham	Manager – FirstEnergy Solutions Corp.	12-31-2010	at large
Jack Cashin	Senior Manager of Policy, Electric Power Supply Association (EPSA)	12-31-2011	at large
Sam Forrest	Vice President - Energy Marketing and Trading, Florida Power & Light	12-31-2010	IOU
R. Scott Brown	Vice President and Director, Exelon Generation Power Team	12-31-2011	IOU
V A C A N C Y		12-31-2011	At-Large



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

DISTRIBUTION/LOAD SERVING ENTITIES (LSE) SEGMENT		TERM END:	SUBSEGMENT:
Arthur G. Fusco	Vice President and General Counsel, Central Electric Power Cooperative Inc.	12-31-2010	Muni/Coop
Paul McCurley	Manager – Power Supply, National Rural Electric Cooperative Association	12-31-2011	Muni/Coop
V A C A N C Y		12-31-2010	IOU
Nelson Peeler	Vice President System Operations, Duke Energy	12-31-2011	IOU
V A C A N C Y		12-31-2011	Competitive Retailer
Joe Hartsoe	Managing Director – Federal Policy, American Electric Power Service Corp.	12-31-2010	at large
Bruce Ellsworth	New York State Reliability Council	12-31-2011	At-Large
END USERS SEGMENT			
Jesse D. Hurley	Chief Executive Officer, Shift Research, LLC	12-31-2011	at large
Aaron Breidenbaugh	Senior Manager - Regulatory Affairs and Public Policy - New York, EnerNOC, Inc.	12-31-2010	at large
Thomas G. Dvorsky	Director of the Office of Electricity, Gas, and Water at the New York State Department of Public Service, rep. National Association of Regulatory Utility Commissioners	12-31-2010	Regulator
V A C A N C Y		12-31-2011	Residential/Commercial
Rick Lentz	Fellow with SunGard	12-31-2010	at large
V A C A N C Y		12-31-2011	Large Industrial
Michehl Gent	Open Access Technology International, Inc.	12-31-2011	At-Large
INDEPENDENT GRID OPERATORS/PLANNERS			
Michael Desselle	Vice President Process Integrity, Southwest Power Pool	12-31-2010	
Kent Saathoff	Vice President of System Operations, ERCOT	12-31-2010	
Kevin Kirby	Vice President Market Operations, ISO New England, Inc.	12-31-2010	
Rana Mukerji	Vice President Market Structures, New York Independent System Operator, Inc. (NYISO)	12-31-2010	
Andy Ott	Senior Vice President Marketing, PJM Interconnection, LLC	12-31-2011	
Bill Phillips	Vice President Standards Compliance & Strategy, Midwest ISO (MISO)	12-31-2011	
Peter Sergejewich	Director of Corporate Planning, Independent Electricity System Operator (IESO)	12-31-2011	



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

TECHNOLOGY AND SERVICES

Jim Buccigross	Vice President Energy Industry Practice, 8760 Inc.	12-31-2010
Laurent M. Liscia	Executive Director, Organization for the Advancement of Structured Information Standards (OASIS)	12-31-2010
David A. Wollman	Leader, Smart Grid Team – Standards and Electrical Metrology Groups, National Institute of Standards and Technology (NIST)	12-31-2010
V A C A N C Y		12-31-2010
V A C A N C Y		12-31-2011
V A C A N C Y		12-31-2011
V A C A N C Y		12-31-2011

The subsegments noted in the above roster are:

At-Large -- Regional reliability organizations, regional transmission organizations, consultants, service companies, information services and software companies, law firms, and other such organizations that are not specifically encompassed in the other subsegments for a given segment.

Competitive Retailer (not available to MUNI/COOP, IOU or IOU affiliates)

End Use (also in another segment)

Federal/State/Provincial

IOU – Investor Owned Utility or IOU Affiliated

ITC – Independent Transmission Company

 Large Industrials (not in other segments)

 Merchant

 Muni/Coop – Municipals, Cooperatives

 Not IOU Affiliated

 OTHER -- (not available to MUNI/COOP, IOU or IOU affiliates)

 Regulator

 Residential/Commercial

 End Use (Self Generation)

The number of seats within each segment that are allotted to sub-segments are controlled through the WEQ Procedures.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

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

SERVICE PROVIDERS/SUPPLIERS SEGMENT		TERM END:
Leigh Spangler	President, Latitude Technologies Inc.	12-31-2010
V A C A N C Y		12-31-2010
Dave Darnell	President & CEO, Systrends USA	12-31-2011
Greg Lander	President, Capacity Center	12-31-2011
DISTRIBUTORS SEGMENT		
Alonzo Weaver	Vice President of Engineering and Operations, Memphis Light, Gas & Water Division (APGA)	12-31-2011
Ralph Cleveland	Senior Vice President – Engineering and Operations, AGL Resources, Inc.	12-31-2011
V A C A N C Y		12-31-2010
V A C A N C Y		12-31-2010
END USERS/PUBLIC AGENCIES SEGMENT		
V A C A N C Y		12-31-2010
V A C A N C Y		12-31-2010
V A C A N C Y		12-31-2011
V A C A N C Y		12-31-2011



North American Energy Standards Board

1301 Fannin, Suite 2350, 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
 March 22, 2010

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

FROM: Rae McQuade, NAESB President

RE: Agendas with links for NAESB Board Meeting and related NAESB Meetings – March 24 – 25, 2010

Dear Board members, EC members, EC alternates, NAESB members, NAESB Advisory Council and invited guests,

As noted in other communications, we are pleased to announce the upcoming Board meeting which for March 25 in Houston, Texas at the Marriott IAH Airport Hotel. I hope you are able to travel to Houston for our upcoming Board meeting, related committee meetings and our Board dinner. For the Board meeting, we will address progress made towards the annual plans, an update from our Advisory Council meeting and, the work underway related to Smart Grid applications, demand response, and energy efficiency.

At the Board dinner on March 24, you will not want to miss our speaker, Lorraine Cross, who will bring us up to date on the climate change bill and other congressional and regulatory actions that may impact our efforts. You can find Ms. Cross's biography at the following link: http://www.naesb.org/misc/cross_bio_0310.doc.

For the Board meeting, we will address progress made towards the annual plans, an update from our Advisory Council meeting and, the work underway related to Smart Grid applications, demand response, and energy efficiency.

The specifics of the meetings are:

Events:	Board of Directors Meeting, and related NAESB meetings
Where:	Marriott IAH Airport, 18700 John F. Kennedy Blvd, Houston, TX 77032, phone (281) 443-2310 (excepting Board Reception and Dinner)
When:	March 24 Retail Gas and Electric Quadrant Leadership Meeting from 11:00 am to 1:00 pm C (lunch served at noon during the meeting) – Presidio AB
	March 24 Wholesale Electric Quadrant Leadership Meeting from 1:00 am to 3:00 pm C – Presidio AB
	March 24 Wholesale Gas Quadrant Leadership Meeting from 3:00 pm to 5:00 pm C – Presidio AB
	March 24 Board Reception and Dinner - 6:00 pm reception and 7:00 pm dinner seating (held at the Petroleum Club with bus transportation provided to/from the Marriott IAH Airport Hotel)
	March 25 Resources Committee Meeting from 8:00 am to 9:00 am C – Presidio AB
	March 25 Board Meeting from 9:00 am to 1:00 pm C, (a buffet lunch will be served during the meeting) (Ballroom B)

As with all our meetings, these events are open to any interested party. For the meetings, conference calling will be available should you be unable to attend in person. Please contact Veronica Thomason (vthomason@naesb.org, 713-356-0060) for additional information on the meetings and conference calling information. Board materials are provided as links in the agendas for the Board meeting and the three leadership meetings.

We hope you will be able to make the leadership meetings and the dinner on March 24, followed by the Resources Committee meeting and the Board meeting on March 25. Please RSVP your intention to attend the Board dinner or Board of Directors meeting or any of the related meetings, and your intention to bring a guest or colleague to the dinner at your earliest convenience (vthomason@naesb.org, naesb@naesb.org, 713-356-0060). We look forward to seeing you at the dinner and our Board meeting and at any of the related meetings noted above.

Best Regards,

Rae McQuade

Rae McQuade
 NAESB President and COO

As a reminder for your calendars, other 2010 scheduled Board meetings include: June 23-24, September 22-23, and December 8-9.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

CONFERENCE CALLING AND WEB CONFERENCING DETAILS FOR THE MARCH 24-25, 2010 SET OF BOARD AND RELATED MEETINGS:

The meetings are open to all interested parties, who may participate by phone if unable to attend in person. The Board meeting is also web cast.

March 24	11:00 am to 1:00 pm C	Retail Quadrants Leadership Meeting (In person and Conference Call)
	Room – Presidio AB	<ul style="list-style-type: none"> • Call in number 866-740-1260 • Access Code – 356-0063 • Security Code 2501
March 24	1:00 to 3:00 pm C	Wholesale Electric Quadrant Leadership Meeting (In person and Conference Call)
	Room – Presidio AB	<ul style="list-style-type: none"> • Call in number 866-740-1260 • Access Code – 356-0064 • Security Code 7318
March 24	3:00 to 5:00 pm C	Wholesale Gas Quadrant Leadership Meeting (In person and Conference Call)
	Room – Presidio AB	<ul style="list-style-type: none"> • Call in number 866-740-1260 • Access Code – 356-0063 • Security Code 3521
March 25	8:00 to 9:00 am C	Resources Committee Meeting (In person and Conference Call)
	Room – Presidio AB	<ul style="list-style-type: none"> • Call in number 866-740-1260 • Access Code – 356-0063 • Security Code 2843
March 25	9:00 am to 1:00 pm C	Board Meeting (In person and Conference Call/Web Cast)
	Room: Ballroom B	<ul style="list-style-type: none"> • Call in number 866-740-1260 • Access Code – 356-0060 • Security Code 6515

To join a conference call:

- Dial the 11-digit toll free call-in phone number shown above for the specific meetings
- An automated attendant will ask you to enter a seven-digit access code (shown in the table above)
- The automated attendant will ask you to record your name.
- Please note that if the conference leader has not yet initiated the conference call, you will be placed on music hold until the conference leader starts the conference.
- The automated attendant will then ask you for a four-digit security code (shown in the table above)

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 on-hold line to have it disconnected.

If the meeting has the web conferencing feature enabled, 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.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NAESB BOARD OF DIRECTORS MEETING
Marriott IAH Airport Hotel, Houston, Texas -- Ballroom B
Thursday, March 25 -- 9:00 a.m. to 1:00 pm Central

DRAFT AGENDA REVISED WITH LINKS TO MATERIALS

#	Agenda Item
8:00 A	Resources Committee Meeting
8:30 A	Continental Breakfast
9:00 A	1. Welcome
	a) Antitrust Guidelines http://www.naesb.org/misc/antitrust_guidance.doc (Guidance)
	b) Welcome to Board members, guests: http://www.naesb.org/pdf4/bod_terms.pdf (Roster)
	2. Adoption of the Agenda and Minutes
	a) Agenda Adoption - http://www.naesb.org/pdf4/bd032510a.doc (Agenda)
	b) Adoption of Draft Minutes – December 10, 2009 - http://www.naesb.org/pdf4/bd121009dm.doc (Draft Minutes)
	3. Membership and Financial Report
	a) Membership Report- http://www.naesb.org/misc/membership_update_chart_03212010.pdf , http://www.naesb.org/misc/membership_report_030910.doc (Membership Profile and Report)
	b) Financial Report for 2009 YE & 2010 YTD - http://www.naesb.org/misc/financial_profiles_0310.ppt , http://www.naesb.org/misc/financial_report_032610.doc (Financial Profile and Report)
	4. Reports from Board Committees
	a) Resources – http://www.naesb.org/pdf4/board_resource032510w1.pdf (Resources Report)
	b) Managing Committee – http://www.naesb.org/pdf4/managing021510notes.doc (Managing Committee Report), http://www.naesb.org/pdf4/managing031710notes.doc (Resolution)
	c) Critical Infrastructure Committee - http://www.naesb.org/pdf4/critical_inf032210a.doc (First Meeting Agenda)
	d) Retail Restructuring Committee
	5. Report from the Advisory Council - http://www.naesb.org/pdf4/advisory021310notes.doc (Minutes)
	6. Special Report on Smart Grid Efforts from Toby Considine and the links to the natural gas market
	7. Updates on specific efforts:
	a) Publications – http://www.naesb.org/misc/retail_publication_schedule_031510.doc (Retail Version 1.2), http://www.naesb.org/misc/weq_publication_schedule_031510.doc (WEQ Version 2.2) and http://www.naesb.org/misc/wgq_publication_schedule_031510.doc (WGQ Version 2.0)



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NAESB BOARD OF DIRECTORS MEETING
Marriott IAH Airport Hotel, Houston, Texas -- Ballroom B
Thursday, March 25 -- 9:00 a.m. to 1:00 pm Central

DRAFT AGENDA REVISED WITH LINKS TO MATERIALS

#	Agenda Item
	<ul style="list-style-type: none"> b) Update on Order 890 efforts – http://www.naesb.org/pdf4/update031010w2.xls (Report) c) Update on Demand Response and Demand Side Management d) Smart Grid Update - http://www.naesb.org/pdf4/update031010w8.doc (PAP Draft Recommendations and Phase 2 Report) e) RFP Status for the Electric Industry Registry - http://www.naesb.org/pdf4/update031010w5.pdf (RFP)
8.	2010 Executive Committee Reports <ul style="list-style-type: none"> a) Review of 2010 WGQ Annual Plan and vote to adopt with any revisions made during the meeting - http://www.naesb.org/pdf4/wgq_ec020410a2.doc (WGQ Annual Plan) b) Review of 2010 Retail Annual Plan and vote to adopt with any revisions made during the meeting - http://www.naesb.org/pdf4/retail_ec020310a2.doc (Retail Annual Plan) c) Review of 2010 WEQ Annual Plan and vote to adopt with any revisions made during the meeting - http://www.naesb.org/pdf4/weq_ec020210a3.doc (WEQ Annual Plan)
9.	Plan for June 2010 Board Meeting
10.	Old and New Business <ul style="list-style-type: none"> a) Liaisons with external groups: FERC, NARUC, NERC, Other Groups b) Board Meeting Schedule for 2010 – http://www.naesb.org/misc/2010_schedule.pdf (Calendar), http://naesb.org/pdf4/naesb_bulletin_vol3_issue1.pdf (Newsletter)
1:00 P	11. Adjourn

Attire – Business Casual



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NAESB RETAIL LEADERSHIP MEETING
Marriott IAH Airport Hotel, Houston, Texas -- Presidio A/B
Wednesday March 24 -- 11:00 a.m. to 1:00 pm Central

DRAFT AGENDA

#	Agenda Item
11:00 A	1. Welcome <ul style="list-style-type: none"> a) Antitrust Guidelines http://www.naesb.org/misc/antitrust_guidance.doc (Guidance) b) Welcome to participants
	2. Adoption of the Agenda <ul style="list-style-type: none"> a) Agenda Adoption
	3. Membership Issues <ul style="list-style-type: none"> a) Membership Report- http://www.naesb.org/misc/membership_update_chart_03212010.pdf, http://www.naesb.org/misc/membership_report_030910.doc (Membership Profile and Report) b) Retail Restructuring Update
	4. Report from the Advisory Council - http://www.naesb.org/pdf4/advisory021310notes.doc (Minutes)
	5. Updates on specific efforts: <ul style="list-style-type: none"> a) Publications - http://www.naesb.org/misc/retail_publication_schedule_031510.doc (Retail Version 1.2), b) Update on Demand Response and Demand Side Management d) Smart Grid Update - http://www.naesb.org/pdf4/update031010w8.doc (PAP Draft Recommendations and Phase 2 Report)
	6. 2010 Executive Committee Reports <ul style="list-style-type: none"> a) Review of 2010 Retail Annual Plan - http://www.naesb.org/pdf4/retail_ec020310a2.doc (Retail Annual Plan)
	7. Review of Other Board or Leadership Issues
	8. Old and New Business
1:00 P	9. Adjourn

Attire – Business Casual – Lunch Served in the Room



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NAESB WHOLESALE ELECTRIC QUADRANT LEADERSHIP MEETING
Marriott IAH Airport Hotel, Houston, Texas -- Presidio A/B
Wednesday March 24 -- 1:00 p.m. to 3:00 pm Central

DRAFT AGENDA

#	Agenda Item
1:00 P	1. Welcome <ul style="list-style-type: none"> a) Antitrust Guidelines http://www.naesb.org/misc/antitrust_guidance.doc (Guidance) b) Welcome to participants
	2. Adoption of the Agenda <ul style="list-style-type: none"> a) Agenda Adoption
	3. Report from the Advisory Council - http://www.naesb.org/pdf4/advisory021310notes.doc (Minutes)
	4. Updates on specific efforts: <ul style="list-style-type: none"> a) Publications -- http://www.naesb.org/misc/weq_publication_schedule_031510.doc (WEQ Version 2.2) b) Update on Order 890 efforts – http://www.naesb.org/pdf4/update031010w2.xls (Report) c) Update on Demand Response and Demand Side Management d) Smart Grid Update - http://www.naesb.org/pdf4/update031010w8.doc (PAP Draft Recommendations and Phase 2 Report) e) RFP Status for the Electric Industry Registry - http://www.naesb.org/pdf4/update031010w5.pdf (RFP) f) eTag Testing Status: http://www.naesb.org/pdf4/update031010w1.pdf (Report) g) Parallel Flow Visualization Status: http://www.naesb.org/pdf4/update031010w9.doc (Report)
	5. 2010 Executive Committee Reports <ul style="list-style-type: none"> a) Review of 2010 WEQ Annual Plan - http://www.naesb.org/pdf4/weq_ec020210a3.doc (WEQ Annual Plan)
	6. Review of Other Board or Leadership Issues
	7. Old and New Business
3:00 P	8. Adjourn

Attire – Business Casual – Lunch Served in the Room



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NAESB WHOLESALE GAS QUADRANT LEADERSHIP MEETING
Marriott IAH Airport Hotel, Houston, Texas -- Presidio A/B
Wednesday March 24 -- 3:00 p.m. to 5:00 pm Central

DRAFT AGENDA

#	Agenda Item
3:00 P	1. Welcome <ul style="list-style-type: none"> a) Antitrust Guidelines http://www.naesb.org/misc/antitrust_guidance.doc (Guidance) b) Welcome to participants
	2. Adoption of the Agenda <ul style="list-style-type: none"> a) Agenda Adoption
	3. FERC Efforts <ul style="list-style-type: none"> a) Adoption of Version 1.9 b) eTariff Efforts
	4. Report from the Advisory Council - http://www.naesb.org/pdf4/advisory021310notes.doc (Minutes)
	5. Updates on specific efforts: <ul style="list-style-type: none"> a) Publications - http://www.naesb.org/misc/wgq_publication_schedule_031510.doc (WGQ Version 2.0)
	6. 2010 Executive Committee Reports <ul style="list-style-type: none"> a) Review of 2010 WGQ Annual Plan - http://www.naesb.org/pdf4/wgq_ec020410a2.doc (WGQ Annual Plan)
	7. Review of Other Board or Leadership Issues
	8. Old and New Business
5:00 P	9. Adjourn

Attire – Business Casual – Lunch Served in the Room



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

December 10, 2009

TO: NAESB Board of Directors, Executive Committee (EC) Members, EC Alternates, and Invited Guests
FROM: Cory Galik Cummings, NAESB Staff Attorney
RE: Draft Minutes of the NAESB Board Meeting – December 10, 2009

NAESB BOARD OF DIRECTORS MEETING
Marriott IAH Airport Hotel, Houston, Texas
Thursday, December 10, 2009 – 9:00 a.m. to 1:00 pm Central
DRAFT MINUTES

1. Administration and Welcome

Ms. Crockett welcomed the Board members and guests in the room and on the phone. Mr. Boswell read the antitrust guidelines. Ms. Cummings called the roll of the NAESB Board members. Quorum was established.

2. Adoption of the Agenda and Minutes

The Board members reviewed the draft agenda. Agenda item 6 – Special Report from NIST on Cybersecurity Standards and the Smart Grid was moved after agenda item 9 – 2010 Executive Committee Reports. Mr. Hossain moved to adopt the agenda as revised and Mr. Oberski seconded the motion. The motion passed without objection. Next, the draft minutes from the September 24 board meeting were reviewed. Mr. Hossain moved, seconded by Mr. Lucas to adopt the minutes as drafted.

3. Membership and Financial Report

Membership Report: Ms. McQuade reviewed the [membership report](#). NAESB continues to lose memberships, with the majority of the losses in the WEQ and WGQ quadrants. The creation of a new WEQ segment in January should increase membership as more companies become involved in NAESB's smart grid activities. As reported previously, based upon exit interviews, most companies cited the poor economy and consolidation of multiple memberships as the grounds for resignation. None of the resignations were cited as due to the increase in dues.

Financial Report: Ms. Wishart provided an account of the [financial report](#) and [financial chart](#). The meeting statistics show the number of meetings held by conference call, in person and the number of hours allocated for these meetings for 2009. The report also lists the number of products sold, a month-by-month accounting of membership, and membership changes by segments and quadrants. In reviewing the balance sheet, it shows an increase in expenses which are directly related to the increase in the number of meetings held, particularly related to smart grid, but the increase in expenses is offset by the increase in revenues collected resulting from the dues increases, sales of work products and revenues from courses.

4. Presentation of 2010 Budget Proposal for Vote for Adoption

Budget Proposal for 2010: Ms. McQuade reviewed the [2010 budget proposal](#). It describes the proposal in terms of the 2009 year end estimate and is based on the September 2009 actuals. The budget assumes an increase in membership as a result of the new WEQ quadrant and the addition of one new staff member in 2010 to ensure the NAESB office can provide adequate meeting coverage. The NAESB office anticipates moving to another building in April 2010, which will either reduce the lease cost or delete the increase in lease cost projected by Griffin Partners should we stay in our current building. Travel and meeting expenses will decrease slightly with more reliance on conference calling to support the industry's travel limitations. The Managing Committee met on November 30, 2009 to review this budget and an alternative budget. Mr. Morris moved, seconded by Mr. Gent to approve the budget. The motion unanimously passed a simple majority vote.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

5. Reports from Board Committees

Resources: Mr. Brown provided the [report](#). He called for more participation at the Board Resources meetings, noting that only a few board members are actively involved. Five new members have joined NAESB since the September Board meeting but 15 members were lost. Many of those losses were due to companies consolidating multiple memberships. Some companies withdrew their membership completely, including one that contained a board member. The Board Resources Committee has a list of short term prospects that have received membership packets, including companies involved in demand side management (DSM), smart grid, wind and solar projects. He asked board members to get involved in outreach to these companies. Mr. Brown will work with Ms. McQuade to create a list of top candidates for membership for board members to contact. The WEQ has several board openings; Ms. McQuade, Mr. Desselle and Mr. Brown will meet to identify people in the fill those board positions. There are also a number of openings in the retail quadrants. Mr. Novak has been working with Ms. Rager to identify potential members for the retail seats.

WEQ Segment Restructuring: Ms. McQuade provided the update on the [WEQ segment restructuring](#) and the addition of a technology/services segment. The WEQ Board approved moving forward with the new segment. The new segment will allow technology companies to work with NAESB on the current smart grid activities. Members in the end user and transmission segment that provide technical services are also eligible to move to the new segment. The seats that have become “at large” will return to their original subsegment at the expiration of the term in an effort to preserve the intended balance in the quadrant.

Retail Membership Update: Mr. Minneman provided the update. The retail quadrants restructured in the third quarter of 2009. Under the new structure the quadrants are divided into three segments; 1) the Suppliers/Services Providers segment, 2) the Utilities segment, and 3) the End Users/Public Agencies segment. The number of Board members and Executive Committee seats in both quadrants was set at four per segment. Both retail quadrants are still below the minimum number of required members as set in the bylaws and there will be a board level review of the quadrants in 2010. New members are anticipated with the retail Demand Side Management and Energy Efficiency (DSM-EE) and smart grid efforts.

Managing Committee Update: Ms. McQuade provided the update. The Managing Committee met via conference call to review the options for the 2010 budget and unanimously approved the budget that was approved by the board earlier in the meeting. The notes for that meeting can be found at the following link: <http://www.naesb.org/pdf4/managing113009notes.doc>.

6. Special Report from NIST on Cybersecurity Standards and the Smart Grid

Ms. Lee from NIST provided a [power point presentation](#) for her report on the Cybersecurity Coordination Task Force. She reviewed President Obama’s Cyberspace Policy and noted the quick pace for the program. The Smart Grid Cybersecurity Strategy group has over 270 volunteer participants that have been meeting via weekly teleconference since March of this year. The group has divided into several working groups, all of which have a Twiki site to keep all participants up to date with the working group activities. She encouraged any interested participants to contact her. The strategy of the group is to select use cases with cyber security considerations, perform risk assessments of the Smart Grid development of security architecture linked to the Smart Grid interface diagrams, and identify cyber security requirements and risk mitigation measures to provide adequate protection. The goal of the group is create recommended cyber security requirements. NIST is not a regulatory body and cannot mandate its work. There is a time limit on their work due to the Energy Independence and Security Act that mandates NIST’s smart grid efforts.

7. Updates on Specific Efforts

Publications: Ms. McQuade provided an update for all the quadrant publications. Ms. Rager is completing the [Retail Version 1.2](#) and it will be published by the end of the year. The WEQ has scheduled the [Version 2.2](#) publication for first quarter of 2010 to accommodate FERC Order No. 890. The [WGQ Version 2.0](#) will be published in late 2010 after the quadrant voted to change to an annual publication schedule.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

WEQ, Update on FERC Order No. 890 efforts: Ms York provided an [update on recent Order 890 efforts](#). She noted that the WEQ OASIS subcommittee has been working hard to complete the standards related to FERC Order No. 890. They anticipate completion of the work related to Network Integration Transmission Services (NITS) by the end of the year with a draft of the standards out for comment in the first quarter of 2010. The next item to be addressed will be transmission across multiple transmission services.

WEQ/Retail Electric, Update on Demand Response and Demand Side Management: Mr. True provided the [update on the DSM efforts](#). FERC released its Notice of Proposed Rulemaking (NOPR) on the WEQ Demand Response (DR) standards in September. Since the last board meeting the WEQ DR work group has met four times to address the second phase of DR standards development. In October the WEQ EC created a task force to provide direction to the work group on its phase II efforts. This task force met six times and made the following recommendations to the EC; 1) direct the subcommittee to review the business practices for measurement and verification (M&V) of wholesale electricity demand response (the Phase I standards) and identify standards that could be enhanced; and 2) investigate and develop additional information specific to performance evaluation type and associated service type. The two co-chairs of the work group resigned due to other commitments and to be able to better advocate in the meetings. Mr. True volunteered to chair the work group in the interim.

WEQ/Retail Electric, Smart Grid Update: Mr. Booe provided the update for these efforts. Since the last board meeting the smart grid task force has worked hard to complete the responsibilities assigned to them; 1) [Priority Action Plan 03](#) – The Development of a Common Price Communication Model; 2) [Priority Action Plan 04](#) – The Development of a Common Scheduling Mechanism; and 3) [Priority Action Plan 09](#) – The Development of Standard Demand Response Signals. The task force and task force work group have held 14 conference calls and held one 3 day face-to-face meeting to develop the work products requested by NIST. In response to Priority Action Plan 09 The Task Force has created three documents; 1) A Framework Document for Integrated Demand Response and Distributed Energy Resource Models – which describes at a high level the various transactions related to demand response and DER events); 2) A set of Wholesale Market Use Cases – which for the most part were contributed by the ISO-RTO members and are being expanded by the Task Force; and 3) A set of Retail Market Use Cases. In response to Priority Action Plan 03 the task force created a set of use cases for price communication transactions and also a requirements document in response to Action Plan 04. These five documents were posted for an informal comment period on November 17, 2009 and presented at the Grid Interop meeting in Denver that same week. The task force received a number of comments and is reviewing them to further develop the posted documents. The task force tentatively scheduled to vote these Phase 1 documents out of the subcommittee for the 30 day formal comment period in mid-January. The goal is to have these documents ratified by the membership and filed with NIST and FERC by the end of March or early April, although that timeline may be extended. NAESB was informed this week that it has been assigned some responsibilities related to [Priority Action Plan 10 – Standard Energy Usage Information](#). Mr. Lucas asked what board members could do to help with the smart grid activities. Members were encouraged to look to see which technical experts in their companies could help develop use cases. There is some concern with the process NIST is using to develop standards and with transparency for the way in which the standards are adopted. It was asked if the board could sponsor an outreach to NIST to have NAESB provide input on the process to create standards that have industry consensus and transparency. Mr. Boswell noted that this issue was discussed and NAESB plans to name a board committee to coordinate this effort. It is critical that participants believe in the process and that the needs of the stakeholders are met.

8. 2009 Executive Committee Reports

Mr. Buccigross reviewed the [2009 WGQ Annual Plan](#) and noted the items that were completed. Mr. Novak reviewed the [2009 Retail Annual Plan](#) and noted the items that would be carried over to the 2010 plan. Ms. York reviewed the [2009 WEQ Annual Plan](#). The motion to approve all three annual plans was made by Mr. Hurley and seconded by Mr. Oberski. The motion unanimously passed a simple majority vote.

9. 2010 Executive Committee Reports

Mr. Buccigross reviewed the 2010 WGQ Annual Plan; Mr. Novak reviewed the 2010 Retail Annual Plan; and Ms. York provided the review for the 2010 WEQ Annual Plan.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

In discussion on the WEQ 2010 plan, Mr. Phillips asked how item 4(e) was added to the WEQ Annual Plan. Ms. McQuade answered that Mr. Breidenbaugh, a board member, asked that it be included when the plans were sent out for comment with requests for additions. Mr. Breidenbaugh noted that the item was developed from discussion on FERC’s strategy for the next five years and discussion on scope for the DSM-EE subcommittee. If this is an item the FERC would like to see addressed he thought it best to allow the industry to have an opportunity to develop it. Mr. Phillips stated that Midwest ISO and the other ISOs have not had an opportunity to discuss the issue but he believed that it infringed upon market design activities, which is a function of the FERC. He noted that the EC did not approve this annual plan item. Mr. Boswell noted that it was not a requirement for the EC to approve the annual plan, as that was the responsibility of the board. Mr. Phillips stated he valued the EC’s input and noted that it was important to know which annual plan items had been discussed by the EC and which had been submitted by individual board members. Mr. Breidenbaugh moved to approve all three annual plans and Mr. Ellsworth seconded the motion. In discussing the motion, Mr. Phillips asked that item 4(e) be removed from the WEQ Annual Plan. Mr. Breidenbaugh did not agree with the amendment to the motion. Mr. True asked, in the interest of better understanding the item, to move the annual plan item in question to the provisional items section. Mr. Novak agreed and suggested that the item be revisited at the March board meeting to allow participants time to review the item before voting on it. Mr. Breidenbaugh and Mr. Ellsworth agreed with Mr. Novak’s suggestion. Mr. Phillips stated that he would prefer striking the item altogether from the plan. Ms. McQuade noted that Mr. Phillips’ concern goes to the heart of discussions on standards and program design, and whether or not this item should be considered for development by NAESB. She recommended that board determine how to best resolve whether to add the item as it may become an issue for future smart grid and DR work. Mr. Desselle asked Mr. Breidenbaugh and Mr. Ellsworth to accept a modification to the motion to approve the annual plan without this particular item and to discuss it at the March board meeting. Mr. Breidenbaugh and Mr. Ellsworth agreed. This item will be placed on the agenda for the March 2010 NAESB Board of Directors meeting.

10. Plan for March 2010 Board Meeting

Ms. McQuade noted that the March 25, 2010 board meeting will be held in Houston, Texas. Ms. Crockett asked Board and EC members to fly in the day before the meeting to attend the leadership meetings as they allow leadership an opportunity to discuss quadrant issues in greater detail than can be addressed during the board meeting. The 2010 Board meeting schedule can be found at the following link:
http://www.naesb.org/misc/2010_schedule.doc.

11. Old and New Business

Ms. McQuade noted that eleven different filings have been made by the NAESB office. See the government activities page for more information on regulatory actions that may have an impact on NAESB:
<http://www.naesb.org/Noprs.asp>

12. Adjourn

Mr. Hurley moved to adjourn the meeting, seconded by Mr. Hossain. The meeting adjourned at 11:54 a.m. Central on December 10, 2009.

13. Board Attendance and Voting Record (Vacancies Omitted)

		ATTENDANCE
WGQ PRODUCERS SEGMENT		
Richard D. Smith	Regulatory & Compliance Manager, Noble Energy Inc.	In Person
Bill Hebenstreit	Marketing Manager, Goodrich Petroleum Company LLC	In Person
Keith Sappenfield	Regional Director – US Regulatory Affairs, EnCana Oil & Gas (USA) Inc.	Phone
Marty Patterson	Vice President – Commercial Operations, Foothills Energy Ventures LLC	
Pete Frost	Director - Regulatory Affairs, ConocoPhillips Gas and Power Marketing	
WGQ PIPELINE SEGMENT		
Cathie Legge	Manager – Customer Service, Alliance Pipeline LP	In Person
Bill Grygar	Vice President, Panhandle Eastern Pipe Line	In Person



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

		ATTENDANCE
Susanna B. Barry	Vice President – Commercial Operations, Tennessee Gas Pipeline Company	In Person
Machelle Grim	Director – Regulatory Affairs ConocoPhillips Gas and Power Marketing	Phone
Richard Kruse	Senior Vice President, Spectra Energy Transmission	
WGQ LOCAL DISTRIBUTION COMPANY (LDC) SEGMENT		
Craig Colombo	Energy Trader III, Dominion Resources	Phone
Adrian Chapman	Vice President, Regulatory Affairs & Energy Acquisition, Washington Gas	Phone
Carlos Thillet	Manager, Gas Supply & Transportation, PECO Energy Co.	
Mike Novak	Asst. General Manager, National Fuel Gas Distribution Corporation	In Person
Lee Stewart	Senior Vice President, Gas Transmission, Southern California Gas Company	
WGQ END USERS SEGMENT		
Valerie Crockett	Senior Energy & Policy Specialist, Tennessee Valley Authority	In Person
Timothy W. Gerrish	Director of Origination-Energy Marketing and Trading, Florida Power & Light	
Tina Burnett	Natural Gas Resources Administrator, The Boeing Co.	
Lori-Lynn C. Pennock	Senior Fuel Supply Analyst, Salt River Project	In Person
Jim Templeton	Principal, Comprehensive Energy Services	In Person
WGQ SERVICES SEGMENT		
Steve Abbey	Manager of Regulatory Affairs, Marketing Department, Anadarko	
Rusty Brazil	Managing Director, Bentek Energy, LLC	
Jim Buccigross	Vice President Energy Industry Practice, 8760 Inc.	Phone
Lori Leeder	Relationship Manager/Business Development – Asset Optimization, Vega Energy Partners	In Person
REQ SERVICE PROVIDERS/SUPPLIERS SEGMENT		
Robert K. Koger	President, North Carolina Advanced Energy Corporation	
Jim Minneman	Controller, PPL Solutions LLC	Phone
J Cade Burks	President, EC Power	
Austin Morris	Managing Partner – Energy, Sungard Consulting Services, LLC	
REQ UTILITIES SEGMENT		
David Koogler	Director – State Regulation, Dominion Virginia Power	
Dennis Derricks	Director Regulatory Policy and Analysis, Wisconsin Public Service Corporation	Phone
Ruth Kiselewich	Director, Conservation Programs, Baltimore Gas & Electric Company	
Debbie McKeever	Market Advocate, Oncor	In Person
REQ END USERS/PUBLIC AGENCIES SEGMENT		
Sonny Popowsky	Consumer Advocate, Pennsylvania Office of Consumer Advocate	
James P. Cargas	Senior Assistant City Attorney, City of Houston	
WEQ TRANSMISSION SEGMENT		SUB SEG:
Dan Klempel	Director Transmission Regulatory Compliance, Basin Electric Power Cooperative	Muni/Coop
Chuck Feagans	Senior Manager, Reliability Policy, Tennessee Valley Authority	Fed/State/Prov. Phone
John E. Lucas	Director - Transmission Policy and Services, Southern Company Transmission	IOU In Person
Jill Horswell	Director Transmission, Southern California Edison	at large
Edward J. Davis	Policy Consultant, Entergy Services, Inc.	at large In Person
Michelle Mizumori	Market Interface Manager, Western Electricity Coordinating Council (WECC)	At-Large
WEQ GENERATION SEGMENT		
Curtis Winterfeld	Vice President of Power Marketing, Deseret Generation & Transmission Cooperative	Muni/Coop
Belinda Thornton	General Manager – Energy Origination, Tennessee Valley Authority	Fed/State/Prov.
Lou Oberski	Director – Electric Market Policy, Dominion Resources Services, Inc.	IOU In Person



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

			ATTENDANCE
Charles W. Severance	Manager – Supply & Wholesale Services, Wisconsin Public Service Corporation	IOU	Phone
Gloria Godson	Vice President Energy Policy, Conectiv Energy Supply, Inc.	Merchant	
Shah Hossain	Senior Regulatory Specialist, Westar Energy, Inc.	at large	In Person
WEQ MARKETERS/BROKERS SEGMENT			
Roy True	Manager of Regulatory and Markets Development, ACES Power Marketing	Muni/Coop	In Person
Jeff Ackerman	Manager, Colorado River Storage Project Energy Management and Marketing Office, Western Area Power Administration	Fed/State/Prov.	
Jack Cashin	Senior Manager of Policy, Electric Power Supply Association (EPSA)	at large	
Sam Forrest	Vice President, Energy Marketing and Trading, Florida Power & Light	IOU	
R. Scott Brown	Vice President and Director, Exelon Generation Power Team	IOU	Phone
WEQ DISTRIBUTION/LOAD SERVING ENTITIES (LSE) SEGMENT			
Arthur G. Fusco	Vice President and General Counsel, Central Electric Power Cooperative Inc.	Muni/Coop	In Person
Paul McCurley	Manager – Power Supply, National Rural Electric Cooperative Association	Muni/Coop	
Frank Johnson	Senior Vice President Electric Transmission and Distribution, Consumers Energy	IOU	
Joe Hartsoe	Managing Director – Federal Policy, American Electric Power Service Corp.	at large	Phone
Bruce Ellsworth	New York State Reliability Council	At-Large	In Person
WEQ END USERS SEGMENT			
Jesse D. Hurley	Chief Executive Office, Shift Research , LLC	at large	In Person
Aaron Breidenbaugh	Senior Manager – Regulatory Affairs and Public Policy – New York, EnerNOC, Inc.		Phone
Thomas G. Dvorsky	Director of the Office of Electricity, Gas, and Water at the New York State Department of Public Service	Regulator	
Rick Lentz	Fellow with Sungard	at large	In Person
Michehl Gent	Open Access Technology International, Inc.	At-Large	In Person
WEQ INDEPENDENT GRID OPERATORS/PLANNERS			
Michael Desselle	Vice President Process Integrity, Southwest Power Pool		Phone
Kent Saathoff	Vice President of System Operations, ERCOT		Phone
Kevin Kirby	Vice President Market Operations, ISO New England, Inc.		Phone
Rana Mukerji	Vice President Market Structures, New York Independent System Operator, Inc. (NYISO)		
Andy Ott	Senior Vice President Marketing, PJM Interconnection		
Bill Phillips	Vice President Standards Compliance & Strategy, Midwest ISO (MISO)		In Person
Don Tench	Director Planning & Assessments, Independent Electricity System Operator (IESO)		Phone
RGQ DISTRIBUTORS SEGMENT			
Alonzo Weaver	Vice President of Engineering and Operations, Memphis Light, Gas & Water Division (APGA)		
Ralph Cleveland	Senior Vice President – Engineering and Operations, AGL Resources, Inc.		Phone
RGQ SERVICE PROVIDERS/SERVICE PROVIDERS SEGMENT			
Leigh Spangler	President, Latitude Technologies Inc.		In Person
Dave Darnell	President & CEO, Systrends USA		
Greg Lander	President, Capacity Center		
The WEQ subsegments noted in the above roster are:			
At-Large – Regional reliability organizations, regional transmission organizations, consultants, service companies, information services and software companies, law firms, and other such organizations		that are not specifically encompassed in the other subsegments for a given segment.	
		Competitive Retailer (not available to MUNI/COOP, IOU or IOU affiliates)	



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

End Use (also in another segment)

Federal/State/Provincial

IOU – Investor Owned Utility or IOU Affiliated

ITC – Independent Transmission Company

Large Industrials (not in other segments)

Merchant

Muni/Coop – Municipals, Cooperatives

Not IOU Affiliated

OTHER – (not available to MUNI/COOP, IOU or IOU affiliates)

Regulator

Residential/Commercial

End Use (Self Generation)

The numbers of seats within each segment that are allotted to sub-segments are controlled through the WEQ Procedures.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

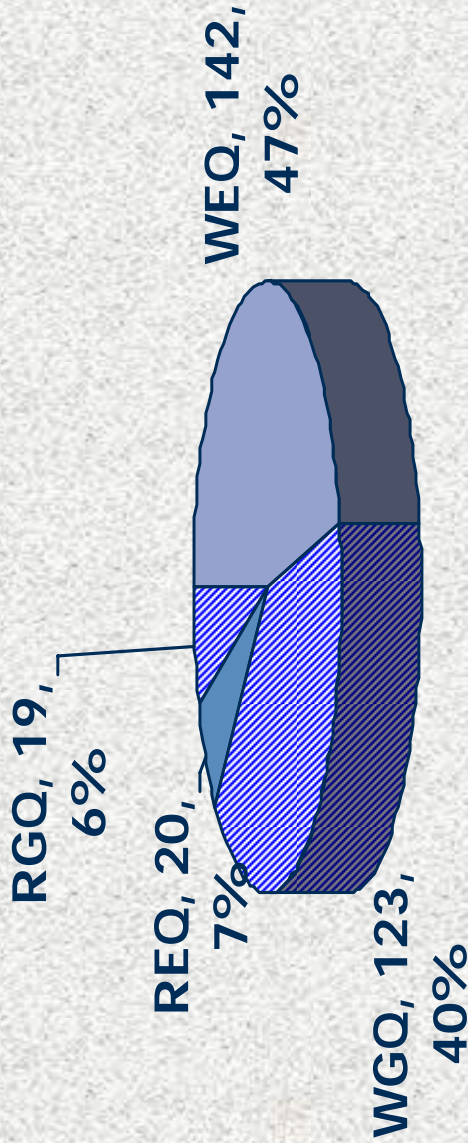
14. Other Attendance

Name	Organization	Attendance
Jonathan Booe	NAESB	In Person
Bill Boswell	NAESB	In Person
Kathryn Burch	Spectra Energy Transmission	In Person
Christopher Burden	Williams Gas Pipeline	In Person
James Culliton	NAESB	In Person
Cory Cummings	NAESB	In Person
Dale Davis	Williams Gas Pipeline	In Person
Mark Gracey	El Paso Gas Pipeline Company	In Person
Barry Green	Barry Green Consulting	In Person
Bill Griffith	El Paso Natural Gas	In Person
Alan Johnson	NRG Energy	Phone
Iris King	Dominion	Phone
Annabelle Lee	NIST	Phone
Rick Lisenbe	Self Employed	In Person
Bruce McAllister	FERC	Phone
Susan Munson	ERCOT	Phone
Sylvia Munson	ERCOT	In Person
Rae McQuade	NAESB	In Person
Shawntae Nix	Spectra Energy	In Person
Joelle Ogg	Brunenkant & Cross, LLP	In Person
Denise Rager	NAESB	In Person
Andy Rodriguez	NERC	In Person
Lisa Simpkins	Constellation Energy Resources	Phone
Ed Skiba	Midwest ISO	In Person
Veronica Thomason	NAESB	In Person
Ronald Tomlinson	Dominion	In Person
Kim Van Pelt	Panhandle Eastern Pipeline	In Person
Jill Vaughn	Preferred Legal Services	In Person
Eric Winkler	ISO New England	Phone
Darla Wishart	NAESB	In Person
Charles Yeung	SPP	In Person
Kathy York	Tennessee Valley Authority	In Person
Randy Young	Boardwalk Pipelines, LP	Phone

North American Energy Standards Board Organizational Profile

Membership Profile

March 21, 2010



Total Membership
304

Quadrant Statistics	WEQ	WGO	REQ	RGQ	Total
Membership YE 2009	138	122	18	19	297
Reclassification	0	0	0	0	0
Net Change	+4	+1	+2	0	+7
Membership YTD	142	123	20	19	304

North American Energy Standards Board Membership List
As of March 9, 2010

NAESB Membership Statistics – Changes by Quadrant for 2010 as of March 9, 2010

NAESB Membership Report - Quadrant/Segment Membership Analysis		Number of Members
WGQ Segments	TOTAL	122
	End Users	17
	Distributors	18
	Pipelines	42
	Producers	15
	Services	30
REQ Segments	TOTAL	20
	End Users/Public Agencies	5
	Utilities	7
	Service Providers/Suppliers	8
RGQ Segments	TOTAL	19
	End Users/Public Agencies	1
	Distributors	6
	Service Providers/Suppliers	12
WEQ Segments	TOTAL	142
	End Users	10
	Distributors	21
	Transmission	46
	Generation	24
	Marketers	27
	None Specified	1
	Independent Grid Operators/Planners	10
	Technology /Services	3

North American Energy Standards Board Membership List
As of March 9, 2010

WEQ	New Members:	+6
	<i>8760, Inc. (Technology/Services), Organization for the Advancement of Structured Information Standards (OASIS) (Technology/Services), Public Utilities Commission of Ohio (End Users, Regulator); National Institute of Standards and Technology (NIST) (Technology/Services), Avista Corporation (Transmission, IOU), Brookfield Energy Marketing, Inc. (Marketers/Brokers, NIOU)</i>	
	Member Resignations:	- 2
	<i>Southeastern Power Administration (Generation, Fed/State/Prov), Progress Energy (Marketers/Brokers, IOU)</i>	
WGQ	New Members:	+ 1
	<i>Cenovus Energy, Inc. (Services)</i>	
	Member Resignations:	- 1
	<i>Pacific Gas & Electric (Pipeline)</i>	
REQ	New Members:	+2
	<i>Maryland Public Service Commission (End Users/Public Agencies), Public Service Utilities Commission of Ohio (End Users/Public Agencies)</i>	
	Member Resignations:	- 0
RGQ	New Members:	+ 0
	Member Resignations:	- 0
TOTAL	New Members:	9
	Member Resignations:	3

North American Energy Standards Board Membership List
As of March 9, 2010

	Organization	Seg ¹	Contact	Sub-Seg ²
Retail Electric Quadrant Members:				
1	Alabama Power	u	Judy W. Ray	
2	Ameren Services Company	u	Patrick Eynon	
3	Baltimore Gas & Electric Co.	u	Ruth Kiselewich, Phil Precht	
4	City of Houston	e	James P. Cargas	
5	Dominion Retail	s	William Barkas, Richard Zelenko	
6	Dominion Virginia Power	u	David F. Koogler, Mary Edwards	
7	Electric Reliability Council of Texas (ERCOT)	s	Susan Munson, Kent Saathoff	
8	Exelon Energy Delivery	u	Toni Garza	
9	ista	s	Judy Bailey, J. Cade Burks, Jennifer Teel	
10	Maryland Public Service Commission	e	Dan Norfolk	
11	North Carolina Advanced Energy Corporation	s	Robert K. Koger	
12	Oncor	u	Larry Williford, Debbie McKeever	
13	Pennsylvania Office Of Consumer Advocate	e	Tanya J. McCloskey, Sonny A. Popowsky	
14	Pennsylvania Public Utility Commission	e	Robert F. Wilson, Annunciata E. Marino	
15	PPL Solutions, LLC	s	James M. Minneman, Kim Wall	
16	Public Utilities Commission of Ohio	e	Christopher Kotting	
17	Southern Company Services	s	Barbara Hingst	
18	SunGard Consulting Services, LLC	s	Austin Morris	
19	Ventyx, Inc.	s	Anthony Hill	
20	Wisconsin Public Service Corporation	u	Dennis Derricks, Ken Thiry	
Wholesale Gas Quadrant Members:				
1	8760, Inc.	s	Jim Buccigross	
2	Alliance Pipeline LP	pl	Cathie Legge, Brian Troicuk	
3	Ameren Corporation	l	Scott Glaeser, Ken Dothage, Jim Massmann	
4	Anadarko Energy Services Company	s	John Bretz, Steven Abbey	
5	ANR Pipeline Company	s	Sandy Meyers, Joseph E. Polland, Rene Staeb, Debbie Forth, Carol Wehlmann	
6	Apache Corporation	pr	Maribeth Bedevian	
7	Arizona Public Service Company	e	Tom Carlson, Kelly Daly	
8	Atmos Energy	pl	Steve Easley	
9	Ballard Natural Gas, LLC	s	Susan Thibodeaux	
10	Baltimore Gas & Electric Co.	l	Phil Precht, Ron Jennings	
11	Barclays Bank PLC	s	Guy Kern-Martin	

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. **WGO**: s – services, pl – pipeline, l – LDC, pr – producer, e – end user.

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

North American Energy Standards Board Membership List
As of March 9, 2010

	Organization	Seg¹	Contact	Sub-Seg²
12	Bentek Energy, LLC	s	E. Russell Braziel	
13	BG Energy Merchants, LLC	s	Martha Braddy, Denise Almoina, Susan Bailey, Melody Fontenot	
14	Boardwalk Pipelines, LP	pl	Randy Young, Mitch Whitehead	
15	Boeing Co., The	e	Tina Burnett	
16	BP Energy	pr	Mark Stultz, Rhonda Denton	
17	Calpine Energy Services, LP	e	Shonnie Daniel, Jay Dibble	
18	Cargill Incorporated	s	Lester Welch	
19	Carolina Gas Transmission Corporation	pl	Rae Davis, Dana B. Randall	
20	Cenovus Energy, Inc.	s	Paul Kahler	
21	CenterPoint Energy Gas Services, Inc.	s	James G. Beste, Larry Kunkle	
22	CenterPoint Energy Gas Transmission Company	pl	Larry Thomas	
23	CenterPoint Energy Mississippi River Transmission Corporation	pl	Robert Trost	
24	Cheniere Pipeline Company	pl	Whit Scott	
25	Chevron Natural Gas	pr	Charles (Chuck) Cook	
26	Chevron Pipe Line Company	pl	Mary Anne Collins, Deborah Plattsmier, Jeff Kirk	
27	Cimarex Energy Co.	pr	Charlotte Baker	
28	Citigroup Energy Inc.	s	Carrie Southard, Angela Davis	
29	Colorado Springs Utilities	l	Joe M. Holmes	
30	Columbia Gas Transmission	pl	Claire Burum	
31	Comprehensive Energy Services	e	Jim Templeton	
32	ConocoPhillips Gas and Power	pr	Peter Frost	
33	Consolidated Edison Company of NY	l	Scott Butler, Paul Olmsted	
34	Constellation Energy Commodities Group Inc.	s	Lisa Simpkins, Joseph Kirwan, Andrea Kullman, Jennifer Scott	
35	Dauphin Island Gathering Partners	pl	Katie Rice	
36	DB Energy Trading	s	William Donnelly, Travis McCullough	
37	Defense Energy Support Center	e	Veronica Jones, Kevin Ahern	
38	Department of Energy	e	Christopher Freitas	
39	Devon Energy Corporation	pr	Bill Green, Dianne Dunbar	
40	Dominion Resources	l	Craig Columbo	
41	Dominion Transmission, Inc.	pl	Gary Sypolt, Iris King	
42	DTE Energy Trading, Inc.	s	Gregory V. Staton, James Buck, Dena Crawford, Marcia L. Hissong, Ann Marie Jambor, Cynthia Klots, Shelley Greene	
43	El Paso Natural Gas	pl	William Griffith	
44	El Paso Exploration & Production Company	pr	David A. Webster, Stephanie Karm	
45	Enbridge (U.S.) Inc.	pl	Brad Petzold	
46	EnCana Marketing (USA) Inc.	s	Keith Sappenfield	
47	EnCana Oil & Gas (USA) Inc.	pr	Keith Sappenfield	
48	Energy Transfer Partners, L.P.	pl	Josie Castrejana, Melissa Graves, Robert Walker	
49	Entergy Services, Inc.	e	Laura Berryman, Terry Shields	

North American Energy Standards Board Membership List
As of March 9, 2010

	Organization	Seg¹	Contact	Sub-Seg²
50	Enterprise Products Partners L.P.	pl	Jeff Molinaro	
51	Equitrans, LP	pl	Joseph M. Dawley	
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	Dona Gussow, Art Morris	
54	Foothills Energy Ventures, LLC	pr	Marty Patterson	
55	FPL Energy Power Marketing, LLC	e	Marty Jo Rogers	
56	Gas Transmission Northwest Corp.	pl	Jay Story	
57	Golden Pass Pipeline, LLC	pl	Susan Braden	
58	Goodrich Petroleum Company, L.L.C.	pr	Bill Hebenstreit	
59	Great Lakes Gas Transmission	pl	Gene Fava	
60	High Mount Exploration and Production, Inc.	pr	David Ogden, Gary Weaver, Sheri Heslington	
61	Iberdrola USA Management Corporation	l	Mark Marini	
62	Imperial Irrigation District	e	William Rapp	
63	Integrus Energy Group, Inc.	l	David E. Wear	
64	Iroquois Gas Transmission System	pl	Tom Gwilliam	
65	JP Morgan Ventures Energy Corp	S	Paul Tramonte	
66	Kern River Gas Transmission Co	pl	Brenda Horton	
67	Laclede Gas Co.	l	Kenneth Neises	
68	Latitude Technologies	s	Leigh Spangler	
69	Louis Dreyfus Energy Services	s	Jennifer Farris, Eric Twombly	
70	Lower Colorado River Authority	e	Mickey Bell	
71	Macquarie Cook Energy, LLC	s	Angela Jones	
72	Marathon Oil Company	pr	Robin Perrine	
73	Mewbourne Oil Company	pr	Michael F. Shepard	
74	Mirant Energy Trading, LLC	e	Laura Trautman, John F. Hogan	
75	National Fuel Gas Distribution	l	Michael Novak	
76	National Fuel Gas Supply Corp.	pl	Joseph Kardas	
77	National Grid Gas Distribution Companies	l	Bob Superty	
78	Natural Gas Pipeline Co of America	pl	Paul Love, Stan Thomas, Mike Schisler, Paul Haas	
79	Nexen Marketing	s	Shelley Leavitt	
80	NiSource, Inc.	l	George Simmons, Sorana Linder	
81	Noble Americas Corp	pl	Joseph Limone	
82	Noble Energy, Inc.	pr	Richard Smith, Tammy M. Stevens	
83	Northern Border Pipeline Company	pl	Scott Coburn	
84	Northern Natural Gas	pl	Mary Darveaux	
85	Northwest Natural Gas Company	l	Randolph Friedman	
86	NOVA Gas Transmission Ltd.	pl	Doug Miller	
87	OGE Energy Resources, Inc.	s	Cary Metz	
88	ONEOK	l	Richard Tangeman	
89	ONEOK Partners GP, LLC	pl	Teri Tingler	
90	Panhandle Eastern Pipe Line	pl	William Grygar, Kim Van Pelt	

North American Energy Standards Board Membership List
As of March 9, 2010

	Organization	Seg ¹	Contact	Sub-Seg ²
91	PECO Energy Co.	l	Carlos Thillet	
92	Pemex Gas Y Petroquimica Basica	s	Juan Enrique Gonzalez Azuara	
93	Peoples Gas System (A division of Tampa Electric Co)	l	Wraye Grimard	
94	Platts	s	Bill Murphy	
95	Portland Natural Gas Transmission System	pl	David Haag	
96	PPL EnergyPlus, LLC	e	Anne Lovett	
97	Questar Pipeline Co.	pl	Scott Hansen	
98	Quorum Business Solutions Inc.	s	Anne Golenternek, Michael Lewis	
99	Reliance Gas Transportation Infrastructure Limited	pl	Jagjit S. Yadav	
100	Salt River Project Agricultural Improvement & Power District	e	Lori-Lynn C. Pennock	
101	Sempra Energy - Southern California Gas Co.	l	Lee Stewart, Rodger Schwecke	
102	Sequent Energy Management, L.P.	s	Pat Metteauer	
103	Shell Energy North America (US), L.P.	s	Eric Gillaspie	
104	SolArc, Inc.	s	Mark Davis	
105	Southern California Edison Company	e	Roman Bakke, Curt Roney	
106	Southern Company Services, Inc.	e	Alan Kilpatrick, Bryan Mitchell	
107	Southern Natural Gas Co.	pl	Renee Hyde, Tracey Nicholson, Ludean Wyatt	
108	Southern Star Central Gas Pipeline	pl	Philip Rullman, Tim L. Thompson	
109	Southwest Gas Corporation	l	Larry Black	
110	Spectra Energy Transmission	pl	Richard Kruse	
111	SunGard	s	Lucia Nail	
112	Tennessee Gas Pipeline Company	pl	Sue Barry, Mark Gracey	
113	Tennessee Valley Authority	e	Valerie Crockett	
114	Tiger Natural Gas	s	Tracy Phillips	
115	TransCanada Pipelines	pl	Doug Miller	
116	Transwestern Pipeline Company, LLC	pl	Blair V. Lichtenwalter, Mary Draemer, David Mendoza	
117	Vector Pipeline L.P.	pl	Amy Bruhn	
118	Vega Energy Partners, Ltd	s	Julie Pincus, Lori Leeder	
119	Washington Gas Light Co.	l	Adrian Chapman, Mark Lowe, Paul Buckley	
120	Williams Gas Marketing, Inc.	s	Rich Ficken	
121	Williams Gas Pipeline	pl	Dale Davis, Christopher Burden	
122	Williston Basin Interstate Pipeline	pl	Keith Tiggelaar, Gwen Schoepp, Kelly Brooks, Lori Myerchin	

Wholesale Electric Quadrant Members:

1	8760, Inc.	ts	Jim Buccigross	
2	ACES Power Marketing LLC	m	Roy J. True, Amadou Fall	muni
3	Alabama Municipal Electric Authority	d	Ray Phillips	muni
4	Alberta Electric System Operator	i	Diana Pommen, Henry Ren	
5	American Electric Power Service Corp.	d	Barbara Radous, Joseph Hartsoe, Phil Cox	iou
6	American Municipal Power, Inc.	m	Chris Norton, Alice Walker	muni

North American Energy Standards Board Membership List
As of March 9, 2010

	Organization	Seg¹	Contact	Sub-Seg²
7	American Public Power Association	d	Allen Mosher	muni
8	American Wind Energy Association	g	Robert Gramlich	merc
9	APS Marketing and Trading	m	Steve Norris	iou
10	Arizona Public Service Company	t	Mark W. Hackney	iou
11	Arkansas Electric Cooperative Corporation	g	Ricky Bittle	muni
12	Avista Corporation	t	Jeff Schlect	iou
13	Basin Electric Power Cooperative	t	Dan Klempel	muni
14	Basin Electric Power Cooperative	m	David Raatz	muni
15	Basin Electric Power Cooperative	g	Jason Doerr	muni
16	Black Hills Corporation	t	Larry D. Williamson	iou
17	Bonneville Power Administration	d	Sydney D. Berwager	other
18	Bonneville Power Administration	g	Francis Halpin, Robin Chung	fed
19	Bonneville Power Administration	m	Brenda Anderson	fed
20	Bonneville Power Administration	t	Barbara Rehman, Tom Davis	fed
21	BP America Inc.	e	Rhonda Denton	lind
22	British Columbia Transmission Corporation	t	Rohan Soulsby	fed
23	Brookfield Energy Marketing, Inc.	m	Nicolas Bosse	niou
24	California Department of Water Resources	g	Glenn Solberg, Chi Doan	fed
25	California ISO	i	Yakout Mansour	
26	Central Electric Power Cooperative	d	Arthur Fusco	muni
27	Cleco Power, LLC	t	Cindy Guillot	iou
28	Comprehensive Energy Services	e	Jim Templeton	enduse
29	Conectiv Energy Supply, Inc.	g	Gloria Godson	merc
30	Consolidated Edison Company of New York, Inc.	t	Scott Butler	iou
31	Consumers Energy Company	d	Andrew C. Dotterweich, Frank Johnson	iou
32	Dairyland Power Cooperative	t	Chuck Callies	muni
33	Deseret Power Electric Co-op	g	Curt Winterfeld	muni
34	Dominion Energy Marketing, Inc.	g	Lou Oberski, Jalal Babik	iou
35	Duke Energy Americas, LLC (DEA)	g	Walt Yeager	iou
36	Duke Energy Corp.	d	Alan Pritchard	iou
37	Dynegy Power Marketing, Inc.	g	Ben Trammell	merc
38	Edison Electric Institute	n	David Owens, Dave Dworzak, James P. Fama	n
39	Electric Power Supply Association	m	Jack Cashin, Barry Green	at large
40	Electric Reliability Council of Texas (ERCOT)	i	Bill Blevins, Paul Wattles, Joel Mickey	
41	Empire District Electric Company, The	t	Bary K. Warren	iou
42	EnerNOC, Inc.	e	Aaron Breidenbaugh	end use
43	Entegra Power Group, LLC	g	Rebecca Turner	merc
44	Entergy Services, Inc.	t	Edward J. Davis, Narinder Saini	iou
45	Exelon Generation - Power Team	m	Jack Crowley	iou
46	First Energy Service Company	d	Robert M. Martinko, Thomas C. Burgess	iou
47	FirstEnergy Solutions Corp.	m	Mark Travaglianti	iou

North American Energy Standards Board Membership List
As of March 9, 2010

	Organization	Seg¹	Contact	Sub-Seg²
48	Florida Municipal Power Agency	g	Frank Gaffney	muni
49	Florida Municipal Power Agency	d	Frank Gaffney	muni
50	Florida Power & Light Company	m	Gerry Yupp, Tim Gerrish	iou
51	Florida Power & Light Company	t	Marty Mennes, Bob Birch	iou
52	Georgia Transmission Corporation	t	Patrick McGovern	muni
53	Hydro – Quebec Transenergie	t	Glenn Sylvain	fed
54	Iberdrola USA Management Corporation	t	Mark Marini	iou
55	Idaho Power Company	t	Tessia Park	iou
56	Independent Electricity System Operator (IESO)	i	Cristian Dragnea, Biju Gopi	
57	Indiana Municipal Power Agency	g	Scott Berry	muni
58	ISO New England, Inc.	i	Matthew F. Goldberg	
59	Lincoln Electric System	g	Douglas Bantam	muni
60	Los Angeles Department of Water and Power	t	Mohammed Johar Beshir	muni
61	Los Angeles Department of Water and Power	m	Bradford L. Packer, Joel F. Cordero	muni
62	Manitoba Hydro	t	Blaine Poff	fed
63	Manitoba Hydro	m	Blaine Poff	fed
64	Michigan Public Power Agency	d	James R. Nickel	muni
65	MidAmerican Energy Company	m	Dennis Kimm	iou
66	Midwest Independent Transmission System Operator	i	William (Bill) Phillips, Ed Skiba	
67	Midwest Reliability Organization	t	Dan Schoenecker	at large
68	Missouri River Energy Services	d	Brian Zavesky	muni
69	Modesto Irrigation District	t	Roger Van Hoy	muni
70	National Association of Regulatory Utility Commissioners	e	Lou Ann Westerfield	reg
71	National Grid	t	Edward M. Kremzier	iou
72	National Institute of Standards and Technology	ts	David A. Wollman	
73	National Rural Electric Cooperative Assoc.	d	Paul McCurley	muni/c oop
74	New York Independent System Operator (NYISO)	i	Rana Mukerji	
75	New York State Reliability Council	d	P. Donald Raymond	at large
76	North American Electric Reliability Corporation	d	Gerry Adamski, Andy Rodriguez	at large
77	North Carolina Electric Membership Corporation	d	David Beam	muni
78	NCMPA1	d	Martin Summe, George Landis	muni
79	Northeast Utilities Service Company	t	David Boguslawski, Calvin A. Bowie	iou
80	Northwestern Corporation	t	Mike Cashell	iou
81	NRG Energy, Inc.	g	Alan Johnson, Jennifer J. Vosburg	merc
82	NV Energy	m	Sheryl Torrey	iou
83	NV Energy, Inc.	t	Patricia Englin	iou
84	Open Access Technology International, Inc.	e	Michehl Gent	at large
85	Open Access Technology International, Inc.	t	Paul R. Sorenson	at large
86	Organization for the Advancement of Structured Information Standards (OASIS)	ts	Laurent M. Liscia	

North American Energy Standards Board Membership List
As of March 9, 2010

	Organization	Seg¹	Contact	Sub-Seg²
87	PacifiCorp	m	John Apperson	iou
88	PacifiCorp	t	Shay Labray	iou
89	PHI Power Delivery	t	Ken Gates	iou
90	PJM Interconnection	i	Patrick Brown, Cathy Wesley	
91	Portland General Electric	t	Frank Afranji, John Walker	iou
92	Powerex Corp	m	Michael L McWilliams, Sharole Tylor	fed
93	PowerSouth Energy Cooperative	d	William Ronald Graham	muni
94	PPL Electric Utilities Corporation	t	Ray Mammarella	iou
95	Progress Energy	t	Phillip W. Lewis, Michael Anthony, Leslie Williams, Lee Schuster	iou
96	Public Service Company of New Mexico	m	Steven Maestas, Darren Wilkins, Patricia Merville, Roger Vaughn	iou
97	Public Service Electric and Gas Company	t	Kenneth D. Brown	iou
98	Public Utilities Commission of Ohio	e	Christopher Kotting	reg
99	Puget Sound Energy, Inc.	t	George Marshall, Bob Harshbarger	iou
100	RRI Energy Services, Inc.	g	Trent Carlson	merc
101	Sacramento Municipal Utility District	d	Steve Sorey	muni
102	Salt River Project Agricultural Improvement and Power District	t	Wendy Weathers, Michael J. Pfeister	fed
103	Salt River Project Agricultural improvement and Power District	m	Richard Lehman	fed
104	San Diego Gas & Electric Company	t	Patricia vanMidde	iou
105	Santee Cooper	t	Tom Abrams	fed
106	Seattle City Light	d	Marilynn Semro, Thomas P. Rowan, Doug Rough	muni
107	Seminole Electric Cooperative, Inc.	m	Steve Wallace	muni
108	Shell Energy America (US), L.P.	m	Robert Reilley, Paul Kerr	niou
109	Shift Research, LLC	e	Jesse D. Hurley	at large
110	SonicWALL, Inc.	e	Boris Yanovsky	enduse
111	South Carolina Electric & Gas Company	t	S. Porcher Stoney	iou
112	South Carolina Electric & Gas Company	m	Kevin Spitzform	iou
113	Southern California Edison	t	Weston Williams	iou
114	Southern California Edison Co.	g	Tracy Bibb	iou
115	Southern Company Services, Inc.	g	John Ciza	iou
116	Southern Company Services, Inc.	m	Joel Dison	iou
117	Southern Company Services, Inc.	t	R.D. (Dean) Ulch, John Lucas, JT Wood, James Y. Busbin, Daryl McGee	iou
118	Southwest Power Pool	i	Carl Monroe, Michael Desselle, Charles Yeung	
119	Southwest Transmission Cooperative, Inc.	t	Larry D. Huff	muni
120	Southwestern Power Administration	t	Tracey Stewart	fed
121	SunGard	e	Andrew Tritch	at large
122	Tampa Electric Company	m	Gail M. McKaig	iou
123	Tenaska, Inc.	g	Scott Helyer	merc
124	Tennessee Valley Authority	g	Kathy York	fed

North American Energy Standards Board Membership List
As of March 9, 2010

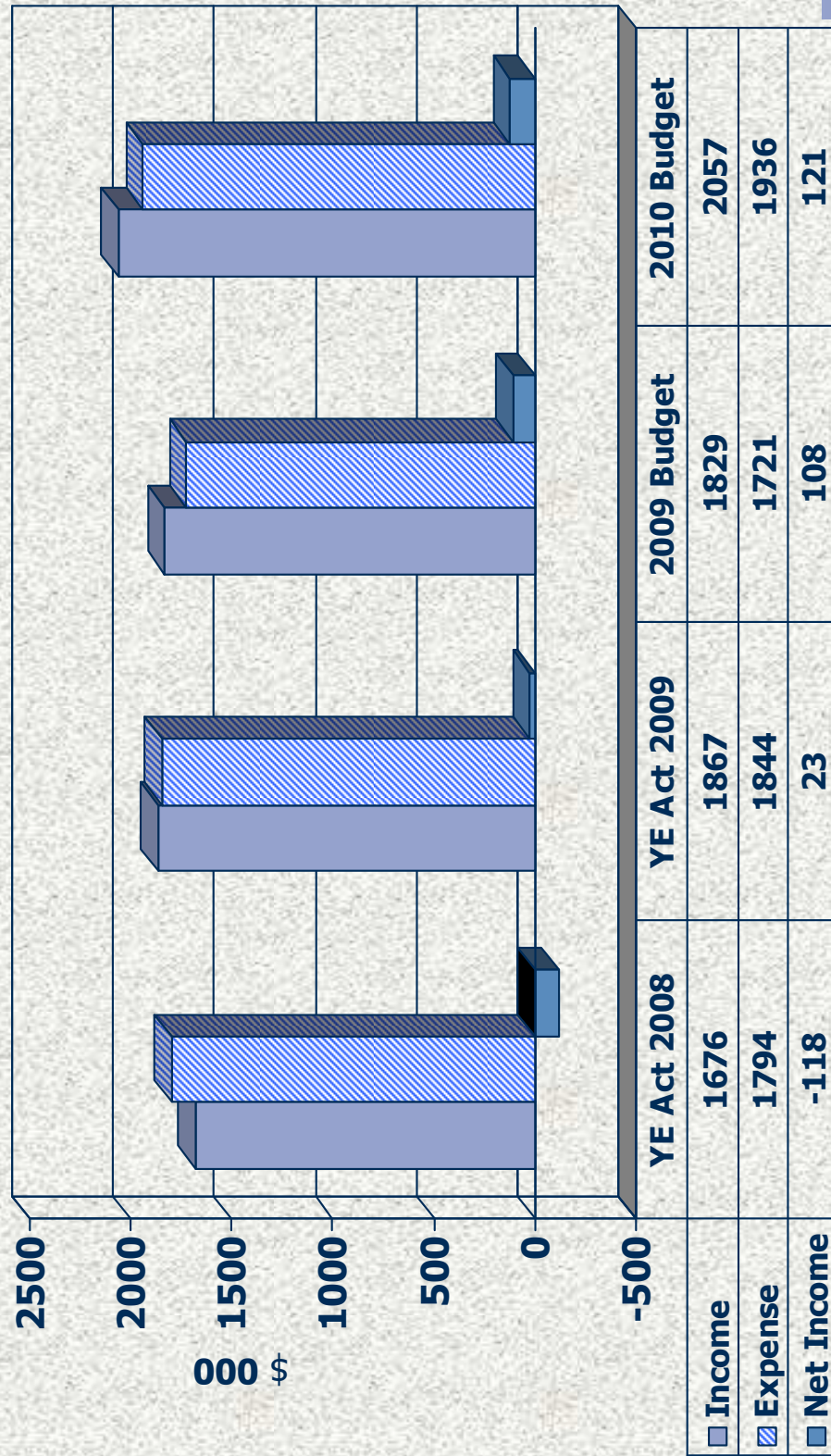
	Organization	Seg¹	Contact	Sub-Seg²
125	Tennessee Valley Authority	m	Belinda Thornton, Valerie Crockett	fed
126	Tennessee Valley Authority	t	Chuck Feagans	fed
127	TransAlta Energy Marketing Canada	m	Kim McRunnel	niou
128	TranServ International, Inc.	i	Kevin Burns	
129	Tri-State Generation and Transmission Association, Inc.	t	Keith V. Carman	muni
130	Tri-State G&T Association, Inc.	g	Janelle Marriott	muni
131	Tucson Electric Power Company	t	Raquel Aguilar, Judy Fregoso, Ed Beck	iou
132	United Illuminating Company, The	t	Rose Pysh	iou
133	Vermont Public Power Supply Authority	g	William J. Gallagher	muni
134	Westar Energy, Inc.	g	Shah Hossain, Grant Wilkerson	iou
135	Western Area Power Administration	t	JB Hite	fed
136	Western Area Power Administration	m	Jeffrey Ackerman	fed
137	Western Electricity Coordinating Council	t	Michelle Mizumori, Louise McCarren	at large
138	We Energies (Wisconsin Electric)	d	Linda Horn	iou
139	We Energies (Wisconsin Electric)	g	James R. Keller	iou
140	WPPI Energy	d	Mike Stuart	muni
141	Wisconsin Public Service Corporation	g	Christopher Plante, Charles W. Severance, Neal Balu	iou
142	Xcel Energy Inc.	m	David Lemmons	iou

Retail Gas Quadrant Members:

1	AGL Resources Inc.	d	Gregory Becker	
2	Allegro Development	s	Kimberly Page	
3	American Public Gas Association (APGA)	d	Alonzo Weaver, Joe Stengel	
4	Asgard Energy, LLC	s	Rhett C. Shumway	
5	Capacity Center	s	Greg Lander	
6	Clarity Systems, Ltd.	s	Steve O'Neil	
7	Dominion Retail, Inc.	s	Richard A. Zollars	
8	Duke Energy Corp	d	Dan Jones	
9	Exelon Energy	s	Sheree M. Petrone	
10	International LNG Alliance	s	David Sweet	
11	Interstate Gas Supply	s	Ginger Fletcher	
12	Latitude Technologies	s	Leigh Spangler	
13	National Fuel Gas Distribution Corporation	d	Mike Novak	
14	Pennsylvania Office of Consumer Advocate	e	Tanya J. McCloskey	
15	Sprague Energy Corp.	s	Paul Scoff	
16	Systrends USA	s	Dave Darnell	
17	UGI Utilities, Inc.	d	Paul Szykman	
18	Vectren Retail, LLC	s	Tami Wilson	
19	Wisconsin Public Service Corporation	d	Dennis Derricks, Ken Thiry	

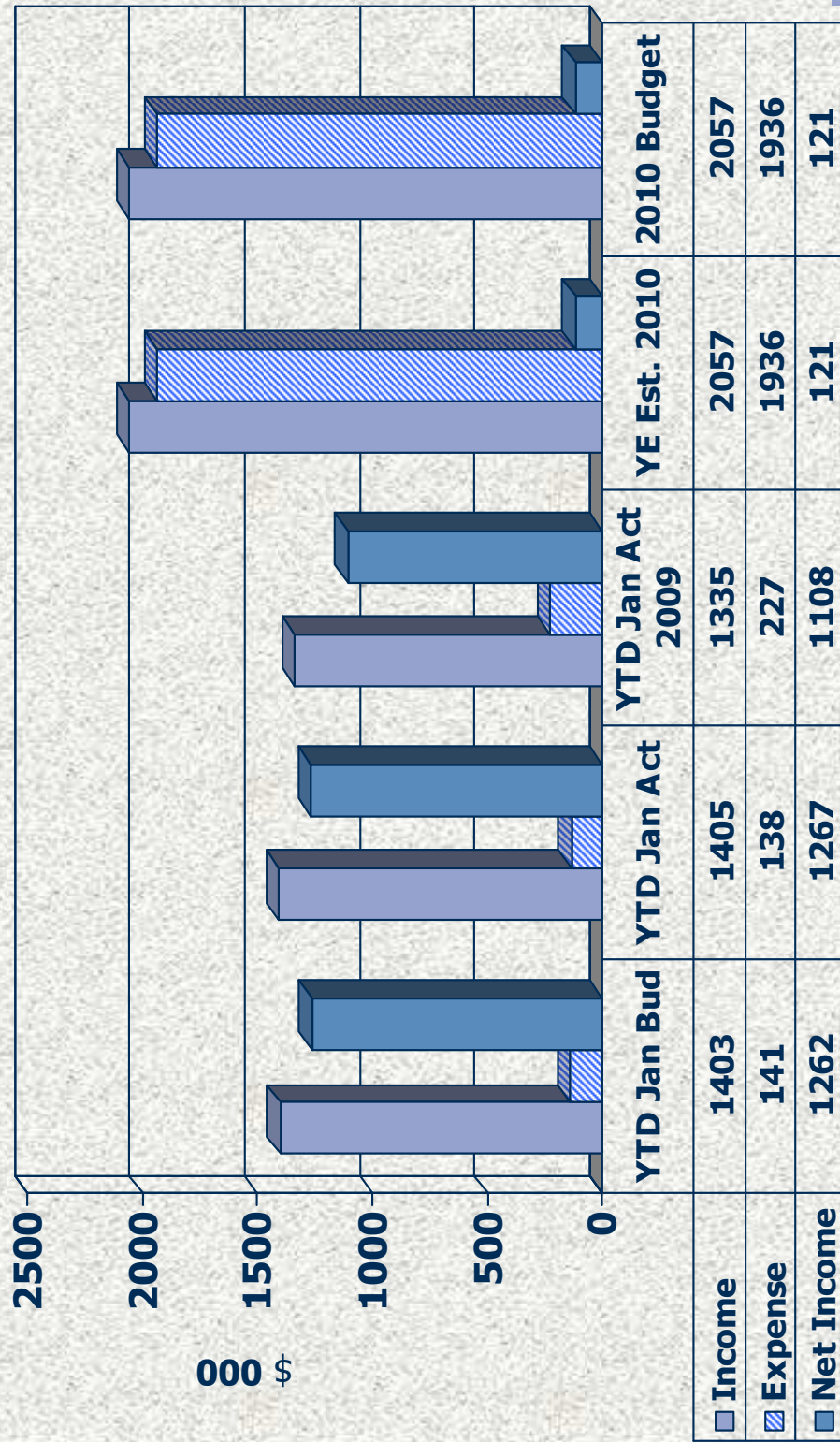
North American Energy Standards Board Board of Directors Meeting – 3-25-10

2009 YE Actuals Compared to 2009 & 2010 Budget and 2008 YE Actuals



North American Energy Standards Board Board of Directors Meeting – 3-25-10

As of January 2010 Accrual Based Income and Expenses





North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

MEMBERSHIP YE 2009 – ANALYSIS BY MONTH:

- **January 31, 2009:** Membership in January is 322. Membership by quadrant is: 134 (WGQ), 23 (REQ), 18 (RGQ), 147 (WEQ). Year to date, we have had three new memberships (2 – WEQ, 0 – REQ, 0 – RGQ, 1 – WGQ) and eight member resignation (2 – WGQ, 0 – REQ, 1 – RGQ, 5- WEQ). We began the year with 327 members (135 (WGQ), 23 (REQ), 19 (RGQ), 150 (WEQ)). In January, we had three new members join, Golden Pass Pipeline, LLC (WGQ, Pipeline), Los Angeles Department of Water and Power (WEQ, Transmission, Muni/Coop), and Los Angeles Department of Water and Power (WEQ, Marketers/Brokers, Muni/Coop). We had eight member resignations Cascade Natural Gas Corporation (WGQ, LDC), UBS Energy LLC (WGQ, Services), Xcel Energy (RGQ, Distribution), Imperial Irrigation District (WEQ, Marketers/Brokers, Muni/Coop), PSEG Energy Resources and Trading LLC (WEQ, Marketers/Brokers, IOU), PSEG Power, LLC (WEQ, Generation, Merc), North Carolina Electric Municipal Power Agency #1 (WEQ, Marketers/Brokers, Muni/Coop), and Electricities of North Carolina (WEQ, Generation, Muni/Coop).
- **February 28, 2009:** Membership in February is 320. Membership by quadrant is: 133 (WGQ), 23 (REQ), 18 (RGQ), 146 (WEQ). Year to date, we have had three new memberships (2 – WEQ, 0 – REQ, 0 – RGQ, 1 – WGQ) and 10 member resignation (3 – WGQ, 0 – REQ, 1 – RGQ, 6- WEQ). We began the year with 327 members (135 (WGQ), 23 (REQ), 19 (RGQ), 150 (WEQ)). In February, we had no new members join. We had two member resignations SUEZ Energy Marketing NA, Inc. (WEQ, Marketers/Brokers, Not IOU) and Westfield Gas & Electric Light Dept. (WGQ, LDC).
- **March 31, 2009:** Membership in March is 316. Membership by quadrant is: 130 (WGQ), 23 (REQ), 18 (RGQ), 145 (WEQ). Year to date, we have had three new memberships (2 – WEQ, 0 – REQ, 0 – RGQ, 1 – WGQ) and 14 member resignation (6 – WGQ, 0 – REQ, 1 – RGQ, 7- WEQ). We began the year with 327 members (135 (WGQ), 23 (REQ), 19 (RGQ), 150 (WEQ)). In March, we had no new members join. We had four member resignations Exelon Corporation – PECO Energy (WEQ, Distribution, IOU). Hess Corporation (WGQ, Services), Lehman Brothers Commodity Services, Inc. (WGQ, Services) and Chandeaur Pipe Line Co (WGQ, Pipeline).
- **April 30, 2009:** Membership in April is 316. Membership by quadrant is: 130 (WGQ), 22 (REQ), 18 (RGQ), 146 (WEQ). Year to date, we have had five new memberships (4 – WEQ, 0 – REQ, 0 – RGQ, 1 – WGQ) and 16 member resignation (6 – WGQ, 1 – REQ, 1 – RGQ, 8- WEQ). We began the year with 327 members (135 (WGQ), 23 (REQ), 19 (RGQ), 150 (WEQ)). In April, we had two new members join, Alabama Municipal Electric Authority (WEQ, Distribution, Muni/Coop) and SunGard Consulting Services, LLC (WEQ, End User, at large). We had two member resignations Otter Tail Power Company (WEQ, Transmission, IOU) and Public Service Electric & Gas Company (REQ, Distribution).
- **May 31, 2009:** Membership in May is 311. Membership by quadrant is: 127 (WGQ), 21 (REQ), 18 (RGQ), 145 (WEQ). Year to date, we have had five new memberships (4 – WEQ, 0 – REQ, 0 – RGQ, 1 – WGQ) and 21 member resignation (9 – WGQ, 2 – REQ, 1 – RGQ, 9- WEQ). We began the year with 327 members (135 (WGQ), 23 (REQ), 19 (RGQ), 150 (WEQ)). In May, we had no new members join. We had five member resignations, Virginia Power Energy Marketing (WGQ, Services), Cheniere LNG Marketing (WGQ, Services), MidAmerican Energy Company (REQ, Distribution), Public Power Council (WEQ, Distribution, Muni/Coop) and NiSource, Inc. (WGQ, LDC).
- **June 30, 2009:** Membership in June is 310. Membership by quadrant is: 127 (WGQ), 22 (REQ), 19 (RGQ), 142 (WEQ). Year to date, we have had seven new memberships (4 – WEQ, 1 – REQ, 1 – RGQ, 1 – WGQ) and 24 member resignation (9 – WGQ, 3 – REQ, 1 – RGQ, 11- WEQ) and *one reclassification of membership for Sungard Consulting Services, LLC membership from WEQ, end user, at large to REQ, services on June 11, 2009.* We began the year with 327 members (135 (WGQ), 23 (REQ), 19 (RGQ), 150 (WEQ)). In June, we had two new members join Asgard Energy, LLC (RGQ, Supplier) and City of Houston (REQ, End Users). We had three member resignations, Exxon Mobil Gas Marketing (WEQ, Generation, Self Generator), Office of Public Advocate, State of Maine (REQ, End Users) and PacifiCorp (WEQ, Generation, IOU).



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

- July 31, 2009:** Membership in June is 309. Membership by quadrant is: 128 (WGQ), 21 (REQ), 19 (RGQ), 141 (WEQ). Year to date, we have had nine new memberships (6 – WEQ, 1 – REQ, 1 – RGQ, 1 – WGQ) and 27 member resignation (8 – WGQ, 4 – REQ, 1 – RGQ, 14- WEQ (*Note: NiSource, Inc. was reinstated July 1, 2009 in the WGQ, LDC segment*)) and one reclassification of membership for Sungard Consulting Services, LLC membership from WEQ, end user, at large to REQ, services on June 11, 2009. We began the year with 327 members (135 (WGQ), 23 (REQ), 19 (RGQ), 150 (WEQ)). In July, we had two new member join, Arkansas Electric Cooperative Corporation (WEQ, Generation, Muni/Coop) and Shift Research, LLC (WEQ, End User, at large). We had four member resignations, Ameren Services (WEQ, Marketer/Broker, IOU), Consolidated Edison Company of NY (REQ, Distribution), Ontario Power Generation (WEQ, Generation, Merchant) and Portland General Electric (WEQ, Marketer/Broker, IOU).
- August 31, 2009:** Membership in August is 309. Membership by quadrant is: 128 (WGQ), 21 (REQ), 19 (RGQ), 141 (WEQ). Year to date, we have had ten new memberships (6 – WEQ, 2 – REQ, 1 – RGQ, 1 – WGQ) and 28 member resignation (8 – WGQ, 5 – REQ, 1 – RGQ, 14- WEQ (*Note: NiSource, Inc. was reinstated July 1, 2009 in the WGQ, LDC segment*)) and one reclassification of membership for Sungard Consulting Services, LLC membership from WEQ, end user, at large to REQ, services on June 11, 2009. We began the year with 327 members (135 (WGQ), 23 (REQ), 19 (RGQ), 150 (WEQ)). In August, we had one new member join, Pennsylvania Public Utility Commission (REQ, End Users). We had one member resignation, Advantage IQ, Inc. (REQ, End Users).
- September 30, 2009:** Membership in September is 309. Membership by quadrant is: 129 (WGQ), 20 (REQ), 19 (RGQ), 141 (WEQ). Year to date, we have had 14 new memberships (8 – WEQ, 2 – REQ, 2 – RGQ, 2 – WGQ) and 32 member resignation (8 – WGQ, 6 – REQ, 2 – RGQ, 16- WEQ (*Note: NiSource, Inc. was reinstated July 1, 2009 in the WGQ, LDC segment*)) and one reclassification of membership for Sungard Consulting Services, LLC membership from WEQ, end user, at large to REQ, services on June 11, 2009. We began the year with 327 members (135 (WGQ), 23 (REQ), 19 (RGQ), 150 (WEQ)). In September, we had four new member join, Clarity Systems, Ltd. (RGQ, Services) Manitoba Hydro (WEQ, Transmission, Fed/State/Prov.), Manitoba Hydro (WEQ, Marketers/Brokers, Fed/State/Prov.) and Noble Americas Corp. (WGQ, Pipeline). We had four member resignations, Baltimore Gas & Electric Company (RGQ, Distribution), Direct Energy Business Services (REQ, Supplier), Edison Mission Marketing & Trading, Inc. (WEQ, Generation, Merchant), and Hydro One Networks (WEQ, Transmission, ITC).
- October 31, 2009:** Membership in October is 304. Membership by quadrant is: 126 (WGQ), 19 (REQ), 19 (RGQ), 140 (WEQ). Year to date, we have had 14 new memberships (8 – WEQ, 2 – REQ, 2 – RGQ, 2 – WGQ) and 37 member resignation (11 – WGQ, 7 – REQ, 2 – RGQ, 17- WEQ (*Note: NiSource, Inc. was reinstated July 1, 2009 in the WGQ, LDC segment*)) and one reclassification of membership for Sungard Consulting Services, LLC membership from WEQ, end user, at large to REQ, services on June 11, 2009. We began the year with 327 members (135 (WGQ), 23 (REQ), 19 (RGQ), 150 (WEQ)). In October, we had no new member join. We had five member resignations, Husky Energy Marketing, Inc. (WGQ, Producer), Husky Gas Marketing, Inc. (WGQ, Producer), Husky Marketing and Supply Company (WGQ, End Users), Public Service Electric and Gas Company (WEQ, Distribution, IOU) and ICF International (REQ, Service Provider/Supplier).
- November 30, 2009:** Membership in November is 299. Membership by quadrant is: 124 (WGQ), 18 (REQ), 19 (RGQ), 138 (WEQ). Year to date, we have had 15 new memberships (9 – WEQ, 2 – REQ, 2 – RGQ, 2 – WGQ) and 42 member resignation (13 – WGQ, 8 – REQ, 2 – RGQ, 19- WEQ (*Note: NiSource, Inc. was reinstated July 1, 2009 in the WGQ, LDC segment*)) and one reclassification of membership for Sungard Consulting Services, LLC membership from WEQ, end user, at large to REQ, services on June 11, 2009. We began the year with 327 members (135 (WGQ), 23 (REQ), 19 (RGQ), 150 (WEQ)). In November, we had one new member join, SonicWALL, Inc. (WEQ, End Users). We had six member resignations, Ozark Gas Transmission, LLC (WGQ, Pipeline), Quedi, Inc. (WEQ, Generation, at large), Navigant Consulting, Inc. (WEQ, Marketers/Brokers, At-Large), Constellation NewEnergy, Inc. (REQ, Service Providers/Suppliers), Tennessee Valley Authority (WEQ, Distribution, Other) and SUEZ Energy Marketing NA, Inc. (WGQ, Services).



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

- December 31, 2009:** Membership in November is 297. Membership by quadrant is: 122 (WGQ), 18 (REQ), 19 (RGQ), 138 (WEQ). Year to date, we have had 16 new memberships (10 – WEQ, 2 – REQ, 2 – RGQ, 2 – WGQ) and 45 member resignation (15 – WGQ, 8 – REQ, 2 – RGQ, 20- WEQ (*Note: NiSource, Inc. was reinstated July 1, 2009 in the WGQ, LDC segment*)) and *one reclassification of membership for Sungard Consulting Services, LLC membership from WEQ, end user, at large to REQ, services on June 11, 2009.* We began the year with 327 members (135 (WGQ), 23 (REQ), 19 (RGQ), 150 (WEQ)). In December, we had one new member join, TransAlta Energy Marketing Canada (WEQ, Marketers/Brokers, NIOU). We had three member resignations, Southern Company Services, Inc. (WEQ, Distribution, IOU), Public Service Electric & Gas (WGQ, LDC) and New Jersey Natural Gas Company (WGQ, LDC).

MEETING STATISTICS YE 2009

Month	Event	Total		WEQ		WGQ		Retail		Joint		Board	
		#	Hours	#	Hours	#	Hours	#	Hours	#	Hours	#	Hours
January	Meetings/Hours	11	49.5	7	32	3	12.5	0	0	1	5	0	0
	Conf. Calls/Hours	22	49	8	22	4	7	5	11	5	9	0	0
	Monthly Total	33	98.5	15	54	7	19.5	5	11	6	14	0	0
February	Meetings/Hours	10	44	4	18	4	19	2	7	0	0	0	0
	Conf. Calls/Hours	7	24.5	5	20.5	0	0	0	0	1	2	1	2
	Monthly Total	17	68.5	9	38.5	4	19	2	7	1	2	1	2
March	Meetings/Hours	16	75.5	8	41	6	29.5	0	0	0	0	2	5
	Conf. Calls/Hours	15	43	6	21	2	5	5	13	2	4	0	0
	Monthly Total	31	118.5	14	62	8	34.5	5	13	2	4	2	5
April	Meetings/Hours	10	56	4	24	5	28	0	0	1	4	0	0
	Conf. Calls/Hours	18	50.5	6	21.5	6	14	2	7	4	8	0	0
	Monthly Total	28	106.5	10	45.5	11	42	2	7	5	12	0	0
May	Meetings/Hours	13	73	9	51	3	17	1	5	0	0	0	0
	Conf. Calls/Hours	14	34.5	4	14	3	6.5	2	3.5	4	8.5	1	2
	Monthly Total	27	107.5	13	65	6	23.5	3	8.5	4	8.5	1	2
June	Meetings/Hours	13	62	6	33	3	18	1	2	1	4	2	5
	Conf. Calls/Hours	15	37	6	23	2	4	4	4.5	3	5.5	0	0
	Monthly Total	28	99	12	56	5	22	5	6.5	4	9.5	2	5
July	Meetings/Hours	11	61.5	5	31	5	25.5	0	0	1	5	0	0
	Conf. Calls/Hours	12	34	4	16	1	1	1	5	6	12	0	0
	Monthly Total	23	95.5	9	47	6	26.5	1	5	7	17	0	0
August	Meetings/Hours	11	61.5	7	42	3	16	0	0	1	3.5	0	0
	Conf. Calls/Hours	4	14	2	9	0	0	1	2	1	3	0	0
	Monthly Total	15	75.5	9	51	3	16	1	2	2	6.5	0	0



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

MEETING STATISTICS YE 2009

Month	Event	Total		WEQ		WGQ		Retail		Joint		Board	
		#	Hours	#	Hours	#	Hours	#	Hours	#	Hours	#	Hours
September	Meetings/Hours	11	45	4	18	3	13	0	0	2	9	2	5
	Conf. Calls/Hours	14	32.5	5	19	1	2	1	1	7	10.5	0	0
	Monthly Total	25	77.5	9	37	4	15	1	1	9	19.5	2	5
October	Meetings/Hours	17	89.5	8	48	5	28	4	13.5	0	0	0	0
	Conf. Calls/Hours	16	35.5	5	14	1	2	1	1	9	18.5	0	0
	Monthly Total	33	125	13	62	6	30	5	14.5	9	18.5	0	0
November	Meetings/Hours	8	42	2	9	2	12	0	0	4	21	0	0
	Conf. Call/Hours	16	43	6	25	1	2	1	2	8	14	0	0
	Monthly Total	24	85	8	34	3	14	1	2	12	35	0	0
December	Meetings/Hours	11	48	7	33	2	10	0	0	0	0	2	5
	Conf. Call/Hours	15	40	3	15	2	4	2	6	8	15	0	0
	Monthly Total	26	88	10	48	4	14	2	6	8	15	2	5
Total YE 2009	Meetings/Hours	142	707.5	71	380	44	228.5	8	27.5	11	51.5	8	20
	Conf. Calls/Hours	137	354.5	51	180	20	41.5	22	48	42	81	2	4
	Events/Hours	279	1062	122	560	64	270	30	75.5	53	132.5	10	24

PRODUCT ACCESS

- **Monthly:** The [copyright policy and list of companies](#) with authorized access to our standards is prepared monthly and posted on the NAESB web site. It includes all companies who have legal access to the NAESB standards.
- **December 31, 2009:** The copyright report as of December 31, 2009 is posted on the [web site](#). Statistics for purchases of standards are maintained monthly and can be seen below as of December 31, 2009.

Purchases of NAESB Products as of December 31, 2009

Product	J	F	M	A	M	J	J	A	S	O	N	D	Total
NAESB Home Page Access for Password Protected Area (\$3500)	2	0	1	2	0	0	2	1	0	1	0	3	12
NAESB WGQ / REQ / RGQ Internet Electronic Transport Manual, Version 1.0 (\$150/\$900)	0	0	0	0	0	0	0	0	0	0	0	0	0
Retail Base Contract for Sales/Purchase of Natural Gas/Electricity (\$25/\$50)	0	0	4	2	2	1	1	0	1	1	1	1	14
WGQ Base Contract for Sales/Purchases of Natural Gas/FTAA/OBA (Versions 1.7 and older) (\$25/\$50 ea)	0	0	0	0	0	0	0	1	0	0	0	0	1
WGQ Base Contract for Sales/Purchases of Natural Gas/FTAA/OBA (Version 1.8, 1.9) (\$25/\$50 ea)	13	9	3	16	6	2	1	4	10	6	9	3	82
WGQ Electronic CD-Rom of Standards Manuals (Versions 1.7 and older) (\$150/\$900)	0	4	0	1	1	2	0	0	0	0	0	0	8
WGQ Electronic CD-Rom of Standards Manuals (Version 1.8) (\$150/\$900)	10	2	1	3	7	3	0	1	3	7	1	1	39



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Purchases of NAESB Products as of December 31, 2009

Product	J	F	M	A	M	J	J	A	S	O	N	D	Total
WGQ Electronic CD-Rom of Standards Manuals (Version 1.9) (\$150/\$900)	0	0	0	0	0	0	0	0	0	15	0	1	16
WEQ Electronic CD-Rom of Standards Manuals (Versions 002 and older) (\$150/\$900)	3	0	0	0	0	0	0	0	0	0	0	0	3
WEQ Electronic CD-Rom of Standards Manuals (Version 002.1) (\$150/\$900)	0	0	0	1	1	0	2	0	0	0	0	0	4
NAESB WGQ Contracts Course/ eTariff Workshop CD-Rom	34	0	0	0	0	0	11	0	0	0	0	0	45
NAESB REQ/RGQ Model Business Practices CD-Rom (Versions 1.1 and older) (\$150/\$900)	0	0	0	0	0	0	0	1	0	0	0	0	1
Final Actions (\$50)	0	0	0	0	2	0	1	0	3 ¹	2 ¹	1 ¹	1 ¹	10
Total	62	15	9	25	19	8	18	8	17	32	12	10	235

Non-Member Three-Day Limited Waivers

Product	J	F	M	A	M	J	J	A	S	O	N	D	Total
NAESB Final Actions	0	0	0	0	0	0	0	0	0	1	1	0	2
WGQ Standards Manuals (Version 1.4)	0	0	0	0	0	0	0	0	0	0	0	0	0
WGQ Standards Manuals (Version 1.5)	0	0	0	0	0	0	0	0	0	0	0	0	0
WGQ Standards Manuals (Version 1.6)	0	0	0	0	0	0	0	0	0	0	0	0	0
WGQ Standards Manuals (Version 1.7)	0	0	0	0	0	0	0	0	0	0	0	0	0
WGQ Standards Manuals (Version 1.8)	0	0	0	0	0	0	0	0	0	0	0	0	0
WEQ Standards Manuals (Version 001)	0	0	0	0	0	0	0	0	0	0	0	0	0
WEQ Standards Manuals (Version 002)	0	0	0	0	0	0	0	0	0	0	0	0	0
WEQ Standards Manuals (Version 002.1)	0	0	0	0	1	0	0	0	0	0	0	0	1
NAESB REQ/RGQ Model Business Practices (Version 001)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	0	0	1	1	0	3

¹ NAESB Final Action: WEQ 2008 Annual Plan Item 5(a) – NAESB Wholesale Electric Quadrant Demand Response M&V Standards



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

FINANCIAL REPORT YEAREND 2009 – ACCRUAL BASED

BALANCE SHEET

Assets	
Current Assets	\$696,186.95
Accounts Receivable	\$279,500.00
Fixed Assets	\$39,299.95
Other Assets	\$10,277.94
Total Assets	\$1,025,264.84
Liability & Equity	
Deferred Revenue	\$1,332,499.97
Accounts Payable	\$43,745.49
Retained Earnings	(\$374,185.91)
Net Income	\$23,205.29
Total Liability and Equity	\$1,025,264.84

INCOME AND EXPENSE

Income	\$1,867,505.72
Expense	\$1,844,300.43
Net Income	\$23,205.29

INCOME AND EXPENSES TO BUDGET - YE

2009 YE Budget for Income	\$1,829,143.48
Income Variance (over budget)	\$38,362.24
2009 YE Budget for Expenses	\$1,829,143.48
Expenses Variance (over budget)	\$15,156.95

YEAR END ANALYSIS

2009 Budget	\$1,829,143.48
Revenue YE	\$1,867,505.72
Expenses YE	\$1,844,300.43
Difference - Revenue - Expenses	\$23,205.29

CASH BASIS ANALYSIS

Beginning Balance 1-1-09	\$463,306
Total Cash Income	\$2,051,507
Total Costs	\$1,832,454
Ending Balance	\$682,359

ACCOUNTS RECEIVABLE ANALYSIS

Accounts Receivable as of December 2009	\$279,500.00
Items More than 90 Days Outstanding	\$0.00
Items 90 Days Outstanding	\$6,500.00
Items 60 Days Outstanding	\$19,500.00
Items 30 Days or Less Outstanding	\$26,000.00
Items Related to 2010 Membership Dues	\$227,500.00



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Membership YTD 2010:

- January 31, 2010:** Membership in January is 299. Membership by quadrant is: 122 (WGQ), 19 (REQ), 19 (RGQ), 139 (WEQ). Year to date, we have had four new memberships (2 – WEQ, 1 – REQ, 0 – RGQ, 1 – WGQ) and two member resignation (1 – WGQ, 0 – REQ, 0 – RGQ, 1 – WEQ). We began the year with 297 members (122 (WGQ), 18 (REQ), 19 (RGQ), 138 (WEQ)). In January, we had four new member join, Cenovus Energy, Inc. (WGQ, Services), 8760, Inc. (WEQ, Technology/Services), Organization for the Advancement of Structured Information Standards (OASIS) (WEQ, Technology/Services) and Maryland Public Service Commission (REQ, End Users) . We had two member resignations, Southeastern Power Administration (WEQ, Generation, Fed/State/Prov) and Pacific Gas and Electric (WGQ, Pipeline).
- February 28, 2010:** Membership in February is 302. Membership by quadrant is: 122 (WGQ), 20 (REQ), 19 (RGQ), 141 (WEQ). Year to date, we have had eight new memberships (5 – WEQ, 2 – REQ, 0 – RGQ, 1 – WGQ) and three member resignation (1 – WGQ, 0 – REQ, 0 – RGQ, 2 – WEQ). We began the year with 297 members (122 (WGQ), 18 (REQ), 19 (RGQ), 138 (WEQ)). In February, we had four new members join, Public Utilities Commission of Ohio (WEQ, End Users, Regulator), National Institute of Standards and Technology (WEQ, Technology/Services), Avista Corporation (WEQ, Transmission, IOU) and Public Utilities Commission of Ohio (REQ, End Users/Public Agencies). We had one member resignation, Progress Energy (WEQ, Marketers/Brokers, IOU).

MEETING STATISTICS YE 2010

Month	Event	Total		WEQ		WGQ		Retail		Joint		Board	
		#	Hours	#	Hours	#	Hours	#	Hours	#	Hours	#	Hours
January	Meetings/Hours	9	45.5	6	30	3	15.5	0	0	0	0	0	0
	Conf. Calls/Hours	14	36	3	12	2	4	1	5	8	15	0	0
	Monthly Total	23	81.5	9	42	5	19.5	1	5	8	15	0	0
February	Meetings/Hours	8	43	4	24	3	17	0	0	1	2	0	0
	Conf. Calls/Hours	9	24.5	2	8	1	2	1	5	5	9.5	0	0
	Monthly Total	17	67.5	6	32	4	19	1	5	6	11.5	0	0
Total YTD 2010	Meetings/Hours	17	88.5	10	54	6	32.5	0	0	1	2	0	0
	Conf. Calls/Hours	23	60.5	5	20	3	6	2	10	13	24.5	0	0
	Events/Hours	40	149	15	74	9	38.5	2	10	14	26.5	0	0



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

FINANCIAL REPORT YEAR-TO-DATE 2010 – ACCRUAL BASED, AS OF JANUARY 31, 2010

BALANCE SHEET

Assets	
Current Assets	\$712,515.11
Accounts Receivable	\$234,000.00
Fixed Assets	\$44,297.33
Other Assets	\$10,277.94
Total Assets	\$1,001,090.38
Liability & Equity	
Deferred Revenue	\$22,208.36
Accounts Payable	\$62,456.40
Retained Earnings	(\$350,980.62)
Net Income	\$1,267,406.24
Total Liability and Equity	\$1,001,090.38

INCOME AND EXPENSE

Income	\$1,405,298.08
Expense	\$137,891.84
Net Income	\$1,267,406.24

INCOME AND EXPENSES TO BUDGET - YTD

2010 YTD Budget for Income	\$1,403,474.66
Income Variance (over budget)	\$1,823.42
2010 YTD Budget for Expenses	\$140,983.33
Expenses Variance (under budget)	(\$3,091.49)

YEAR END ANALYSIS

2010 Budget	\$2,056,933.00
Revenue YTD Actual	\$1,405,298.08
Remaining Revenue Estimated through YE	\$651,634.92
Estimated YE Revenue	\$2,056,933.00
Expenses YTD Actual	\$137,891.84
Remaining Expenses Estimated through YE	\$1,797,885.46
Estimated YE Expenses	\$1,935,777.30
Difference – YE Revenue – YE Expenses	\$121,155.70

CASH BASIS ANALYSIS

Beginning Balance 1-1-10	\$682,359
Total Cash Income	\$140,506
Total Costs	\$123,445
Ending Balance	\$699,420

ACCOUNTS RECEIVABLE ANALYSIS

Accounts Receivable	\$234,000.00
Items more than 90 Days Outstanding	\$0.00
Items 90 Days or more Outstanding	\$0.00
Items 60 Days Outstanding	\$13,000.00
Items 30 Days or less Outstanding	\$221,000.00

**North American Energy Standards Board**

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

March 15, 2010

TO: NAESB Resources committee
FROM: Rae McQuade, NAESB President and COO
RE: Membership Analysis, Vacancies on the Board and EC, Membership Prospects – March 15, 2010

via email

Dear NAESB Resources Committee:

This report has several parts, all of which should provide information to support the committee as it determines actions to take to solicit participation and membership in NAESB. We truly appreciate your efforts in helping grow our organization --

Best Regards,
Rae

Enclosures:

- (1) Resources Committee Roster
- (2) Membership Prospects: (a) short-term, (b) wind generators, (c) solar, (d) demand side management – energy efficiency, (e) groups, (f) long-term, (g) smart grid – technology companies
- (3) New Members in 2009 and 2010
- (4) Member Resignations in 2009 and 2010
- (5) Vacancies on the Board and Executive Committee
- (6) Membership Roster Sorted by Company



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 1

North American Energy Standards Board Board Resources Committee Roster

Quadrant	Contact and Company	Phone	Email
WEQ	Jeff Ackerman, Western Area Power Administration	970-240-6209	ackerman@wapa.gov
WEQ	Scott Brown, Exelon Corporation	202-347-8096	scott.brown@exeloncorp.com
WGQ	Adrian Chapman, Washington Gas	703-750-7677	achapman@washgas.com
WEQ	Michael Desselle, Southwest Power Pool	501-614-3206	mdesselle@spp.org
WEQ	Bruce Ellsworth, New York State Reliability Council	603-746-3447	ellsworth@conket.com
WEQ	Jesse Hurley, Shift Research, Inc.	774-262-9093	jesse.hurley@shiftresearch.com
REQ	Ruth Kiselewich, Baltimore Gas & Electric	410-470-1361	ruth.c.kiselewich@bge.com
REQ	David Koogler, Dominion Virginia Power	804-771-3429	david.koogler@dom.com
RGQ	Greg Lander, Commerce Energy Group	978-535-7500	glander@skippingstone.com
WGQ	Mike Novak, National Fuel Gas Distribution	716-857-7884	novakm@natfuel.com
WGQ	Lori-Lynn Pennock, Salt River Project	602-236-4360	lori-lynn.pennock@srpnet.com
WGQ	Keith Sappenfield, EnCana Oil & Gas (USA), Inc.	720-876-3693	keith.sappenfield@encana.com
WGQ	Jim Templeton, Comprehensive Energy Services	713-759-6999	jrtemplton@aol.com
WEQ	Roy True, Aces Power Marketing	317-344-7203	royt@acespower.com



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2a

NAESB Membership Prospects – Short Term, Individual Companies and Organizations

Membership Prospects	Source	Contact/Notes	Assignment
AARP			S. Brown, J. Ackerman
Agway Energy Services	M. Novak	Mark Anton, II – sent membership information 03/09/2010	D. Rager
✓ American Midstream Partners, LP	R. McQuade	Marty Patterson – Joined 03/2010	R. McQuade/D. Rager
ATC	S. Brown	Burt Garvin – Scott will approach	S. Brown
Bridge Energy	Board Resources	Jim Walker – membership information sent 03/08/2010	
✓ Brookfield Energy Marketing, Inc.	Office	Nicolas Bosse – Joined 03/2010	D. Rager
✓ Cenovus Energy, Inc.	K. Sappenfield	Paul Kahler – Joined 01/2010	K. Sappenfield
Comverge	S. Brown/R. True	S. Brown and R. True will follow-up with Norm Brownell	S. Brown, R. True
C-Power	S. Brown	Mike Gordon – Scott will approach.	S. Brown
Dean Ventures Natural Gas Trading	Office	Max Rausch – sent membership information 01/22/2010 – not interested at this time.	D. Rager
Direct Energy	Board Resources	Michael Flores and Chuck Moore – sent membership information 03/08/2010	D. Rager
Energy Curtailment Specialist	Board Resources	Bob Boyle and Daniel Perez – sent membership information 03/08/2010	D. Rager
EnerNex	J. Booe	Eric Gunther – Jonathan met with Eric - sent follow-up materials 12/02/09	J. Booe
FixProtocol	J. Booe	Jim Northey – sent membership information 01/27/2010	J. Booe
Gateway Energy Services Corporation	M. Novak	William D. Cateno – sent membership information 03/09/2010	D. Rager
General Electric	Board Resources	Charles R. Smith – sent membership information 03/08/2010	D. Rager
Google	J. Hurley		J. Hurley



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2a

NAESB Membership Prospects – Short Term, Individual Companies and Organizations

Membership Prospects	Source	Contact/Notes	Assignment
Green Energy Corporation	D. Koogler	Daniel C. Gregory – sent membership information 12/27/2009 – sent follow up 03/09/2010	D. Rager
GreenSmith Energy Management Systems		Dr. Chen-Young – sent information on 12/3/08 as requested by R. McQuade	R. McQuade
GridPoint	J. Hurley		J. Hurley
Gridwise Alliance	R. McQuade	Karen Hamilton – Rae meeting on 04/02/2009 – not joining at this time.	R. McQuade
Honeywell	J. Booe	Dave Kaufman – sent information and purchased WEQ and REQ M&V and DR standards – 11/30/09	J. Booe
International Transmission Company (ITC)	S. Brown	Terry Harvill – Scott met with Terry on July 8	S. Brown
John Deere Wind	R. True	John A. Harvey – sent information 03/09/2010	D. Rager
✓ Maryland Public Service Commission	J. Booe	Dan Norfolk – sent membership information 01/27/2010 – Jointed 01/2010	J. Booe
Microsoft	J. Hurley		J. Hurley
Missouri Public Service Commission	Office	Dave Sommerer – sent membership information 02/12/2010. Not interested in joining at this time.	D. Rager
✓ National Institute of Standards and Technology (NIST)	R. McQuade/J. Booe	Dr. David A. Wollman – Joined 02/2010	D. Rager/J. Booe
Paloma Business Solutions	R. McQuade	John McNevin - sent membership information 4/3/2009, D. Rager follow-up 4/13/2009	D. Rager
PNE Wind USA, Inc.	M. Desselle/R. McQuade	Edmundo O. Toro – Rae sent information 8/13/09. Sent follow-up on 12/02/09 via email.	R. McQuade
✓ Public Utilities Commission of Ohio	R. McQuade/J. Booe	Chris Kotting – sent membership information 02/04/2010 – Joined 02/2010 REQ and WEQ (End Users)	
Shibley Energy Company	M. Novak	Brett Hoffmaster – sent membership information 03/10/2010	D. Rager



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2a

NAESB Membership Prospects – Short Term, Individual Companies and Organizations

Membership Prospects	Source	Contact/Notes	Assignment
Solar Alliance, The	S. Brown	Carrie Cullen Hitt – Scott will contact with info provided by Rae. Carrie is presenting to her Board.	S. Brown
Summitt Blue	Board Resources	Kevin Cooney – sent membership information 03/08/2010	D. Rager
Verisign	J. Hurley		J. Hurley



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2b

NAESB Membership Prospects – Wind Generators

Membership Prospects	Source	Contact/Notes	Assignment
Acciona	Resource Committee		S. Brown, R. McQuade, M. Desselle
First Wind	Resource Committee	Kurt Adams	S. Brown
Gamesa	Resource Committee		S. Brown
Horizon	Resource Committee		S. Brown, R. McQuade, M. Desselle
Iberdola	Resource Committee		S. Brown, R. McQuade, M. Desselle
John Deere Wind	Resource Committee	John Harvey	R. True
PNE Wind USA, Inc.	M. Desselle/R. McQuade	Edmundo O. Toro – Rae sent information 8/13/09.	R. McQuade



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2c

NAESB Membership Prospects – Solar

Membership Prospects	Source	Contact/Notes	Assignment
Solar Alliance, The	S. Brown	Carrie Cullen Hitt – Scott will contact with info provided by Rae. Carrie is presenting to her Board.	S. Brown
Solar Trade Association	Resource Committee	Mack Thompson	
Solar Electric Power Association (SEPA)	Resource Committee	Julia Hamm, Executive Director	



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2d

NAESB Membership Prospects – Demand Side Management – Energy Efficiency
 (***Bold = Active participant in DSM-EE activities.***)

Membership Prospects	Source	Contact/Notes	Assignment
Accenture	Participant DSM	Jeb Bartley	
Allegheny Energy, Inc.	Participant DSM	<i>David P. Johnson, Cynthia A. Menhorn</i>	
Allegheny Power	Participant DSM	<i>Terri Brabiak, Cassandra Robinson, Thomas Rone, Jason J. Wojciechowicz</i>	
Alliance to Save Energy	Participant DSM	Steve Capanna, Joe Loper	
American Gas Association	Participant DSM	Mariam Arnaout	
ANB Enterprises, Inc.	Participant DSM	S. Blakrishnan	
Arizona Corporation Commission	Participant DSM	Bob Gray	
Association of Energy Services Professionals (AESP)	Participant DSM	Meg Matt	
Balhoff & Rowe, LLC	Participant DSM	Bob Rowe	
Ballard Spahr Andrews & Ingersoll, LLP	Participant DSM	Howard H. Shafferman	
Bayboro EC, Inc.	Participant DSM	Yolanda Mason	
BHMM Energy Services, LLC	Participant DSM	Vicky A. Bailey	
Brattle Group, The	Participant DSM	Philip Q. Hanser	
Brickfield, Burchette, Ritts and Stone	Participant DSM	Shaun Moher, Damon Xenopoulos	
California Public Utility Commission	Participant DSM	Dian Grueneich	
CLEARresult Consulting	Participant DSM	Eric Stern	
CLEARresult Incorporated	Participant DSM	Glenn Garland, Jonathan Kleinman, John Oyhenart	
Climate Master	Participant DSM	Dan Ellis, Robert Sallee	
Colorado Public Utilities Commission	Participant DSM	Jeff Hein	
ComVerge	Participant DSM	Cynthia Arcate, Bob Bress, Wendell Miyaji, Blake Morris	
Consortium for Energy Efficiency	Participant DSM	Marc Hoffman, Monica Nevius	
CPower, Inc.	Participant DSM	Janette Dudley, Murtaza Kapadia, Dirk Mahling, Nicholas Justice Planson	



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2d

NAESB Membership Prospects – Demand Side Management – Energy Efficiency
 (***Bold = Active participant in DSM-EE activities.***)

Membership Prospects	Source	Contact/Notes	Assignment
Demand Response Coordinating Committee	Participant DSM	Katherine George, Paul M. Pietsch	
Demand Response & Energy Consulting, LLC	Participant DSM	Marie Pieniazek	
Distributed Energy Financial Group LLC	Participant DSM	Jamie Wimberly	
Distribution Control Systems, Inc.	Participant DSM	Ben Boyd	
District of Columbia Public Service Commission	Participant DSM	Daniel Cleverdon	
Duquesne Light Company	Participant DSM	Dan Flaherty	
Eagle Energy Partners	Participant DSM	Mary Anne Berlinsky	
Efficiency Valuation Organization	Participant DSM	John Cowan, Abraham Raher	
Electric Power Research Institute	Participant DSM	Bob Enriken, Krish Gomatom, Jennifer Robinson	
Electricity Consumers Resource Council (ELCON)	Participant DSM	John Hughes	
Energy and Environmental Economics, Inc.	Participant DSM	Ren Orans	
Energy Connect	Participant DSM	Jacob Dobscha	
Energy Curtailment Specialists, Inc.	Participant DSM	Daniel Perez, Glen E. Smith, Paul Tyno	
Energy Regulatory Affairs, Alcoa, Inc.	Participant DSM	Tom Gianneschi	
Energy Services Group	Participant DSM	George Behr	
Energy Trust of Oregon	Participant DSM	Fred Gordon	
Energy Washington Week	Participant DSM	David Clarke	
Bector Consulting	Participant DSM	Brett A. Perlman	
Environmental Law and Policy Center	Participant DSM	John N. Moore	
EPRI	Participant DSM	Bernie Neenan	
Evergreen Software Inc.	Participant DSM	Marc Tannenbaum	
Fox, Smolen & Associates	Participant DSM	Paul N. Smolen	
Frontier Associates	Participant DSM	Phil Audet, Ed Garcia, John McClain, Greg Landreth, Jay Zarnikau	



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2d

NAESB Membership Prospects – Demand Side Management – Energy Efficiency
(Bold = Active participant in DSM-EE activities.)

Membership Prospects	Source	Contact/Notes	Assignment
Gainesville Regional Utilities	Participant DSM	Earl Fair	
GDS Associates, Inc.	Participant DSM	Richard Spellman	
Good Company Associates	Participant DSM	Greg Ewing, Steve Isser, Robert King	
GoodCents	Participant DSM	Bill Bland, Robert Mason, Liza Thompson	
GreenSmith Energy Management Systems	Participant DSM	Michael Chen-Young	
Gridpoint	Participant DSM	Marija Zivanovic	
Honeywell	Participant DSM	Donna Harper	
Honeywell Utility Solutions	Participant DSM	Thomas McMahan	
Institute for Electric Efficiency	Participant DSM	TD Smith	
International Program Measurement and Verification Protocol (IPMVP)	Participant DSM	Steve Schiller	
Itron, Inc.	Participant DSM	Chris Haslund, Dave Hanna	
JEA	Participant DSM	PG (Bud) Para	
Kansas City Power & Light	Participant DSM	Jason Jones	
KEMA Services	Participant DSM	Daniel Waitroob	
Kema/Xnergy	Participant DSM	Mimi Goldberg, Liz Hicks	
Lawrence Berkeley National Laboratory	Participant DSM	Chuck Goldman, Gryason Heffner	
Lockheed Martin Information Technology	Participant DSM	Mark R. Bowen	
Loeffler Tuggey Pauerstein Rosenthal, LLP	Participant DSM	Rebecca A. Klein	
Maine Office of Public Advocate	Participant DSM	Richard Davies	
Maine Public Utilities Commission	Participant DSM	Denise Bergeron	
Market Development Group	Participant DSM	Katherine Johnson	
Mendota Group, LLC	Participant DSM	Grey Staples	
Metropolitan Washington Council of Governments	Participant DSM	Jeff King	
Midwest Energy Efficiency Alliance	Participant	Alicia Ward	



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2d

NAESB Membership Prospects – Demand Side Management – Energy Efficiency
 (*Bold = Active participant in DSM-EE activities.*)

Membership Prospects	Source	Contact/Notes	Assignment
	DSM		
Monsanto	Participant DSM	Gary Kajander	
National Association of State Utility Consumer Advocates	Participant DSM	Charles A. Acquard	
National Energy Board	Participant DSM	John McCarthy	
National Energy Marketers Association	Participant DSM	Stacey Rantala	
NC Utilities Commission – Public Staff	Participant DSM	Jack Floyd, Bob Hinton	
New York Public Service Commission	Participant DSM	Diane Barney	
New York Department of Public Service	Participant DSM	Alice Miller, Lia Rosi	
New York State Department of Public Service	Participant DSM	Sigmund Peplowski, Stacey Harwood, William (Bill) Saxonis	
Nexus Market Research, Inc.	Participant DSM	Greg Clendenning, Tim Pettit	
Northeast Energy Efficiency Partnerships, Inc.	Participant DSM	Julie Michals, Elizabeth Titus	
Northeast Energy Efficiency Project	Participant DSM	Sue Coakley	
Norhtrop Grumman, Tech. Services	Participant DSM	Thomas A. Adams	
Northwest Power and Conservation Council	Participant DSM	Tom Eckman	
NSTAR Electric & Gas	Participant DSM	David Olivier, Dave Weber, Lisa Shea	J. Hurley
Occidental Energy Ventures Corp	Participant DSM	Michelle D'Antuono	
Occidental Chemical	Participant DSM	Scott Wardle	
Office of Weatherization and Intergovernmental Program, EE-2K	Participant DSM	Faith S. Lambert	
Public Utilities Commission of Ohio	Participant DSM	Thom Pearce	
Ontario Power Authority	Participant DSM	Neil Hutchings	
Otter Tail Power Company	Participant DSM	Kim Pederson, Rebeca Wentler	
Peak Load Management Association (PLMA)	Participant DSM	Elliott Boardman, Craig Boice	
Policy Solutions	Participant DSM	Anne Arquit	
Praxair	Participant DSM	David Meade	



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2d

NAESB Membership Prospects – Demand Side Management – Energy Efficiency
(Bold = Active participant in DSM-EE activities.)

Membership Prospects	Source	Contact/Notes	Assignment
Public Utility Commission of Texas	Participant DSM	Shawnee Claiborn-Pinto, Cliff Crouch, Ernest Garcia, Theresa Gross, Voiteh Yaroshevich	
RETX	Participant DSM	Ross Malme	
Southeast Energy Efficiency Alliance	Participant DSM	Kelly Ross Gillespie	
Southern California Gas Company	Participant DSM	Lee Stewart	
Southwest Energy Efficiency Alliance	Participant DSM	Howard Geller	
Summit Blue Consulting	Participant DSM	Mark Klos, Daniel Violette, Kevein Coney	
Synapse Energy Economics	Participant DSM	Paul Peterson	
TecMarket Works	Participant DSM	Nick Hall	
The Gee Strategies Group	Participant DSM	Robert W. Gee	
The Regulatory Assistance Project	Participant DSM	Richard Sedano	
TXU Energy	Participant DSM	Mack Wallace	
U.S. Environmental Protection Agency	Participant DSM	Stacy Angel, Nikolaas Dietsch	
U.S. Demand Response Coordinating Committee	Participant DSM	Dan Delurey	
UISOL	Participant DSM	Scott Coe	
University of Texas MD Anderson Cancer Center	Participant DSM	Ron Russell	
VA State Corporation Commission	Participant DSM	David R. Eichenlaub	
Vermont Energy Investment Corp.	Participant DSM	Bolleen Orsburn	
Vermont Public Service Board	Participant DSM	Pam Stonier	
Virginia State Corporation Commission	Participant DSM	Diane Jenkins	
Warren Energy engineering, LLC	Participant DSM	Kevin Warren	



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2e

NAESB Membership Prospects – Groups

Membership Prospects	Source	Contact/Notes	Assignment
End Users	Resources Committee	Should hold meetings with John Anderson for ideas after we begin the sessions for ISOs and RTOs.	S Brown/M Desselle
Munis and Coops	Resources Committee	R. True will approach APPA and NRECA about opportunities to speak about NAESB to raise awareness and increase interest in membership. Mr. True followed up with APPA but will provide the NAESB office with a more up to date calendar prior of APPA events prior to the next meeting.	R. True
Western Groups - WECC	Resources Committee	WECC has been a member since May 2005. Conference call held with J Ackerman, B Schwermann, M Wells and L Westerfield. Meeting held on October 27 to speak to them about NAESB.	S Brown/M Desselle/R. McQuade
ABBA Energy Limited ?	Resource Committee		



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2f

NAESB Membership Prospects – Long Term

Membership Prospects	Source	Contact/Notes	Assignment
AES Corporation - Indianapolis Power & Light Company	EEI - EPSA		
Alaska Energy and Resources Company	EEI		
ALLETE - Minnesota Power - Superior Water, Light and Power	EEI		
Alliant Energy Corporation - Interstate Power and Light Co - Wisconsin Power and Light Co	EEI		
Arizona Corporation Commission	NERC		
Avista Utilities	EEI		
Big Rivers Electric Corp.	NERC		
Central Vermont Public Service Corporation	EEI		
CH Energy Group, Inc. - Central Hudson Gas & Electric Corp	EEI		
Clarksdale Public Utilities Commission	NERC		
DPL Inc. - The Dayton Power and Light Company	EEI		
Duquesne Light Holdings - Duquesne Light Company	EEI		S. Brown
East Kentucky Power Coop.	NERC		
El Paso Electric Company	EEI		M. Desselle
Electric Energy, Inc.	EEI		
Electric Power Research Institute	NERC		
Farmington Electric Utility System	NERC		
Goldman Sachs & Co.	EPSA		S. Brown
Great Plains Energy, Inc. - Kansas City Power & Light Company	EEI		M. Desselle
Great River Energy	NERC		
GridAmerica LLC	NERC		
Hawaiian Electric Industries, Inc. - Hawaii Electric Light Co., Inc. - Maui Electric Co., Ltd.	EEI		
Huntsville Utilities	NERC		
InterGen	EPSA		
Kansas City Board of Public Utilities	NERC		
MDU Resources Group, Inc. - Montana-Dakota Utilities Co.	EEI		
MGE Energy, Inc. - Madison Gas and Electric Co.	EEI		
Missouri Office of Public Counsel	NERC		
Mt. Carmel Public Utility Company	EEI		
National Energy & Gas Transmission Inc.	EPSA		
National Energy Board	NERC		



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2f

NAESB Membership Prospects – Long Term

Membership Prospects	Source	Contact/Notes	Assignment
Nebraska Public Power District	NERC		
Northeast Power Coordinating Council			M Desselle
Northern Star Generation Co. -- NSTAR	EPSA-EEI		
Nuclear Management Company, LLC	EEI		
Ohio Valley Electric Corporation	EEI		
Omaha Public Power District	NERC		
Ontario Energy Board	NERC		
Pepco Holdings, Inc. - Pepco	EEI		
Pinnacle West Capital Corporation -- (APS)	EEI		
PNM Resources, Inc. - Public Service Co of New Mexico	EEI		
Praxair, Inc.	NERC		
Quebec Energy Board	NERC		
Shell Trading	EPSA		S. Brown
Sierra Pacific Resources - Nevada Power Company - Sierra Pacific Power Company	EEI		
Sithe Energies Inc.	EPSA		
Snohomish County PUD No.1	NERC		
Strategic Energy LLC	EPSA		
TECO Energy, Inc. - Tampa Electric Company	EEI		S. Brown
TNP Enterprises, Inc. - Texas-New Mexico Power Company	EEI		
TransAlta	NERC		
Trans-link			M Desselle
UIL Holdings Corporation - The United Illuminating Company	EEI		
UniSource Energy Corporation - Tucson Electric Power Company	EEI		
Utah Public Service Commission	NERC		
Vermont Electric Power Company, Inc.	EEI		
Wheelabrator Technologies Inc.	EPSA		
Wolf Creek Nuclear Operating Corporation	EEI		



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2g

NAESB Membership Prospects – Smart Grid (Technology Companies)

(Bold = Active participant in DSM-EE activities.)

Membership Prospects	Source	Contact/Notes	Assignment
Abidance Consulting (DLC International)	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Aegix Consulting	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
AESI-US, Inc.	S. Brown	Loreto D. Sarrachini - D. Rager - sent letter with membership information 4/23/2009	D. Rager
Agiliance, Inc.	S. Brown	Mark Lockareff - D. Rager - sent letter with membership information 4/23/2009	D. Rager
Akonix Systems, Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Akuacom	Participant SGSTF	Edward Koch	
Allen Systems Group, Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
AssurX, Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
AUS, Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Axentis	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Barbeion Software Corporation	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
BOW Networks	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Bridge Energy Group, Inc.	Participant SGSTF	Jim Walker	
Bullzi Security, Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
CA, Inc.	S. Brown	Bill Warren - D. Rager - sent letter with membership information 4/23/2009	D. Rager



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2g

NAESB Membership Prospects – Smart Grid (Technology Companies)

(Bold = Active participant in DSM-EE activities.)

Membership Prospects	Source	Contact/Notes	Assignment
Ceelox, Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
CipherOptics	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Compliance Spectrum	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
ControlPath	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Cooper Power Systems, Inc. (Cybectec)	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
CoreTrace Corporation	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Corpedia, Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Critical Watch	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Corporate Risk Solutions, Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Deloitte & Touche, LLP	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Dyonyx	S. Brown	Fred Pratt - D. Rager - sent letter with membership information 4/23/2009	D. Rager
Ember	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
EnerNex Corporation	Participant SGSTF	Erich W. Gunther	J. Booe
EnerVision, Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
ENOSERV	S. Brown	D. Rager - sent letter with membership information	D. Rager



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2g

NAESB Membership Prospects – Smart Grid (Technology Companies)

(Bold = Active participant in DSM-EE activities.)

Membership Prospects	Source	Contact/Notes	Assignment
		4/23/2009	
Eviance	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Erado Message Control Solutions	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
ERLPhase Power Technologies, Ltd.	S. Brown	Michael Weiblen - D. Rager - sent letter with membership information 4/23/2009	D. Rager
EthicsPoint, Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Eureka Software	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
FishNet Security, Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Fix Protocol	Participant SGSTF	Kathleen Callahan, Courtney Doyle, Jim Northey, Ryan Pierce	
General Electric	Participant SGSTF	Charles Smith	
Gilliam Wesley International	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Global DataGuard, Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Gridpoint	Participant SGSTF	R. Scott Crowder, III, Stephen Haber	
Gridwise Architecture Council	Participant SGSTF	Dr. Kenneth P. Wacks	
Grier Consulting Group, LLC	S. Brown	Chris Grier - D. Rager - sent letter with membership information 4/23/2009	D. Rager
Honeywell	Participant SGSTF	David R. Kaufman	J. Booe
HP Atalla Security Products	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Industrial Defender	S. Brown	D. Rager - sent letter with membership information	D. Rager



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2g

NAESB Membership Prospects – Smart Grid (Technology Companies)

(Bold = Active participant in DSM-EE activities.)

Membership Prospects	Source	Contact/Notes	Assignment
		4/23/2009	
Industry Compliance Institute	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Intellibind	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Ivara Corporation	S. Brown	Kathy Steel - D. Rager - sent letter with membership information 4/23/2009	D. Rager
Jefferson Wells	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
KEMA	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Kestrel Power Engineering, LLC	S. Brown	Mike Fogarty - D. Rager - sent letter with membership information 4/23/2009	D. Rager
KPMG LLP	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Lawrence Berkeley National Laboratory	Participant	Dave Watson	
	SGSTF		
LogRhythm, Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Loma Consulting	S. Brown	Earl S. Hill - D. Rager - sent letter with membership information 4/23/2009	D. Rager
The MathWorks	S. Brown	Jack Little - D. Rager - sent letter with membership information 4/23/2009	D. Rager
Matrikon	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
McCoy Power Consultants	S. Brown	Steven W. McCoy - D. Rager - sent letter with membership information 4/23/2009	D. Rager
Methodware	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2g

NAESB Membership Prospects – Smart Grid (Technology Companies)

(Bold = Active participant in DSM-EE activities.)

Membership Prospects	Source	Contact/Notes	Assignment
MetricStream, Inc.	S. Brown	Gunjan Sinha - D. Rager - sent letter with membership information 4/23/2009	D. Rager
MLJ Energy Group	S. Brown	Michael T. Brown - D. Rager - sent letter with membership information 4/23/2009	D. Rager
NCircle Network Security	S. Brown	Abe Kleinfeld - D. Rager - sent letter with membership information 4/23/2009	D. Rager
N-Dimension Solutions Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
NetVision	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Network & Security Technologies, Inc.	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Nexant, Inc.	S. Brown	Basem Sarandah - D. Rager - sent letter with membership information 4/23/2009	D. Rager
North American Energy Services	S. Brown	D. Rager - sent letter with membership information 4/23/2009	D. Rager
Oxford Consulting	S. Brown	Michelle Abreu - D. Rager - sent letter with membership information 4/23/2009	D. Rager
Pacific Northwest National Laboratory	Participant SGSTF	Steve Widergren	
Policy Technologies International, Inc.	S. Brown	D. Rager - sent letter with membership information 4/24/2009	D. Rager
Portland Gas and Electric	Participant SGSTF	Albert Chiu	
Power Decisions Consulting	S. Brown	D. Rager - sent letter with membership information 4/24/2009	D. Rager
POWER Testing and Energization, Inc.	S. Brown	D. Rager - sent letter with membership information 4/24/2009	D. Rager
Powersmiths International, Inc.	S. Brown	D. Rager - sent letter with membership information 4/24/2009	D. Rager
PricewaterhouseCoopers LLP	S. Brown	D. Rager - sent letter with	D. Rager



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2g

NAESB Membership Prospects – Smart Grid (Technology Companies)

(Bold = Active participant in DSM-EE activities.)

Membership Prospects	Source	Contact/Notes	Assignment
		membership information 4/24/2009	
Quality Plus Engineering, LLC	S. Brown	Greg Hutchins - D. Rager - sent letter with membership information 4/24/2009	D. Rager
Quanta Technology	S. Brown	James (Jim) M. Blackman - D. Rager - sent letter with membership information 4/24/2009	D. Rager
Quizzicle	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
RavenEye	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Resolver, Inc.	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Rocky Mountain Power Services, Inc.	S. Brown	Matthew Fulk - D. Rager - sent letter with membership information 4/29/2009	D. Rager
RW Beck	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Securicon, LLC	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
SecuSolutions Ltd.	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
SenSage, Inc.	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Sirius Solutions, LLP	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Slalom Consulting	S. Brown	Brian Jacobsen - D. Rager - sent letter with membership information 4/29/2009	D. Rager
Softential, Inc.	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2g

NAESB Membership Prospects – Smart Grid (Technology Companies)

(Bold = Active participant in DSM-EE activities.)

Membership Prospects	Source	Contact/Notes	Assignment
SOURCEfire	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Southwest Microwave, Inc.	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Sph3r3, LLC	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Structure Consulting Group, LLC	S. Brown	Mike Peterson - D. Rager - sent letter with membership information 4/29/2009	D. Rager
Surf Technologies, Inc.	S. Brown	Jacques Davignon - D. Rager - sent letter with membership information 4/29/2009	D. Rager
Symantec	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
System Operations Success, Int'l. (SOS Int'l)	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Telkonet, Inc.	S. Brown	Jason L. Tienor - D. Rager - sent letter with membership information 4/29/2009	D. Rager
Teltone	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Towerline Software	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
TriGeo Network Security	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Tripwire	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Utility Decision Support (UDS) Group	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Universal Safety Response, Inc.	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 2g

NAESB Membership Prospects – Smart Grid (Technology Companies)

(Bold = Active participant in DSM-EE activities.)

Membership Prospects	Source	Contact/Notes	Assignment
University of North Carolina	Participant SGSTF	Toby Considine	
Utility Services LLC	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Utility System Efficiencies, Inc.	S. Brown	Daniel H. Wood - D. Rager - sent letter with membership information 4/29/2009	D. Rager
Vidient	S. Brown	Frank Pao - D. Rager - sent letter with membership information 4/29/2009	D. Rager
Vigilant Power Solutions, Inc.	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Verisign	S. Brown	D. Rager - sent letter with membership information 4/29/2009	D. Rager
Xtensible Solutions	Participant SGSTF	Joe Zhou	
Z Global Engineering & Energy Solutions	S. Brown	Ziad Alaywan - D. Rager - sent letter with membership information 4/29/2009	D. Rager



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 3

North American Energy Standards Board New Members since January 2009

Quadrant	Segment	Contact and Company	Reason Joined	Month Joined
WEQ	Distribution	Alabama Municipal Electric Authority Contact: Ray Phillips	Participation	April
WEQ	Generation	Arkansas Electric Coopeartive Corporation Contact: Ricky Bittle	Participation	July
RGQ	Supplier	Asgard Energy, LLC Contact: Rhett C. Shumway	Participation	June
REQ	End Users	City of Houston Contact: James P. Cargas	Participation	June
RGQ	Services	Clarity Systems, Ltd. Contact: Steve O'Neil	Participation	September
WGQ	Pipeline	Golden Pass Pipeline, LLC Contact: Susan Braden	Participation	January
WEQ	Marketer	Los Angeles Department of Water and Power Contact: Michael S. Webster	Participation	January
WEQ	Transmission	Los Angeles Department of Water and Power Contact: Mohammed Johar Beshir	Participation	January
WEQ	Transmission	Manitoba Hydro Contact: Blaine Poff	Participation	July
WEQ	Marketers	Manitoba Hydro Contact: Blaine Poff	Participation	July
WGQ	Producer	Noble Americas Corp. Contact: Boris Yanovsky	Participation	September
REQ	End Users	Pennsylvania Public Utility Commission Contacts: Robert F. Wilson and Annunciata E. Marino	Participation	August
WEQ	End Users	Shift Research, LLC Contact: Jesse D. Hurley	Participation	July
WEQ	End Users	SonicWALL, Inc. Contact: Boris Yanovsky	Participation	October
WEQ	End Users	SunGard Consulting Services, LLC Contact: Austin Morris	Participation	April



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 3

North American Energy Standards Board New Members since January 2010

Quadrant	Segment	Contact and Company	Reason Joined	Month Joined
WEQ	Technology/Services	8760, Inc. Contact: Jim Buccigross	Participation	January
WGQ	Pipeline	American Midstream Partners, LP	Participation	March
WEQ	Transmission	Avista Corporation Contact: Jeff Schlect	Participation	January
WEQ	Marketers/Brokers	Brookfield Energy Marketing, Inc Contact: Nicolas Bosse	Participation	March
WGQ	Services	Cenovus Energy, Inc. Contact: Paul Kahler	Participation	January
REQ	End Users	Maryland Public Service Commission Contact: Dan Norfolk	Participation	January
WEQ	Technology/Services	National Institute of Standards and Technology Contact: David A. Wollman	Participation	February
WEQ	Technology/Services	Organization for the Advancement of Structured Information Standards Contact: Laurent M. Liscia	Participation	January
REQ	End Users	Public Utilities Commission of Ohio Contact: Christopher Kotting	Participation	February
WEQ	End Users	Public Utilities Commission of Ohion Contact: Christopher Kotting	Participation	February



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 4

North American Energy Standards Board Member Resignations in 2009

Quadrant	Segment	Contact and Company	Reason Resigned	Month Resigned
REQ	End Users	Advantage IQ, Inc.	No reason given for non renewal	August
WEQ	Marketers/Brokers	Ameren Services	No reason given for non renewal	July
RGQ	Distribution	Baltimore Gas & Electric Company	Company decision to not renew – only keeping two memberships	September
WGQ	LDC	Cascade Natural Gas Corporation	Company decision to not renew due to resources (<i>May reconsider later in year</i>)	January
WGQ	Pipeline	Chandeleur Pipe Line Co	No reason given for non renewal	March
WGQ	Services	Cheniere LNG Marketing	May reconsider in June 2009	May
REQ	Distribution	Consolidated Edison Company of NY	Non-renewal due to budget	July
REQ	Services	Constellation NewEnergy, Inc.	Non-renewal due to budget	November
REQ	Supplier	Direct Energy Business Services	No reason given for non renewal	September
WEQ	Generation	Edison Mission Marketing & Trading, Inc.	No reason given for non renewal	September
WEQ	Generation	ElectriCities of North Carolina (North Carolina Eastern Municipal Power Agency)	Company decision to not renew – only keeping one membership	January
WEQ	Distribution	Exelon Corporation – PECO Energy	No reason given for non renewal	March
WEQ	Generation	Exxon Mobil Gas Marketing	Company decision to not renew – only keeping one membership	June
WGQ	Services	Hess Corporation	No reason given for non renewal	March
WGQ	Producer	Husky Energy Marketing, Inc.	Company decision to not renew – purchased contract	October
WGQ	Producer	Husky Gas Marketing, Inc.	Company decision to not renew – purchased contract	October
WGQ	End Users	Husy Marketing and Supply Company	Company decision to not renew – purchased contract	October
WEQ	Transmission	Hydro One Networks	No reason given for non renewal	September
REQ	Serv Prov/Supp	ICF International	No reason given for non renewal	October
WEQ	Marketers/Brokers	Imperial Irrigation District	Company decision to not renew – only keeping one membership	January
WGQ	Services	Lehman Brothers Commodity Services, Inc.	No reason given for non renewal	March
REQ	Distribution	MidAmerican Energy Company	Company decision to not renew – only keeping one membership	May
WEQ	Marketers/Brokers	Navigant Consulting, Inc.	Non-renewal due to budget	November
WGQ	LDC	New Jersey Natural Gas Company	No reason given for non renewal	December
WEQ	Marketers/Brokers	North Carolina Electric Municipal Power Agency #1	Company decision to not renew – only keeping one membership	January



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 4

North American Energy Standards Board Member Resignations in 2009

REQ	End Users	Office of Public Advocate, State of Maine	No reason given for non renewal	June
WEQ	Generation	Ontario Power Generation	Non-renewal due to budget	July
WEQ	Transmission	Otter Tail Power Company	No reason given for non renewal	April
WGQ	Pipeline	Ozark Gas Transmission, LLC	No reason given for non renewal	October
WEQ	Generation	PacifiCorp	Company decision to not renew – only keeping two memberships	June
WEQ	Marketers/Brokers	Portland General Electric	Company decision to not renew – only keeping one membership	July
WEQ	Marketers/Brokers	PSEG Energy Resources and Trade LLC	No reason given for non renewal	January
WEQ	Generation	PSEG Power LLC	No reason given for non renewal	January
WEQ	Distribution	Public Power Council	No reason given for non renewal	May
REQ	Distribution	Public Service Electric & Gas Company	No reason given for non renewal	April
WEQ	Distribution	Public Service Electric and Gas Company	Company decision to not renew – only keeping two memberships	October
WEQ	Generation	Qualedi, Inc.	No reason given for non renewal	November
WEQ	Distribution	Southern Company Services, Inc.	Company decision to not renew – only keeping other memberships	December
WEQ	Marketers/Brokers	SUEZ Energy Marketing NA, Inc.	No reason given for non renewal	February
WGQ	Services	SUEZ Energy Marketing NA, Inc.	No reason given for non renewal	November
WEQ	Distribution	Tennessee Valley Authority	Company decision to not renew – only keeping four memberships	November
WGQ	Services	UBS Energy LLC	No reason given for non renewal	January
WGQ	Services	Virginia Power Energy Marketing	No reason given for non renewal	May
WGQ	LDC	Westfield Gas & Electric Light Dept.	No reason given for non renewal	February
RGQ	Distribution	Xcel Energy	Company decision to not renew due to resources (<i>May reconsider later in 2010</i>)	January



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 4

North American Energy Standards Board Member Resignations in 2010

Quadrant	Segment	Contact and Company	Reason Resigned	Month Resigned
WGQ	Pipeline	Pacific Gas & Electric	No reason given for non renewal	January
WEQ	Marketers/Brokers	Progress Energy	Company decision to not renew – only keeping one memberships	February
WEQ	Generation	Southeastern Power Administration	No reason given for non renewal	January



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 5

North American Energy Standards Board and Executive Committee Vacancies as of March 10, 2010

Vacant Seats	Quadrant	Seat	Segment	Subsegment
6	Retail Electric	Board (4)	End Users/Public Agencies (3)	
			Service Providers/Suppliers (1)	
		Executive Committee (2)	End Users/Public Agencies (2)	
16	Retail Gas	Board (7)	Distributors (2)	
			End Users/Public Agencies (4)	
			Service Providers/Suppliers (1)	
		Executive Committee (9)	Distributors (2)	
			End User /Public Agencies (4)	
			Service Providers/Suppliers (3)	
24	Wholesale Electric	Board (13)	Distribution/Load Serving Entities (LSE) (2)	IOU (1) Competitive Retailer (1)
			Transmission (2)	IOU (at large) (1) At-Large (1)
			Generation (2)	IOU (1) Merchant (at large) (1)
			Marketers/Brokers (1)	At-Large (1)
			End User (2)	Commercial/Residential (1) Large Industrial (1)
			Technology/Services (4)	
		Executive Committee (11)	End User (3)	Large Industrial (1) Commercial/Residential (1) End Use (In other segments) (1)
			Distribution/LSE (1)	Muni/Coop (1)
			Marketers/Brokers (1)	Not IOU Affiliated (at large) (1)
			Technology/Services (6)	
1	Wholesale Gas	Board (1)	LDC (1)	



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 6

Membership Roster Sorted by Company

Quadrant	Segment	Sub-Segment	Member Company	Contact	State / Province
WGQ	s		8760, Inc.	Jim Buccigross	AL
WEQ	ts		8760, Inc.	Jim Buccigross	AL
WEQ	m	muni	ACES Power Marketing LLC	Roy J. True, Amadou Fall	IN
RGQ	d		AGL Resources Inc.	Gregory Becker	GA
WEQ	d	muni	Alabama Municipal Electric Authority	Ray Phillips	AL
REQ	u		Alabama Power	Judy W. Ray	AL
WEQ	i		Alberta Electric System Operator	Diana Pommen, Henry Ren	ALB
RGQ	s		Allegro Development	Kimberly Page	TX
WGQ	pl		Alliance Pipeline LP	Cathie Legge, Brian Troicuk	ONT
WGQ	l		Ameren Corporation	Scott Glaeser, Ken Dothage, Jim Massmann	MO
REQ	u		Ameren Services Company	Patrick Eynon	MO
WEQ	d	iou	American Electric Power Service Corp.	Barbara Radous, Joseph Hartsoe, Phil Cox	OH
WGQ	pl		American Midstream Partners, LP	Marty Patterson	TX
WEQ	m	muni	American Municipal Power, Inc.	Chris Norton, Alice Walker	OH
RGQ	d		American Public Gas Association (APGA)	Alonzo Weaver, Joe Stengel	PA
WEQ	d	muni	American Public Power Association	Allen Mosher	DC
WEQ	g	merc	American Wind Energy Association	Robert Gramlich	DC
WGQ	s		Anadarko Energy Services Company	John Bretz, Steven Abbey	TX
WGQ	pl		ANR Pipeline Company	Sandy Meyers, Joseph E. Polland, Rene Staeb, Debbie Forth, Carol Wehlmann	ALB
WGQ	pr		Apache Corporation	Maribeth Bedevian	TX
WEQ	m	iou	APS Marketing and Trading	Steve Norris	AZ
WEQ	t	iou	Arizona Public Service Company	Mark W. Hackney	AZ
WGQ	e		Arizona Public Service Company	Tom Carlson, Kelly Daly	AZ
WEQ	g	muni	Arkansas Electric Cooperative Corporation	Ricky Bittle	AR
RGQ	s		Asgard Energy, LLC	Rhett C. Shumway	CO
WGQ	pl		Atmos Energy	Steve Easley	TX
WEQ	t	iou	Avista Corporation	Jeff Schlect	WA
WGQ	s		Ballard Natural Gas, LLC	Susan Thibodeaux	TX
REQ	u		Baltimore Gas & Electric Co.	Ruth Kiselewich, Phil Precht	MD
WGQ	l		Baltimore Gas & Electric Co.	Phil Precht, Ron Jennings	MD
WGQ	s		Barclays Bank PLC	Guy Kern-Martin	NY
WEQ	g	muni	Basin Electric Power Cooperative	Jason Doerr	ND
WEQ	m	nd	Basin Electric Power Cooperative	David Raatz	ND
WEQ	t	muni	Basin Electric Power Cooperative	Dan Klempel	ND
WGQ	s		Bentek Energy, LLC	E. Russell Braziel	CO
WGQ	s		BG Energy Merchants, LLC	Martha Braddy, Denise Almoina, Susan Bailey, Melody Fontenot	TX
WEQ	t	iou	Black Hills Corporation	Larry D. Williamson	SD
WGQ	pl		Boardwalk Pipelines, LP	Randy Young, Mitch Whitehead	TX
WGQ	e		Boeing Company	Tina Burnett	WA



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 6

Membership Roster Sorted by Company

Quadrant	Segment	Sub-Segment	Member Company	Contact	State / Province
WEQ	d	other	Bonneville Power Administration	Sydney D. Berwager	OR
WEQ	g	fed	Bonneville Power Administration	Francis Halpin, Robin Chung	OR
WEQ	m	fed	Bonneville Power Administration	Brenda Anderson	OR
WEQ	t	fed	Bonneville Power Administration	Barbara Rehman, Tom Davis	OR
WEQ	e	lind	BP America, Inc.	Rhonda Denton	TX
WGQ	pr		BP Energy	Mark Stultz, Rhonda Denton	TX
WEQ	t	fed	British Columbia Transmission Corporation	Rohan Soulsby	BC
WEQ	m	niou	Brookfield Energy Marketing, Inc.	Nicolas Bosse	QUE
WEQ	g	fed	California Department of Water Resources	Glenn Solberg, Chi Doan	CA
WEQ	i		California ISO	Yakout Mansour	CA
WGQ	e		Calpine Energy Services, LP	Shonnie Daniel, Jay Dibble	TX
RGQ	s		Capacity Center	Greg Lander	MA
WGQ	s		Cargill Incorporated	Kathy Gerken	MN
WGQ	pl		Carolina Gas Transmission Corporation	Rae Davis, Dana B. Randall	SC
WGQ	s		Cenovus Energy, Inc.	Paul Kahler	CAN
WGQ	s		CenterPoint Energy Gas Services, Inc.	James G. Beste, Larry Kunkle	TX
WGQ	pl		CenterPoint Energy Gas Transmission Company	Larry Thomas	TX
WGQ	pl		CenterPoint Energy Mississippi River Transmission Corp.	Robert Trost	TX
WEQ	d	muni	Central Electric Power Cooperative	Arthur Fusco	SC
WGQ	pl		Cheniere Pipeline Company	Whit Scott	TX
WGQ	pr		Chevron Natural Gas	Charles (Chuck) Cook	TX
WGQ	pl		Chevron Pipe Line Company	Mary Ann Collins, Deborah Plattsmier, Jeff Kirk	TX
WGQ	pr		Cimarex Energy Co	Charlotte Baker	OK
WGQ	s		Citigroup Energy Inc.	Carrie Southard, Angela Davis	TX
REQ	e		City of Houston	James P. Cargas	TX
RGQ	s		Clarity Systems, Ltd.	Steve O'Neil	ONT
WEQ	t	iou	Cleco Power, LLC	Cindy Guillot	LA
WGQ	l		Colorado Springs Utilities	Joe M. Holmes	CO
WGQ	pl		Columbia Gas Transmission	Claire Burum	VA
WEQ	e	enduse	Comprehensive Energy Services	Jim Templeton	TX
WGQ	e		Comprehensive Energy Services	Jim Templeton	TX
WEQ	g	merc	Conectiv Energy Supply, Inc.	Gloria Godson	DE
WGQ	pr		ConocoPhillips Gas and Power	Peter Frost	TX
WGQ	l		Consolidated Edison Company of NY	Scott Butler, Paul Olmsted	NY
WEQ	t	iou	Consolidated Edison Company of NY, Inc.	Scott Butler	NY
WGQ	s		Constellation Energy Commodities Group, Inc.	Lisa Simpkins, Joseph Kirwan, Andrea Kullman, Jennifer Scott	MD
WEQ	d	iou	Consumers Energy Company	Andrew C. Dotterweich, Frank Johnson	MI
WEQ	t	muni	Dairyland Power Cooperative	Chuck Callies	WI
WGQ	pl		Dauphin Island Gathering Partners	Katie Rice	CO
WGQ	s		DB Energy Trading	William Donnelly, Travis McCullough	NY
WGQ	e		Defense Energy Support Center	Veronica Jones, Kevin Ahern	VA



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 6

Membership Roster Sorted by Company

Quadrant	Segment	Sub-Segment	Member Company	Contact	State / Province
WGQ	e		Department of Energy	Christopher Freitas	DC
WEQ	g	muni	Deseret Generation & Transmission Co-operative	Curtis Winterfeld	UT
WGQ	pr		Devon Energy Corporation	Bill Green, Dianne Dunbar	OK
WEQ	g	iou	Dominion Energy Marketing, Inc.	Lou Oberski, Jalal Babik	VA
WGQ	l		Dominion Resources (Previously CNG)	Craig Columbo	VA
REQ	s		Dominion Retail	William Barkas, Richard Zelenko	VA
RGQ	s		Dominion Retail, Inc.	Richard A. Zollars	VA
WGQ	pl		Dominion Transmission, Inc.	Gary Sypolt, Iris King	VA
REQ	u		Dominion Virginia Power	David F. Koogler, Mary Edwards	VA
WGQ	s		DTE Energy Trading, Inc.	Gregory V. Staton, James Buck, Dena Crawford, Marcia L. Hissong, Ann Marie Jambor, Cynthia Klots, Shelley Greene	MI
WEQ	g	iou	Duke Energy Americas, LLC (DEA)	Walt Yeager	OH
RGQ	d		Duke Energy Corp.	Dan Jones	OH
WEQ	d	iou	Duke Energy Corp.	Alan Pritchard	NC
WEQ	g	merc	Dynegy Power Marketing, Inc.	Ben Trammell	TX
REQ	s		E:SO (Formerly EC Power International)	Judy Bailey, J. Cade Burks, Jennifer Teel	TX
WEQ	n	n	Edison Electric Institute	David Owens, Dave Dworzak, James P. Fama	DC
WGQ	pr		El Paso Exploration & Production Company	David A. Webster, Stephanie Karm	TX
WGQ	pl		El Paso Natural Gas	William Griffith	TX
WEQ	m		Electric Power Supply Association	Jack Cashin, Barry Green	DC
REQ	s		Electric Reliability Council of Texas (ERCOT)	Susan Munson, Kent Saathoff	TX
WEQ	i		Electric Reliability Council of Texas (ERCOT)	Bill Blevins, Paul Wattles, Joel Mickey	TX
WEQ	t	iou	Empire District Electric Company, The	Bary K. Warren	MO
WGQ	pl		Enbridge (U.S.) Inc.	Brad Petzold	TX
WGQ	s		EnCana Marketing (USA) Inc.	Keith Sappenfield	CO
WGQ	pr		EnCana Oil & Gas (USA) Inc.	Keith Sappenfield	ALB
WGQ	pl		Energy Transfer Partners, L.P.	Josie Castrejana, Melissa Graves, Robert Walker	TX
WEQ	e	enduse	EnerNOC, Inc.	Aaron Breidenbaugh	MA
WEQ	g	merc	Entegra Power Group, LLC	Rebecca Turner	FL
WEQ	t	iou	Entergy Services, Inc.	Edward J. Davis, Narinder Saini	LA
WGQ	e		Entergy Services, Inc.	Laura Berryman, Terry Shields	LA
WGQ	pl		Enterprise Products Partners, LP	Jeff Molinaro	TX
WGQ	pl		Equitrans, L.P.	Joseph M. Dawley	PA
RGQ	s		Exelon Energy	Sheree M. Petrone	PA
REQ	u		Exelon Energy Delivery	Toni Garza	IL
WEQ	m	iou	Exelon Generation - Power Team	Jack Crowley	IL
WGQ	pr		ExxonMobil Gas & Power Marketing Company a division of Exxon Mobil Corporation	Randy E. Parker, John W. Poe	TX
WEQ	d	iou	First Energy Service Company	Robert M. Martinko, Thomas C. Burgess	OH



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

Attachment 6

Membership Roster Sorted by Company

Quadrant	Segment	Sub-Segment	Member Company	Contact	State / Province
WEQ	m	iou	FirstEnergy Solutions Corp.	Mark Travaglianti	OH
WEQ	d	muni	Florida Municipal Power Agency	Frank Gaffney	FL
WEQ	g	muni	Florida Municipal Power Agency	Frank Gaffney	FL
WEQ	m	iou	Florida Power & Light Company	Gerry Yupp, Tim Gerrish	FL
WEQ	t	iou	Florida Power & Light Company	Marty Mennes, Bob Birch	FL
WGQ	e		Florida Power & Light Company	Dona Gussow, Art Morris	FL
WGQ	pr		Foothills Energy Ventures, LOC	Marty Patterson	TX
WGQ	e		FPL Energy Power Marketing, LLC	Marty Jo Rogers	FL
WGQ	pl		Gas Transmission Northwest Corporation	Joseph Pollard	OR
WEQ	t	muni	Georgia Transmission Corporation	Patrick McGovern	GA
WGQ	pl		Golden Pass Pipeline, LLC	Susan Braden	TX
WGQ	pr		Goodrich Petroleum Company, LLC	Bill Hebenstreit	TX
WGQ	pl		Great Lakes Gas Transmission	Joseph Pollard	MI
WGQ	pr		High Mount Exploration and Production, LLC	David Ogden, Sheri Heslington, Gary Weaver	VA
WEQ	t	fed	Hydro - Quebec Transenergie	Glenn Sylvain	QUE
WEQ	t	iou	Iberdrola USA Management Corporation	Mark Marini	NY
WGQ	l		Iberdrola USA Management Corporation	Mark Marini	NY
WEQ	t	iou	Idaho Power Company	Tessia Park	ID
WGQ	e		Imperial Irrigation District	Susie Carrillo	CA
WEQ	i		Independent Electricity System Operator (IESO)	Cristian Dragnea, Biju Gopi	ONT
WEQ	g	muni	Indiana Municipal Power Agency	Scott Berry	IN
WGQ	l		Integrus Energy Group, Inc.	David E. Wear	WI
RGQ	s		International LNG Alliance	David Sweet	DC
RGQ	s		Interstate Gas Supply	Ginger Fletcher	OH
WGQ	pl		Iroquois Gas Transmission System	Tom Gwilliam	CT
WEQ	i		ISO New England, Inc.	Matthew F. Goldberg	MA
WGQ	s		JP Morgan Ventures Energy Corp	Paul Tramonte	TX
WGQ	pl		Kern River Gas Transmission Company	Brenda Horton	UT
WGQ	l		Laclede Gas Co.	Kenneth Neises	MO
RGQ	s		Latitude Technologies	Leigh Spangler	TX
WGQ	s		Latitude Technologies	Leigh Spangler	TX
WEQ	g	muni	Lincoln Electric System	Douglas Bantam	NE
WEQ	t	muni	Los Angeles Department of Water and Power	Mohammed Johar Beshir	CA
WEQ	m	muni	Los Angeles Department of Water and Power	Bradford Packer, Joel F. Cordero	CA
WGQ	s		Louis Dreyfus Energy Services L.P.	Jennifer Farris, Eric Twombly	CT
WGQ	e		Lower Colorado River Authority	Mickey Bell	TX
WGQ	s		Macquarie Cook Energy, LLC	Angela Jones	CA
WEQ	t	fed	Manitoba Hydro	Blaine Poff	CAN
WEQ	m	fed	Manitoba Hydro	Blaine Poff	CAN
WGQ	pr		Marathon Oil Company	Robin Perrine	TX
REQ	e		Maryland Public Service Commission	Dan Norfolk	MD
WGQ	pr		Mewbourne Oil Company	Michael F. Shepard	TX
WEQ	d	muni	Michigan Public Power Agency	James R. Nickel	MI
WEQ	m	iou	MidAmerican Energy Company	Dennis Kimm	IA



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

Attachment 6

Membership Roster Sorted by Company

Quadrant	Segment	Sub-Segment	Member Company	Contact	State / Province
WEQ	i		Midwest Independent Transmission System Operator	Bill Phillips, Ed Skiba	IN
WEQ	t	at large	Midwest Reliability Organization	Dan Schoenecker	MN
WGQ	e		Mirant Energy Trading, LOC	Laura Trautman, John F. Hogan	GA
WEQ	d	muni	Missouri River Energy Services	Brian Zavesky	MO
WEQ	t	muni	Modesto Irrigation District	Roger Van Hoy	CA
WEQ	e	reg	National Association of Regulatory Utility Commissioners	Lou Ann Westerfield	DC
WGQ	l		National Fuel Gas Distribution	Michael Novak	NY
RGQ	d		National Fuel Gas Distribution Corporation	Mike Novak	NY
WGQ	pl		National Fuel Gas Supply Corp.	Joseph Kardas	NY
WEQ	t	iou	National Grid	Edward M, Kremzier	MA
WGQ	l		National Grid Gas Distribution Companies	Bob Superty	NY
WEQ	ts		National Institute of Standards and Technology	David A. Wollman	MS
WEQ	d	muni	National Rural Electric Cooperative Assoc.	Paul McCurley	VA
WGQ	pl		Natural Gas Pipeline Co of America	Paul Love, Stan Thomas, Mike Schisler, Paul Haas	TX
WEQ	d	muni	NCMPA1	Martin Summe, George Landis	NC
WEQ	i		New York Independent System Operator	Rana Mukerji	NY
WEQ	d	at large	New York State Reliability Council	P. Donald Raymond	NY
WGQ	s		Nexen Marketing	Shelley Leavitt	ALB
WGQ	l		NiSource, Inc.	George Simmons, Sorana Linder	IN
WGQ	pl		Noble Americas Corp.	Joseph Limone	CT
WGQ	pr		Noble Energy, Inc.	Richard D. Smith, Tammy M. Stevens	TX
WEQ	d	at large	North American Electric Reliability Corporation (NERC)	Gerry Adamski, Andy Rodriquez	NJ
REQ	s		North Carolina Advanced Energy Corporation	Robert K. Koger	NC
WEQ	d	muni	North Carolina Electric Membership Corporation	David Beam	NC
WEQ	t	iou	Northeast Utilities Service Company	David Boguslawski, Calvin A. Bowie	CT
WGQ	pl		Northern Border Pipeline Company	Joseph Pollard	NE
WGQ	pl		Northern Natural Gas	Mary Darveaux	NE
WGQ	l		Northwest Natural Gas Company	Randolph Friedman	OR
WEQ	t	iou	Northwestern Corporation	Mike Cashell	MT
WGQ	pl		NOVA Gas Transmission Ltd.	Doug Miller	ALB
WEQ	g	merc	NRG Energy, Inc.	Alan Johnson, Jennifer J. Vosburg	NJ
WEQ	m	iou	NV Energy	Sheryl Torrey	NV
WEQ	t	iou	NV Energy, Inc.	Patricia Englin	NV
WGQ	s		OGE Energy Resources, Inc.	Cary Metz	OK
REQ	u		Oncor	Larry Williford, Debbie McKeever	TX
WGQ	l		ONEOK	Richard Tangeman	OK
WGQ	pl		ONEOK Partners GP, LLC	Teri Tingler	NE
WEQ	e	at large	Open Access Technology International, Inc.	Michehl Gent	MN
WEQ	t	at large	Open Access Technology International, Inc.	Paul R. Sorenson	MN
WEQ	ts		Organization for the Advancement of Structured Information Standards (OASIS)	Laurent M. Miscia	MA



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 6

Membership Roster Sorted by Company

Quadrant	Segment	Sub-Segment	Member Company	Contact	State / Province
WEQ	m	iou	PacifiCorp	John Apperson	OR
WEQ	t	iou	PacifiCorp	Shay Labray	OR
WGQ	pl		Panhandle Eastern Pipe Line Co.	William Grygar, Kim Van Pelt	TX
WGQ	l		PECO Energy Co.	Carlos Thillet	TX
WGQ	s		Pemex Gas Y Petroquimica Basica	Juan Enrique Gonzalez Azuara	MEXICO
REQ	e		Pennsylvania Office Of Consumer Advocate	Tanya J. McCloskey, Sonny A. Popowsky	PA
RGQ	e		Pennsylvania Office of Consumer Advocate	Tanya J. McCloskey	PA
REQ	e		Pennsylvania Public Utility Commission	Robert F. Wilson, Annunciata E. Marino	PA
WGQ	l		Peoples Gas System (A division of Tampa Electric Co)	Wraye Grimard	FL
WEQ	t	iou	PHI Power Delivery	Ken Gates	DE
WEQ	i		PJM Interconnection	Patrick Brown, Cathy Wesley	PA
WGQ	s		Platts	Bill Murphy	CO
WEQ	t	iou	Portland General Electric	Frank Afranji, John Walker	OR
WGQ	pl		Portland Natural Gas Transmission System	David Haag	OR
WEQ	m	fed	Powerex Corp.	Michael L. McWilliams, Sharole Tylor	BC
WEQ	d	muni	PowerSouth Energy Cooperative	William Ronald Graham	AL
WEQ	t	iou	PPL Electric Utilities Corporation	Ray Mammarella	PA
WGQ	e		PPL EnergyPlus, LLC	Anne Lovett	PA
REQ	s		PPL Solutions, LLC	James M. Minneman, Kim Wall	PA
WEQ	t	iou	Progress Energy	Phillip W. Lewis	NC
WEQ	m	iou	Public Service Company of New Mexico	Steven Maestas, Darren Wilkins, Patricia Merville, Roger Vaughn	NM
WEQ	t	nd	Public Service Electric and Gas Company	Kenneth D. Brown	NJ
REQ	e		Public Utilities Commission of Ohio	Christopher Kotting	OH
WEQ	e	reg	Public Utilities Commission of Ohio	Christopher Kotting	OH
WEQ	t	iou	Puget Sound Energy, Inc.	George Marshall, Bob Harshbarger	WA
WGQ	pl		Questar Pipeline Co.	Scott Hansen	UT
WGQ	s		Quorum Business Solutions Inc.	Anne Golenternek, Michael Lewis	TX
WGQ	pl		Reliance Gas Transportation Infrastructure Limited	Jagjit S. Yadav	India
WEQ	g	merc	RRI Energy Services, Inc.	Trent Carlson	TX
WEQ	d	muni	Sacramento Municipal Utility District	Steve Sorey	CA
WGQ	e	fed	Salt River Project Agricultural Improvement & Power District	Lori-Lynn C. Pennock	AZ
WEQ	m	fed	Salt River Project Agricultural Improvement and Power District	Richard Lehman	AZ
WEQ	t	fed	Salt River Project Agricultural Improvement and Power District	Wendy Weathers, Michael J. Pfeister	AZ
WEQ	t	iou	San Diego Gas & Electric Company	Patricia vanMidde	CA
WEQ	t	fed	Santee Cooper	Tom Abrams	SC
WEQ	d	muni	Seattle City Light	Marilynn Semro, Thomas P. Rowan, Doug Rough	WA
WEQ	m	muni	Seminole Electric Cooperative, Inc.	Steve Wallace	FL
WGQ	l		Sempra Energy - Southern California Gas Co.	Lee Stewart, Rodger Schewecke	CA



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 6

Membership Roster Sorted by Company

Quadrant	Segment	Sub-Segment	Member Company	Contact	State / Province
WGQ	s		Sequent Energy Management, L.P.	Pat Metteauer	TX
WEQ	m	niou	Shell Energy North American (US), L.P.	Robert Reilley, Paul Kerr	TX
WGQ	s		Shell Energy North American (US), L.P.	Eric Gillaspie	TX
WEQ	e	at large	Shift Research, LLC	Jesse D. Hurley	NV
WGQ	s		SolArc, Inc.	Mark Davis	TX
WEQ	e	enduse	SonicWALL, Inc.	Boris Yanovsky	CA
WEQ	m	iou	South Carolina Electric & Gas Company	Kevin Spitzform	SC
WEQ	t	iou	South Carolina Electric & Gas Company	S. Porcher Stoney	SC
WEQ	t	iou	Southern California Edison	Weston Williams	CA
WEQ	g	iou	Southern California Edison Company	Tracy Bibb	CA
WGQ	e		Southern California Edison Company	Roman Bakke, Curt Roney	CA
REQ	s		Southern Company Services	Barbara Hingst	GA
WEQ	g	iou	Southern Company Services, Inc.	John Ciza	GA
WEQ	m	iou	Southern Company Services, Inc.	Joel Dison	GA
WEQ	t	iou	Southern Company Services, Inc.	R.D. (Dean) Ulch, John Lucas, JT Wood, James Y. Busbin, Daryl McGee	GA
WGQ	e		Southern Company Services, Inc.	Alan Kilpatrick	GA
WGQ	pl		Southern Natural Gas Co.	Renee Hyde, Tracey Nicholson, Ludean Wyatt	AL
WGQ	pl		Southern Star Central Gas Pipeline	Philip Rullman, Tim L. Thompson	KY
WGQ	l		Southwest Gas Corporation	Larry Black	NV
WEQ	i		Southwest Power Pool	Carl Monroe, Michael Desselle, Charles Yeung	AR
WEQ	t	muni	Southwest Transmission Cooperative, Inc.	Larry D. Huff	AR
WEQ	t	fed	Southwestern Power Administration	Tracey Stewart	OK
WGQ	pl		Spectra Energy Transmission	Richard Kruse, Kathryn Burch	NC
RGQ	s		Sprague Energy Corp.	Paul Scoff	NH
WEQ	e	at large	Sungard	Andrew Tritch	TX
WGQ	s		SunGard	Lucia Nail	TX
REQ	s		SunGard Consulting Services, LLC	Austin Morris	TX
RGQ	s		Systrends	Dave Darnell	AZ
WEQ	m	iou	Tampa Electric Company	Gail M. McKaig	FL
WEQ	g	merc	Tenaska, Inc.	Scott Helyer	NE
WGQ	pl		Tennessee Gas Pipeline Company	Sue Barry, Mark Gracey	TX
WEQ	g	fed	Tennessee Valley Authority	Kathy York	TN
WEQ	m	fed	Tennessee Valley Authority	Belinda Thornton, Valerie Crockett	TN
WEQ	t	fed	Tennessee Valley Authority	Chuck Feagans	TN
WGQ	e		Tennessee Valley Authority	Valerie Crockett	TN
WGQ	s		Tiger Natural Gas	Tracy Phillips	OK
WEQ	m	niou	TransAlta Energy Marketing Canada	Kim McRunnel	ALB
WGQ	pl		TransCanada Pipelines	Doug Miller	ALB
WEQ	i		TranServ International, Inc.	Kevin Burns	MN
WGQ	pl		Transwestern Pipeline Company, LOC	B lair V. Lichtenwalter, Mary Dramer, David Mendoza	TX



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Attachment 6

Membership Roster Sorted by Company

Quadrant	Segment	Sub-Segment	Member Company	Contact	State / Province
WEQ	g	muni	Tri-State G&T Association, Inc.	Janelle Marriott	CO
WEQ	t	muni	Tri-State Generation and Transmission Association, Inc.	Carla Javornik, Doug Reese	CO
WEQ	t	iou	Tucson Electric Power Company	Raquel Aguilar, Judy Fregoso, Ed Beck	AZ
RGQ	d		UGI Utilities, Inc.	Paul Szykman	PA
WEQ	t	iou	United Illuminating Company, The	Rose Pysh	CT
WGQ	pl		Vector Pipeline L.P.	Amy Bruhn	MI
RGQ	s		Vectren Retail, LLC	Tami Wilson	IN
WGQ	s		Vega Energy Partners, Ltd.	Julie Pincus, Lori Leeder	TX
REQ	s		Ventyx, Inc.	Anthony Hill	TX
WEQ	g	muni	Vermont Public Power Supply Authority	William J. Gallagher	VT
WGQ	l		Washington Gas Light Co.	Adrian Chapman, Mark Lowe, Paul Buckley	DC
WEQ	d	iou	We Energies	Linda Horn	WI
WEQ	g	iou	We Energies	James R. Keller	WI
WEQ	g	iou	Westar Energy, Inc.	Shah Hossain, Grant Wilkerson	KS
WEQ	m	fed	Western Area Power Administration	Jeffrey Ackerman	CO
WEQ	t	fed	Western Area Power Administration	JB Hite	CO
WEQ	t	at large	Western Electricity Coordinating Council	Michelle Mizumori, Louise McCarren	UT
WGQ	s		Williams Gas Marketing, Inc.	Rich Ficken	OK
WGQ	pl		Williams Gas Pipeline	Dale Davis, Christopher Burden	TX
WGQ	pl		Williston Basin Interstate Pipeline	Keith Tiggelaar, Gwen Schoepp, Kelly Brooks, Lori Myerchin	ND
REQ	u		Wisconsin Public Service Corporation	Dennis Derricks, Ken Thiry	WI
RGQ	d		Wisconsin Public Service Corporation	Dennis Derricks, Ken Thiry	WI
WEQ	g	iou	Wisconsin Public Service Corporation	Christopher Plante, Charles W. Severance, Neal Balu	WI
WEQ	d	muni	WPPI Energy	Mike Stuart	WI
WEQ	m	iou	Xcel Energy Inc.	David Lemmons	CO



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

TO: NAESB Files
FROM: Rae McQuade, NAESB President and COO
RE: Review and Approval of 2010 Compensation Changes
DATE: February 15, 2010

The NAESB Managing Committee met via conference call to review and approve compensation changes for 2010. The conference call was convened at 3:30 pm C. All members were in attendance except Mr. Templeton and Ms. Crockett. Mr. Boswell gave the antitrust guidance. Ms. McQuade reviewed recommendations. After discussion, the motion was made and seconded and unanimously approved to put into effect the compensation changes discussed.

The call adjourned at 4:30 pm C.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

TO: NAESB Files
FROM: Rae McQuade, NAESB President and COO
RE: Email Exchange and Approval of Resolution
DATE: March 17, 2010

The NAESB Managing Committee through a series of email exchanges discussed and unanimously approved the following resolution on March 17:

Whereas,

(1) for the 2010 WEQ annual plan, the following item was suggested as an addition: *“Develop model criteria and business practice standards that system operators can use to determine how demand response will be initiated, communicated, controlled, adjusted, measured and verified, including, where feasible, best practices for demand response products and procedures currently employed in organized wholesale electric markets.”*

with the intention to support the following two specific items from the FERC Strategic Plan, which can be found at the following hyperlink (http://www.naesb.org/pdf4/ferc_strategic_plan.pdf):

“Best practices for demand response products and procedures will be explored and, as appropriate, implemented in organized wholesale electric markets. Annual Performance Targets: FY 2010 - Perform outreach with ISOs/RTOs, demand response providers, and others; as appropriate, issue NOPR on best practices. FY 2011 - As appropriate, issue Final Rule on best practices. FY 2012 - Implement Final Rule as appropriate. FY 2013 - Monitor implementation and performance. FY 2014 - Evaluate performance and seek changes as necessary.”

“Best Practices for Demand Response Products and Procedures: Encouraging the implementation of best practices for demand response products and procedures in the organized wholesale electric markets will help to achieve the potential benefits associated with demand response. The identification of best practices will further facilitate demand response participation in these markets on a non-discriminatory basis. The Commission will identify best practices through informal outreach with industry representatives and, as appropriate, will consider initiating formal proceedings to reform existing market rules.”

and furthermore,

(2) there is a lack of substantive support on behalf of the NAESB WEQ Board members for this item being added to the WEQ Annual Plan,

and furthermore,

(3) The FERC staff and the NAESB Advisory Council have not taken a position either supporting or opposing the development of standards as outlined in the suggested addition.

and furthermore,

(4) it has been NAESB's past practice that for controversial standards development items, if there is not widespread quadrant demonstrable strong executive support and Commission backing when the development may become the focus of regulatory action, then NAESB defers pursuing such development.

then be it resolved that

the Managing Committee recommends to the Board that the suggested addition to the 2010 WEQ Annual Plan does not have the needed support within NAESB and should be tabled. If at a later time, there is both executive support and a regulatory direction to NAESB for such standards development, then the Board could reconsider its decision.



North American Energy Standards Board

1301 Fannin, Suite 2350, 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
March 5, 2010

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

FROM: Rae McQuade, NAESB President

RE: Announcement: First Meeting of the NAESB Critical Infrastructure Committee – March 22, 2010

Dear Committee Members, Board members, EC members, EC alternates, NAESB members, NAESB Advisory Council and invited guests,

As noted in our last Board meeting on December 10, 2009, we agreed to set up the first meeting of the NAESB Critical Infrastructure Committee – a board committee tasked with guiding the organization on the formulation of positions and actions that should be taken regarding cybersecurity and other critical infrastructure issues that affect NAESB. The committee is headed by Cade Burks and Jess Hurley. This first meeting is an organizational/planning meeting and will include discussion of scope, target areas for the attention of the committee, and an announcement of meeting dates for the rest of the year. While this is a named committee, all interested parties are encouraged to attend and participate. If you would like to be added to the distribution list for this committee, please notify Denise Rager at drager@naesb.org.

With Best Regards,

Rae McQuade

Rae McQuade
NAESB President and COO



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

CONFERENCE CALLING AND WEB CONFERENCING DETAILS FOR THE MARCH 22, 2010 SET OF BOARD AND RELATED MEETINGS:

The meetings are open to all interested parties, who may participate by phone if unable to attend in person. The Board meeting is also web cast.

March 22	2:00 pm to 5:00 pm C	Critical Infrastructure Board Committee Conference Call and Web Cast Meeting
		<ul style="list-style-type: none"> • Call in number 866-740-1260 • Access Code 356-0060 • Security Code 5812

To join a conference call:

- Dial the 11-digit toll free call-in phone number shown above for the specific meetings
- An automated attendant will ask you to enter a seven-digit access code (shown in the table above)
- The automated attendant will ask you to record your name.
- Please note that if the conference leader has not yet initiated the conference call, you will be placed on music hold until the conference leader starts the conference.
- The automated attendant will then ask you for a four-digit security code (shown in the table above)

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 on-hold line to have it disconnected.

For participating in the web cast, the web conferencing feature enabled, 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.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NAESB BOARD CRITICAL INFRASTRUCTURE COMMITTEE
Conference Call and Web Cast
Monday, March 22 -- 2:00 p.m. to 5:00 p.m. Central

DRAFT AGENDA

- | | |
|------------------|---|
| 2:00 p.m. | <ol style="list-style-type: none"> 1. Administration and Welcome <ol style="list-style-type: none"> a) Antitrust Guidelines b) Introduction of Committee Members and Participants 2. Adoption of the Agenda <ol style="list-style-type: none"> a) Agenda Adoption 3. Discussion and Adoption of the Scope & Mission of the Committee
 <i>The NAESB Board Critical Infrastructure Committee is created to formulate positions and identify actions and assignments that should be taken regarding cybersecurity and other critical infrastructure issues that affect NAESB and NAESB standards development, for Board consideration.</i> 4. Target Areas for Consideration <ol style="list-style-type: none"> a) Smart Grid Cyber Security Report b) National Energy Sector Cyber Organization (NESSO) 5. Action Items and Assignments for Next Meeting <ol style="list-style-type: none"> a) 2010 Meeting Schedule 6. Old and New Business |
| 5:00 p.m. | <ol style="list-style-type: none"> 7. Adjourn |

Meeting Related Documents:

- NIST Draft Smart Grid Cyber Security Strategy Press Release: http://www.nist.gov/public_affairs/releases/smartergrid_020310.html
- Smart Grid Cyber Security Strategy and Requirements Draft Report: http://csrc.nist.gov/publications/drafts/nistir-7628/draft-nistir-7628_2nd-public-draft.pdf
- Notice of Intent to Issue Funding Opportunity Announcement No. DE-FOA-0000245: <http://www.security-innovation.org/pdfs/NoticeofIntent-01-2010.pdf>
- Roadmap to Secure Control Systems in the Energy Sector: <http://www.oe.energy.gov/DocumentsandMedia/roadmap.pdf>
- U.S. Department of Energy Control System Security Program: <http://www.oe.energy.gov/controlsecurity.htm>
- Article: U.S. Fails in Simulated Cyber attack:
http://www.darkreading.com/security/cybercrime/showArticle.jhtml?articleID=222900775&cid=nl_DR_DAILY_2010-02-18_h
- Article: Mock cyber attack shows U.S. unpreparedness: <http://www.net-security.org/secworld.php?id=8878>



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

via posting

TO: NAESB Web Site for Posting
RE: Notes from the NAESB Advisory Council Meeting – February 13, 2010
DATE: March 1, 2010

NORTH AMERICAN ENERGY STANDARDS BOARD ADVISORY COUNCIL MEETING NOTES
Renaissance Washington Hotel – Washington, DC
February 13, 2010 – 4:00 PM to 6:00 PM Eastern

1. Welcome

Mr. Ellsworth opened the meeting and welcomed the Advisory Council members and observers. The attendees introduced themselves around the table. Mr. Culliton provided antitrust guidance. The agenda¹ as posted was adopted without opposition.

2. Primer: The development of a standard from introduction through approval and publication

Mr. Buccigross guided attendees through the NAESB standards development process using a slideshow presentation². A summary of his presentation and related commentary follows.

He stated that NAESB's participatory philosophy, balanced organizational structure, robust and multi-tiered voting process yields a well-distilled final standard that adheres to the American National Standards Institute's principles of openness, balance, due process and consensus.

Mr. Boswell noted that a particular standard under development will occasionally reach an impasse due to uncertainty regarding an underlying policy aim. He expressed his appreciation that open lines of communication permit NAESB to consult regulators for policy clarification in such cases. He further stated that it does not advocate before regulators or seek to establish policy direction, but seeks to implement articulated policies.

Mr. Buccigross referred attendees to the NAESB Certificate at Article 2, Section 1, which defines the organization's scope as the promotion of streamlined transactional processes that foster competition and market efficiency in the electric and natural gas industries. He added that over 800 cross-spectrum industry volunteers per month assist in the drafting of these standards; the development process typically takes 12 months, although technical complexities and regulatory compliance timelines vary from standard to standard. Mr. Buccigross presented the details of this process to attendees on-screen. NAESB has been able to develop standards from start to finish in as short as 4 months when there is strong executive direction and championship, underlying policies are unambiguous and there is visible and vocal support from regulators for the urgency.

Ms. McQuade noted that the recording of minority positions and their treatment at each step along the way helps to address potential due process concerns. It was noted that the Board is responsible for providing strategic direction and establishing a budget, it does not participate directly in standards development – it does however set the stage for standards development through the annual plans, a tool of the Board. The Board identifies items on the plans and provides the priorities for all development.

Mr. Ellworth observed that NAESB has generated over 2000 standards through a largely volunteer process; Messrs. Boswell and Buccigross added that transaction and implementation costs to affected businesses have been greatly reduced as a result. Ms. McQuade noted that the emergence of NAESB has provided a collaborative venue for the

¹ The agenda may be downloaded at: <http://naesb.org/pdf4/advisory021310ma.doc>.

² The presentation may be downloaded at: <http://naesb.org/pdf4/advisory021310primer.pdf>.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

industry to interact with regulators in the implementation of policy through the adoption of standards. Mr. Freitas asked whether it was possible to quantify the savings benefit provided by the adoption of any particular standard; Mr. McAllister added that FERC orders contain estimated implementation costs. Noting that the universal adoption of electronic transactions, made possible by NAESB standards, has resulted in a more robust, efficient and open marketplace, Mr. Buccigross indicated that he would further research Mr. Freitas' question and provide the Council with a response.

Continuing the presentation, Mr. Buccigross related that NAESB and NERC have developed a process for the joint development of standards that affect both reliability and commercial interests. After the presentation of this process, several attendees expressed satisfaction that the relationship between the two organizations has evolved into an open collaboration; Mr. Ellsworth called this maturation a credit to both organizations.

Mr. Buccigross next detailed NAESB's voting procedures before giving an overview of the mechanics of making minor corrections and creating interpretations. He opened the floor to questions.

Mr. Boswell added that NAESB standards are themselves copyrighted; he referenced a FERC decision from December 2009 that underlined this status.

3. Update on Quadrant Activities and Strategic Directions

Mr. Ellsworth suggested combining this agenda item with the next (NAESB's role relative to federal and state regulators, the Department of Energy, the Department of Commerce and the National Institute of Standards & Technology) in order to facilitate discussion; none were opposed.

- WEQ 2010 Annual Plan³ and Issues

Ms. York presented key items from the WEQ 2010 Annual Plan. She called particular attention to item 1(a) Parallel Flow Visualization/Mitigation for Reliability Coordinators in the Eastern Interconnection. She stated that this effort is intended to better identify congestion and tailor relief in affected areas, through changes to the frequency of data collection, the data organization and the data collected itself. This information is provided to a toll administered by NERC, the Interchange Distribution Calculator. After the changes are made to the IDC, the original IDC and the .revised IDC will run parallel for a period of 12-18 months, before it is determined whether to switch over to the revised IDC. Ms. York also mentioned the following ongoing efforts: 1) the creation of entirely new standards for network service on OASIS; 2) the transition of the TSIN registry from NERC to NAESB; and, 3) the development of demand response, demand-side management, and energy efficiency standards. She also noted the intent to pursue the directives in FERC Order No. 676(e) beginning in June 2010.

Special attention was called to item 12 on the WEQ Provisional Items relating to FERC's National Action Plan on Demand Response. In particular, Ms. McQuade asked for guidance as to whether continued NAESB efforts in response to FERC's directive would be a direction the Advisory Council would suggest NAESB undertake, or should this item remain with the stakeholder processes administered by the ISOs and RTOs. While standards can and do incorporate regional or operational differences to support flexibility in the market, the need for such differences are also identified. The question goes to the heart of the issue of how standards if pursued could impact individual ISO program designs and terms in tariffs. Mr. Ellsworth asked the Advisory Council members to consider this issue and respond to Ms. McQuade at their convenience.

Mr. Camp mentioned that, while measurement and verification standards may reasonably be expected to be uniform, there are certain state-by-state processes contemplated in the National Action Plan. He suggested close coordination between retail and wholesale segments in these areas. Ms. McQuade observed that both wholesale and retail DR and Smart Grid standards are under concurrent and coordinated development to ensure that differences between the two markets can be accommodated, but only if those differences are understood by both groups and determined that they are needed.

³ The WEQ Annual Plan is available at: http://www.naesb.org/pdf4/weq_2010_annual_plan.doc.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Ms. York next announced NAESB's role in the development of the Smart Grid Priority Action Plans (PAPs). After this presentation was made, Ms. McQuade brought up a procedural issue: since NAESB has been given the exclusive responsibility to respond to certain PAPs using its unique process, yet NIST is accountable for the overall Smart Grid project's completion, how should NAESB file its finished product at FERC. Mr. Wollman expressed a preference that NAESB include its PAP efforts into its established filing procedures at FERC, which is also agreeable to FERC staff. The standards should be submitted in late second quarter 2010 to the FERC as part of the WEQ Version 2.2 standards filing.

Mr. Ellsworth asked if additional PAPs were expected and, if so, whether any of them were likely to fall to NAESB to complete. Mr. Wollman replied that the Smart Grid Interoperability Panel had just finished a new PAP relating to IEC standards for wind energy; he added that this effort was likely to be tasked to NAESB. Ms. McQuade also noted that automated demand response enrollment may undertaken by NAESB, it it may bear some similarities to existing NAESB retail standard for enrollments for customer choice programs.

- Retail 2010 Annual Plan⁴ and Issues

Ms. McQuade presented the Retail Annual Plan. She asked that the Advisory Council provide information on the robustness and relevancy of the annual plan standards development vis-à-vis the small number of participants. Mr. Gee asked if NAESB had considered qualification for federal stimulus funds, stating that in his view a strong case could be made. Mr. Freitas stated that DOE could consider funding a staff position at NARUC for support of NAESB and retail standards development. Ms. McQuade stated that if state regulators join NAESB the companies that operate within their jurisdictions might follow. Mr. Camp offered to make various organizations to which he belongs aware of NAESB's Retail efforts and urge them to consider participating in NAESB. The Advisory Council can provide input to Ms. McQuade at its convenience.

- WGQ 2010 Annual Plan⁵ and Issues

Mr. Buccigross presented the WGQ Annual Plan. He stated that this segment's efforts were largely focused on modernizing certain outdated mechanisms in the standards. As an example, he noted that the industry has shifted from the use of EDI; EBB has become universal. He confirmed that Sandia National Laboratories still approves all standards. It was asked to the Advisory Council if the WGQ annual plan items identified provided adequate relevance and support of the wholesale gas market. The Advisory Council can provide input to Ms. McQuade at its convenience.

4. New Business

- Ideas and Suggestions from the Floor

A brief discussion ensued about the emerging build-out of CO₂ pipelines. Mr. Gee noted that such a build-out is required since it is not possible to run CO₂ through the existing natural gas pipeline infrastructure. The observation was also made that there remains a significant unresolved issue: whether the federal government or individual states have jurisdiction over CO₂ pipeline siting decisions. Ms. Crockett asked attendees for written comments about CO₂ pipelines before June 2010. Ms. Cross observed that a significant amount of information needs to be exchanged relating to the quantification of released greenhouse gases to avoid double-counting. She also noted that the upcoming climate bill and the reporting requirements for transparency reporting may well require additional standards development by NAESB that would impact both the wholesale gas and electric markets.

- Election of Chair for 2010

Mr. Boswell nominated Mr. Ellsworth to continue as the NAESB Advisory Council Chair for 2010; Mr. Ellsworth was unanimously re-elected.

⁴ The Retail Annual Plan is available at: http://www.naesb.org/pdf4/retail_2010_annual_plan.doc

⁵ The WGQ Annual Plan is available at: http://www.naesb.org/pdf4/wgq_2010_annual_plan.doc



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

5. Adjourn

The meeting was adjourned at 6:20 PM Eastern by consensus.

6. Attendance

Advisory Council Members in Attendance

Bruce Ellsworth, Chair	New York State Reliability Council
Vicky Bailey	Anderson Stratton Enterprises
Alex DeBoissiere	Duane, Morris
Christopher Freitas	Department of Energy
Robert Gee	The Gee Strategies Group
Annunciata Marino	Pennsylvania Public Utilities Commission
Thom Pearce	Ohio Public Utilities Commission

Board Members in Attendance

Jim Buccigross	8760
Ralph Cleveland	AGL Resources
Valerie Crockett	Tennessee Valley Authority
Lori-Lynn Pennock	Salt River Project

Guests in Attendance

Irene Ladner	Unaffiliated
David Wollman	National Institute of Standards and Technology
Bruce McAllister	Federal Energy Regulatory Commission
Ward Camp	Landis+Gyr
Grace Soderberg	Edison Electric Institute
Kathy York	Tennessee Valley Authority
Lorraine Cross	Cross & Company

NAESB Staff in Attendance

Rae McQuade	NAESB President
Bill Boswell	NAESB General Counsel
James Culliton	NAESB Meeting Administrator/Staff Attorney
Veronica Thomason	NAESB Staff



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NAESB UPDATE: VERSION 1.3 – RETAIL ELECTRIC AND RETAIL GAS QUADRANT (REQ/RGQ) MARCH 15, 2010

ACTIONS TO BE APPLIED TO RETAIL VERSION 1.2 TO CREATE RETAIL VERSION 1.3:

Version 1.2 was published on December 31, 2009.

2009-10:

Final Actions:

None to date

Recommendations:

2009 Retail Annual Plan Item 1/R05016 – Develop Technical Electronic Implementation Standards and Data Dictionaries (*Book 9: Customer Billing and Payment Notification via Uniform Electronic Transaction*) – approved by the Retail ECs on February 3, 2010.

Recommendation – Part A with Revised Attachments -

http://www.naesb.org/pdf4/retail_2009_api1_r05016_rev_rec.doc

Revised Attachment 1 – Data Dictionaries -

http://www.naesb.org/pdf4/retail_2009_api1_r05016_rev_rec_attach1.doc

Revised Attachment 2 – X12 Technical Implementation Guidelines -

http://www.naesb.org/pdf4/retail_2009_api1_r05016_rev_rec_attach2.doc

Minor Corrections:

MC10012 –Errata for NAESB WGQ Internet Electronic Transport (Internet ET) Manual, Version 1.9 and NAESB RXQ Internet ET Manual Version 1.2: http://www.naesb.org/pdf4/wgq_req_rgq_mc10012.doc - notational ballot due March 5, 2010.

TIMELINE:

- Version 1.3 is scheduled for publication in 2011.
- To back into this date – all standards should be ratified by date of publication, and EC actions should be taken one month prior, to publication, all subcommittee actions should be taken three months prior to publication.

Month - 4	Subcommittee Recommendations Completed and sent out for comment
Month - 3	EC Actions taken
Month - 2	Ratifications sent out and completes, minor corrections applied
Month - 1	Review of draft publication
Month - 0	Date of Publication.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NAESB UPDATE: VERSION 002.2 – WHOLESALE ELECTRIC QUADRANT (WEQ) MARCH 15, 2010

ACTIONS TO BE APPLIED TO WEQ VERSION 002.1 TO CREATE WEQ VERSION 002.2:

Version 002.1 was published on March 11, 2009.

2009-10:

Final Actions:

2008 WEQ Annual Plan Item 5(a) – Review and develop business practice standards to support DR and DSM-EE programs – Ratified March 16, 2009 - http://naesb.org/member_login_check.asp?doc=fa_weq_2008_api5a.doc (New WEQ-015)

2009 WEQ Annual Plan Item 3(d) – Order 717, Standards of Conduct – Ratified June 15, 2009 - http://naesb.org/member_login_check.asp?doc=fa_weq_2009_api_3d.doc (WEQ-001, WEQ-002, WEQ-003)

2009 WEQ Annual Plan Item 2(a)(ii)(3) – Rollover Rights on Redirect on a Firm Basis – Ratified July 27, 2009 - http://naesb.org/member_login_check.asp?doc=fa_weq_2009_ap_2aii3.doc (WEQ-001, WEQ-002, WEQ-003, WEQ-013)

2009 WEQ Annual Plan Item 1(a), 3(a)(vii)/R05020 – Modifications to WEQ-004 Coordinate Interchange as approved by the WEQ EC on October 27, 2009 – Ratified December 14, 2009 - http://naesb.org/member_login_form.asp?doc=fa_weq_2009_api_1a_3avii_r05020.doc (WEQ-001, WEQ-002, WEQ-003, WEQ-004, WEQ-013)

Attachment: http://naesb.org/member_login_form.asp?doc=fa_weq_2009_api_1a_3avii_r05020_attach.doc

Recommendations:

2009 WEQ Annual Plan Item 5(b) – Modify NAESB definition to address internal inconsistencies and inconsistencies with the NERC glossary – approved by the WEQ EC on February 2, 2010 - http://naesb.org/member_login_form.asp?doc=weq_rat022210_2009_weq_ap5b_rec_clean.doc - Ratification period ends March 24, 2010.

2009 WEQ Annual Plan Items 5(a)(2), 5(i)/R08004/R09011 – Multiple Annual Plan Items affecting WEQ-011 Gas/Electric Coordination – Formal comment period ended November 2, 2009 - http://naesb.org/pdf4/weq_2009_api_5a2_5i_r08004_r09011_rec.doc

Attachments:

WEQ-001 (Redlined): http://naesb.org/pdf4/weq_2009_api_5a2_5i_r08004_r09011_rec_attach1.doc

WEQ-001 (Clean): http://naesb.org/pdf4/weq_2009_api_5a2_5i_r08004_r09011_rec_attach2.doc



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NAESB UPDATE: VERSION 002.2 – WHOLESALE ELECTRIC QUADRANT (WEQ) MARCH 15, 2010

2009 WEQ Annual Plan Item 2(a)(i)(1-8) – Develop business practice standards to better coordinate the use of the transmission system among neighboring transmission providers. Such business practice standards would be based on recommendations from NERC’s Long Term ATC/AFC Task Force and would involve revised procedures for the ATC calculation and/or revised protocols as determined by the final order. Development is using joint standards development process with NERC. Request R050004 was expanded to include the Order No. 890 ([Docket Nos. RM05-25-000 and RM05-17-000](#)) and Order No. 890-A ([Docket Nos. RM05-17-001, 002 and RM05-25-001, 002](#)), “Preventing Undue Discrimination and Preference in Transmission Services,” issued April 11, 2007). Group 3: Network Service on OASIS – Recommendation currently under development by the WEQ OASIS Subcommittee http://naesb.org/weq/weq_oasis.asp

Minor Corrections:

Minor Correction for WEQ-001 to be applied to versions 002.1 and 002.2 submitted by JT Wood, Southern Company and approved by the WEQ Executive Committee on October 27, 2009. - http://naesb.org/pdf4/weq_mc111209_reqcom.doc Comment period ends November 30, 2009 (*Effective date December 14, 2009*)

TIMELINE:

- Version 002.2 is scheduled for publication end of second quarter 2010.
- To back into this date – all standards should be ratified by date of publication, and EC actions should be taken one month prior, to publication, all subcommittee actions should be taken three months prior to publication.

Month - 4	Subcommittee Recommendations Completed and sent out for comment
Month - 3	EC Actions taken
Month - 2	Ratifications sent out and completes, minor corrections applied
Month - 1	Review of draft publication
Month - 0	Date of Publication.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NAESB UPDATE: VERSION 2.0 – WHOLESALE GAS QUADRANT (WGQ) MARCH 15, 2010

ACTIONS TO BE APPLIED TO WGQ VERSION 1.9 TO CREATE WGQ VERSION 2.0:

Version 1.9 was published on September 30, 2009.

2009-10:

Final Actions:

2009 Annual Plan Item 3/2009 Annual Plan Item 2(a)/R07009 – Update Model ISDA North American Gas Annex, November 2004 to correspond to the updated Base Contract for Sale and Purchase of Natural Gas, dated September 5, 2005, in accordance with NAESB WGQ Request No. R07009 as adopted by the WGQ Executive Committee on October 29, 2009 - http://naesb.org/member_login_check.asp?doc=model_isda_addendum102909.pdf (*This is a model and does not require member ratification*)

Recommendations:

R08020 – Provide for enhanced granularity for public utilities in identifying critical operational flow orders, - http://naesb.org/pdf4/r08020_rec.doc - Approved by the WGQ EC on February 4, 2010.

R09001 – Add two data elements to the Transactional Reporting – Interruptible Transportation Document (5.4.22) - http://naesb.org/pdf4/r09001_rec.doc - Approved by the WGQ EC on February 4, 2010.

Minor Corrections:

MC10012 –Errata for NAESB WGQ Internet Electronic Transport (Internet ET) Manual, Version 1.9 and NAESB RXQ Internet ET Manual Version 1.2: http://www.naesb.org/pdf4/wgq_req_rgq_mc10012.doc - notational ballot due March 5, 2010.

MC10001 - Revised - Minor Correction Submitted by M. Stender, El Paso Natural Gas to NAESB standard 5.4.1, 5.4.2 and 5.4.17 version 1.9: http://www.naesb.org/pdf4/wgq_mc10001_revised011210.doc - approved by the WGQ EC on February 4, 2010. (*Effective date March 31, 2010*)

MC10002/R09019 - Minor Correction (errata to Version 1.9) to modify three and add one new Allocation Transaction Type Code Values and modify the Allocation Transaction Type Matrix accordingly in the following data set: Allocation, NAESB WGQ Standard No. 2.4.3 (Note: This recommendation corrects the actions taken for R05028 which were published in Version 1.9.): http://www.naesb.org/pdf4/wgq_mc10002.doc - approved by the WGQ EC on February 4, 2010. (*Effective date March 31, 2010*)

MC10003 - Minor Correction to Version 1.9 NAESB WGQ Standard No. 2.2.4 – Shipper Imbalance (EDI Implementation: ASC X12 Mapping Guidelines and Data Element Cross Reference): http://www.naesb.org/pdf4/wgq_mc10003.doc - approved by the WGQ EC on February 4, 2010. (*Effective date March 31, 2010*)

MC10005 - Recommendation – Submitted by C. Burden, Williams Gas Pipeline – This request proposes the correction of language for the NAESB WGQ Version 1.9 release: NAESB WGQ Standard 4.3.16: http://www.naesb.org/pdf4/wgq_mc10005.doc - approved by the WGQ EC on February 4, 2010. (*Effective date March 31, 2010*)



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NAESB UPDATE: VERSION 2.0 – WHOLESALE GAS QUADRANT (WGQ) MARCH 15, 2010

MC10006 Recommendation – Submitted by C. Burden, Williams Gas Pipeline – This request proposes corrections to NAESB WGQ Standards Booklet 1 of 2, NAESB WGQ QEDM Standards Manual and NAESB WGQ Capacity Release Standards Manual to correct an error in wording: http://www.naesb.org/pdf4/wgq_mc10006.doc - approved by the WGQ EC on February 4, 2010. (*Effective date March 31, 2010*)

MC10007 Recommendation – Submitted by C. Burden, Williams Gas Pipeline – This request proposes corrections to NAESB WGQ QEDM Standards Manual, Version 1.9 to correct browser and plug-in information and a spelling correction: http://www.naesb.org/pdf4/wgq_mc10007.doc - approved by the WGQ EC on February 4, 2010. (*Effective date March 31, 2010*)

MC10008 Recommendation – Submitted by D. Davis / M. Stender, Chair / Co-Chair WGQ Information Requirements / WGQ Technical Subcommittees – This request proposes corrections to NAESB WGQ Standard Nos. 3.4.1 (Transportation/Sales Invoice) and 3.4.4 (Service Requester Level Charge/Allowance Invoice, Version 1.9 to correct the code values in the Code Values Dictionaries: http://naesb.org/pdf4/wgq_mc10008.doc - approved by the WGQ EC on February 4, 2010. (*Effective date March 31, 2010*)

MC09024 Recommendation - Submitted by M. Schmitz, Northern Natural Gas - This request proposes the addition of 1 code values for the data element “Validation Code (Detail)” in the following datasets for the NAESB WGQ Version 1.9 release: NAESB WGQ Standard 1.4.2 - Nomination Quick Response http://www.naesb.org/pdf4/wgq_mc09024_rec_011810.doc - approved by the WGQ EC on February 4, 2010. (*Effective date March 31, 2010*)

MC09033 Recommendation - Submitted by M. Schmitz, Northern Natural Gas - This request proposes the addition of 4 code values for the data element “Charge Type” in the following datasets for the NAESB WGQ Version 1.9 release: NAESB WGQ Standard 3.4.1 – Transportation / Sales Invoice: http://www.naesb.org/pdf4/wgq_mc09033_rec_011910.doc - approved by the WGQ EC on February 4, 2010. (*Effective date March 31, 2010*)

MC09032 Minor Correction to the Canadian Addendum, dated August 2, 2007 (NAESB Standard 6.3.1.CA) as submitted by K. Sappenfield, Chair, WGQ Contracts Subcommittee - http://naesb.org/pdf4/wgq_mc111209reqcom.doc - approved by the WGQ EC on October 29, 2009 (*Effective date December 14, 2009*)

TIMELINE:

- Version 2.0 is scheduled for publication no earlier than November 1, 2010 and no later than November 30, 2010.
- To back into this date – all standards should be ratified by date of publication, and EC actions should be taken one month prior, to publication, all subcommittee actions should be taken three months prior to publication.

Month - 4	Subcommittee Recommendations Completed and sent out for comment
Month - 3	EC Actions taken
Month - 2	Ratifications sent out and completes, minor corrections applied
Month - 1	Review of draft publication
Month - 0	Date of Publication.

Items not to be included:



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

NAESB UPDATE: VERSION 2.0 – WHOLESALE GAS QUADRANT (WGQ) MARCH 15, 2010

R09017 – Develop a new ISDA Gas Confirmation Form for use with the ISD Gas Annex based on the current Confirmation Form under the NAESB Base Contract for Sale and Purchase of Natural Gas –
http://naesb.org/member_login_form.asp?doc=wgq_rat011310_r09017_rec.doc - Ratification on February 12, 2010.

Attachment (Exhibit A):

http://naesb.org/member_login_form.asp?doc=wgq_rat011310_r09017_rec_attachment.doc

WEQ OASIS Progress Report Based on WEQ 2010 Plan as of January 21, 2010

2009 Annual Plan Item	2010 Annual Plan Item	Annual Plan Item	Scheduled	Underway	Concept Discussion	Draft Recommendation	Sub-committee Review	Post Informal Comments	Review Comments	Sub-committee Final Review	Sub-committee Approval	NAESB Clean-up	Post for Formal Comments	EC Passed	Ratified
2.a.i.1	2.a.i.1	Use of OASIS to Make Electronic Requests to Designate and Terminate Network Resource													
2.a.i.2	2.a.i.2	Ability to Query Requests to Designate and Terminate Network Resources and Allow for Queries of All Information Provided with Designation Requests													
2.a.i.3	2.a.i.3	Masking of Designated Network Resource Operating Restrictions and Generating Cost Information													
2.a.i.4	2.a.i.4	Procedural Requirements for Submitting Designations over new OASIS Functionality													
2.a.i.5	2.a.i.5	Specify How Designated Network Service Informational Postings are Posted on OASIS													
2.a.i.6	2.a.i.6	Set Forth the Treatment of OASIS Requests when the Customer Fails to Provide the Necessary Attestation													
2.a.i.7	2.a.i.7	Procedural Requirements for Submitting Both Temporary and Indefinite Terminations of Network Resources													
2.a.i.8	2.a.i.8	Procedures for Submitting and Processing Requests for Concomitant Evaluations of Transmission Requests and Temporary Terminations													
2.a.ii.1	2.a.ii.1	Pre-Emption													
2.a.ii.2	2.a.ii.2	Document procedures used to implement the displacement/interruption terms of the Pro Forma tariff (Ro5019)													
2.a.iii.1	2.a.iii.1	Paragraph 1377 The coordination of requests across multiple transmission systems													
2.a.iii.2	2.a.iii.2	Re-Bid Of Partial Service across Multiple Transmission Providers' Systems													

WEQ OASIS Progress Report Based on WEQ 2010 Plan as of January 21, 2010

2009 Annual Plan Item	2010 Annual Plan Item	Annual Plan Item	Scheduled	Underway	Concept Discussion	Draft Recommendation	Sub-committee Review	Post Informal Comments	Review Comments	Sub-committee Final Review	Sub-committee Approval	NAESB Clean-up	Post for Formal Comments	EC Passed	Ratified
2.a.iii.3	2.a.iii.3	Group DNR requests from a system with point-to-point requests on other systems for synchronization													
2.a.iv.1	2.a.iv.1	Paragraph 1390 of Order 890 Review existing business functions to determine if there is any impact on these business functions related to TC modifying its application for service to the point that the request is "meaningfully different" than initial request													
2.a.iv.2	2.a.iv.2	Paragraphs 1627 of Order 890 The posting of additional curtailment information on OASIS													
2.a.iv.3	2.a.iv.3	Redispatch Cost Posting to allow for posting of third party offers of planning redispatch services.													
2.b.i.1	2.b.i.1	The processing of transmission service requests, which use TTC(ATC/AFC, in coordination with NERC changes to MOD 001 (R05004)													
3.a.i	3.a.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))													
3.a.iii	3.a.iii	Document procedures used to implement the displacement/interruption terms of the Pro Forma tariff. (R05019)													
3.a.iv.1	3.a.iv.1	Eliminate Masking of TSR tag source and sink when requested status is denied, withdrawn refused, displaced, invalid, declined, annulled or retracted (R05026)													
3.a.iv.2	3.a.iv.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. (R05026)													

WEQ OASIS Progress Report Based on WEQ 2010 Plan as of January 21, 2010

2009 Annual Plan Item	2010 Annual Plan Item	Annual Plan Item	Scheduled	Underway	Concept Discussion	Draft Recommendation	Sub-committee Review	Post Informal Comments	Review Comments	Sub-committee Final Review	Sub-committee Approval	NAESB Clean-up	Post for Formal Comments	EC Passed	Ratified
3-a.iv.3	3-a.iv.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. (R05026)													
3-b.ii	3-b.ii	Develop PKI standards for OASIS.													
5-a.1	5-a	OASIS Consistency Changes (R08001, R08002, R08003, R08005)													
5.d	5.b	Consistent with ¶51 of FERC Order No. 890-A, add AFC and TFC values to the "System_Attribute" data element of the NAESB Standard WEQ-003; OASIS S&CP Data Dictionaries. (R08011)													
5-g	5-c	Correct WEQ 013-2.6.7.2 - Resale off OASIS (R08027)													
5-h	5-d	Add language to WEQ-001-4 Online Negotiation and Confirmation process to clarify Table 4-3 (R09003)													
5-e	5-e	Create a new OASIS mechanism that allows for the merger of like reservations without the use of the resale mechanism (R09015)													
7-a	7.a	Review standards 001-14.1.3 and 001-15.1.2 based on FERC Order No. 676-E (¶39)													
7-b	7.b	Develop standards to support the Transmission Provider right to reassess the availability of conditional firm. (See ¶72)													
provision al 2	provision al 2	Develop business practices for allocating capacity among requests received during a submittal window Order 890-A (Docket Nos. RMO5-17-001, 002 and RMO5-25-001, 002 - Paragraph 805)													

WEQ OASIS Progress Report Based on WEQ 2010 Plan as of January 21, 2010

2009 Annual Plan Item	2010 Annual Plan Item	Scheduled	Underway	Concept Discussion	Draft Recommendation	Sub-committee Review	Post Informal Comments	Review Comments	Sub-committee Final Review	Sub-committee Approval	NAESB Clean-up	Post for Formal Comments	EC Passed	Ratified
-----------------------	-----------------------	-----------	----------	--------------------	----------------------	----------------------	------------------------	-----------------	----------------------------	------------------------	----------------	--------------------------	-----------	----------

LEGEND:

- Progress legend
- Completed prior to February 2010 EC Meeting
- Completed since February 2010 EC Meeting
- AP item legend
- 890 Work Plan
- Normal Annual Plan Items
- New Items Added
- 2009/2010 AP item legend
- AP items linked to nits
- AP items linked to R05019
- AP items linked to services across multiple TP
- AP items linked to R05026
- AP items that stand alone



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

March 3, 2010

TO: NAESB Wholesale and Retail Electric Quadrant Members, Smart Grid Standards Task Force participants and Interested Parties

FROM: Jonathan Booe, NAESB Counsel

RE: **NAESB Smart Grid Phase 2 Standards Development Plan**

Dear All,

As of Feb. 25 2010, the NAESB Smart Grid Standards Task Force (SGTF) has successfully developed and voted out for formal comment the following documents which fulfilled its initial obligations under NIST coordinated effort.

1. PAP03: Requirements Specifications for Common Electricity Product and Pricing Definition:
http://www.naesb.org/pdf4/weq_2010_ap6a_retail_2010_ap9a_rec.doc
2. PAP04: Requirements Specifications for Common Scheduling Mechanism for Energy Transactions:
http://www.naesb.org/pdf4/weq_2010_ap6b_retail_2010_ap9b_rec.doc
3. PAP09: Requirements Specifications for Wholesale Standard DR Signals:
http://www.naesb.org/pdf4/weq_2010_ap_6c_rec.doc
4. PAP09: Requirements Specifications for Retail Standard DR Signals:
http://www.naesb.org/pdf4/retail_2010_ap_9c_rec.doc

In addition, the SGTF developed the reference document "[Framework for Integrated DR and DER Models](#)" to assist its members and the industry to place Smart Grid standards in context for these important application areas.

Now, the work of the SGTF must transition into a second phase where the SGTF is responsible to support the NIST Smart Grid Interoperability Panel and relevant PAPs (PAP03, PAP04, PAP09, and PAP10) are twofold:

- 1) Continue to refine and develop further details of the requirement specifications across PAP03, PAP04, PAP09, and PAP10;
- 2) Continue to play a coordination and facilitation role as identified in the NIST process for PAP03, PAP04, PAP09, and PAP10;
 - Specifically for PAP09, NAESB is responsible for: Task 4: Coordinate and merge Direct and Collaborative Load Management development tracks.
 - Specifically for PAP10, the NASEB is responsible for:
 - i. Task 5 - Survey current practice. Gather existing usage communications between energy suppliers and consumers, including providers of intermediary services; and
 - ii. Task 6 - Consolidate use cases and requirements for existing and planned energy communications

In order for NAESB SGTF to effectively carry out its NIST responsibilities, the SGTF is recommending to its membership to develop more detailed data requirements across PAP03, PAP04, PAP09, and PAP10 for the following objectives:

1. Ensure consistent and complete set of data definitions and requirements across PAP03, PAP04, PAP09, and PAP10.
2. Use the detailed data requirements to facilitate and harmonize the implementation of the NAESB identified use cases within relevant Standards Development and User Group Organizations as identified by NIST in PAP03, PAP04, PAP09, and PAP10, namely, ZigBee Alliance, OASIS, UCAiug OpenSG TFs, and IEC TC57. This activity by the SGTF should maximize harmonization efforts and minimize the emergence of competing and conflicting standards development within the scope of PAP03, PAP04, PAP09, and PAP10.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

3. Detailed data requirements provide better foundation upon which potential regulatory polices could be recommended and enforced.

Consequently going forward, the NAESB SGTF should focus its effort in the following three main activities:

1. PAP10 tasks.
2. NAESB Smart Grid Data Requirements Specification for Energy Consumption and Demand Response.
3. PAP03, PAP04, PAP09, and PAP10 Standards Development Coordination.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

February 22, 2010

TO: NAESB Members, Related Energy Associations and Organizations and Posting
CC: Lynn Costantini, NERC
RE: Request for Proposals on Electric Industry Registry Administrator
DATE: February 22, 2010

The leadership of the North American Energy Standards Board (“NAESB”) and the North American Electric Reliability Corporation (“NERC”) have determined that the Electric Industry Registry (“EIR”) would be more appropriately maintained by the NAESB organization. The organizations are in the process of transferring the EIR from NERC to NAESB, and as part of that process, NAESB is issuing the attached Request for Proposal (“RFP”) for an Electric Industry Registry Administrator. After reading the RFP, we hope that you consider this request and submit a proposal to perform this valuable and highly visible industry role. If you intend to submit an RFP, please notify the NAESB office as soon as possible and provide your contact information. Please prepare your proposals and return them to the NAESB office by May 21, 2010.

Should you choose to submit a proposal, your proposal should address the following:

- The proposed fee structure or funding alternatives
- Timeline for implementation

The NAESB office in consultation with NERC, should reach a decision regarding the submitted proposals no later than June 30, 2010.

Very Truly Yours,

A handwritten signature in cursive script that reads 'Rae McQuade'.

Rae McQuade
President, NAESB

Cc: NAESB Managing Committee
Cory Galik Cummings
Lynn Constantini



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org



North American Energy Standards Board

Request for Proposal

Electric Industry Registry Administrator

February 22, 2010



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

Request for Proposal Electric Industry Registry Administrator

1. Preface
 - 1.1. Background and Request
 - 1.2. Bidding Instructions
 - 1.2.1. General
 - 1.2.2. Qualifications
 - 1.2.3. Bid Proposal Preparation
 - 1.2.4. Award or Rejection of Bids
 - 1.2.5. Implementation Schedule
 - 1.2.6. System Verification and Testing
 - 1.2.7. Industry Training
2. System Description
 - 2.1. General Overview
 - 2.2. Operating Environment
 - 2.3. Definitions
3. Functional Requirements
 - 3.1. EIR Administrator
4. Exhibit A
 - 4.1. EIR System Requirements Document



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

1. Preface

1.1. Background and Request

The Electric Industry Registry (EIR) serves as a central repository of information that is required for commercial interactions. The North American Electric Reliability Corporation (NERC) and the North American Energy Standards Board (NAESB) leadership determined that NAESB, as owner and maintainer of several technical standards, including OASIS Standards & Communications Protocol, will maintain the EIR. NAESB represents its members in the wholesale electric industry in setting both business practice and electronic commerce standards.

NAESB is requesting proposals from industry participants who wish to act as administrator for the EIR. The administrator will maintain and update the EIR, maintain backups and archives of the EIR including maintenance of a disaster recovery plan, and will ensure industry access to the EIR as noted in Exhibit A.

Once the proposal timeframe concludes, the NAESB and NERC staff leadership will review the proposals and by June 30, 2010 will determine a response and reply to all submitters.

1.2. Bidding Instructions

1.2.1. General

NAESB is proposing the following project. Interested parties and several consulting and service companies have been invited to submit bid proposals for this project. Those who desire to make a bid must first make their own estimates of maintaining the Electric Industry Registry including personnel required and difficulties associated with the performance of the proposed Contract, including contingencies to ensure full operations. Those desiring to bid shall exercise special care in studying the functional and technical personnel within their organizations to ensure that the products and services offered are accurately represented, and, if a decision is made to submit a proposal, these instructions should be followed.

1.2.2. Qualifications

The submitting party should have experience in the following areas:

- NAESB standards
- The current TSIN Registry 1.7.03
- Open Access Same-Time Information System (OASIS)
- e-Tag Version 1.8.1

The submitting party should provide a summary of qualifications in the proposal submitted.

1.2.3. Bid Proposal Preparation

A response is requested for all sections and issues identified in this document. Proposals not addressing each issue will not receive the same consideration compared to those proposals that are complete. The proposals should be signed by the person authorized to act for the submitting party. The proposal should indicate the time period for which it is valid. For clarifications of any question, please forward questions by email to Veronica Thomason at naesb@naesb.org before 4:00 p.m. CST each day through May 20, 2010. The responses will be provided to all submitting parties without disclosing the authorship of the questions. Unless advised otherwise, the submitting party should submit one copy of its proposal in electronic format to the NAESB office no later than May 21, 2010.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

1.2.4. Award or Rejection of Bids

The contract will be awarded to one service company or consulting firm, provided that the proposal is deemed to be reasonable and in the interest of NAESB to accept. The submitting party to whom the award is made will be notified at the earliest practical date, no later than June 30, 2010. NAESB reserves the right to reject any and all proposals and to waive any formality in proposals received, whenever NAESB deems such rejection or waiver to be in the best interest of NAESB.

1.2.5. Implementation Schedule

The target date for accepting responsibility as the EIR Administrator is as soon as possible after acceptance of the proposal by NAESB. The proposal should include a testing for transition from NERC to the EIR Administrator and an implementation timeline.

1.2.6. System Verification and Testing

The EIR Administrator will work with NAESB and NERC to ensure that all data is accurately transferred from NERC to the EIR Administrator. The transfer of functions from NERC to the EIR Administrator will take place only after all three organizations agree that the data has transferred and that the functions as described in Exhibit A are operational.

1.2.7. Industry Training

The proposal should address an industry training program to effect a transition from NERC to the EIR Administrator. The training program and development of any needed materials should be reflected in the implementation timeline.

2. System Description

2.1. General Overview

The EIR Administrator must incorporate existing functionality provided by the current TSIN Registry 1.7.03 and accommodate new industry requirements to support OASIS, e-Tag and other applications, as shown in e-Tag version 1.8.1. Data residing in the Registry will be authenticated as part of system implementation and testing before being published for use.

2.2. Operating Environment

The NAESB WEQ PKI Certificate Policy and Authorized Certification Authority Accreditation and Certification Program will identify those certification authority service providers that are authorized to issue certificates under the NAESB policy.

These certification authority service providers would be registered as an entity with the appropriate role of PKI CA. The EIR Administrator would be required to approve/certify these registrations. The following additional information will be registered for each authorized certification authority:

- Certificate Issuer(s)

The certificate issuers identify attributes that can be embedded in the certificates issued by this authorized certification authority.

2.3. Definitions

2.3.1. EIR Administrator - The submitting party who has been selected by NAESB to be the sole administrator and whom in turn has agreed to be the administrator. The administrator will maintain and provide to EIR users the information contained within the Registry.

2.3.2. Data Provider - Any party supplying information to the Registry.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

2.3.3. EIR user - Any party who utilizes the Registry.

3. Functional Requirements

3.1. EIR Administrator

The EIR Administrator will initially maintain the existing TSIN Registry in the e-Tag application with data changes in parallel with the new EIR for a period of 6 months after EIR implementation. The Registry design must also consider providing a general mechanism to audit Registry changes and reconstruct the Registry at a given point in time. The EIR Administrator will maintain necessary data base information. The Administrator is responsible for periodic publication of the full Registry and potentially selected subsets of that registry. Should the Administrator determine that it no longer will perform the role, 12 months notice to NAESB is required in order to effect an orderly transition to a new administrator.

4. Security Requirements

- 4.1 Install and maintain a firewall configuration to protect the EIR.
- 4.2 Do not use vendor-supplied defaults for system passwords and other security parameters.
- 4.3 Protect stored data in the EIR.
- 4.4 Encrypt transmission of EIR data across open, public networks.
- 4.5 Use and regularly update anti-virus software or programs to protect against viruses, Trojans, malware, and other software attacks that might compromise data.
- 4.6 Develop and maintain secure systems and applications.
- 4.7 Restrict access to EIR data as described in Exhibit A.
- 4.8 Assign a unique ID to each person with computer access.
- 4.9 Restrict physical access to EIR data as described in Exhibit A.
- 4.10 Track and monitor all access to network resources and the EIR.
- 4.11 Regularly test security systems and processes.
- 4.12 Maintain a policy that addresses information security for employees and contractors.
- 4.13 Shared hosting providers must protect the EIR environment, (all users, and sub-contractor and partners have to have the same level of security because security is only as strong as its weakest component).

5. Exhibit A

5.1. EIR System Requirements Document (following)

.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

NAESB

System Requirements Document

Electric Industry Registry (EIR)

Version 1.1
March 19, 2008



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Revision History

Date	Version	Description	Author
December 13, 2005	0.3	Initial Version	JISWG
February 13, 2006	0.4	Addition of Glossary	JISWG
May 25, 2006	1.0	Changes to address Industry Comment	JISWG
November 16, 2007	1.1	Updated for NAESB RFP	JISWG
March 19, 2008	1.1	Updated in response to comments received	JISWG



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Table of Contents

1. Introduction	1
1.1. Requirements Overview	1
1.1.1. Registry Identifier	2
1.1.2. Clients (Users).....	5
1.1.3. Security.....	5
1.1.4. Applications	5
1.1.5. Topology	7
1.1.6. Reference Documents.....	10
1.2. Glossary	11
2. Registry Processes and Procedures.....	14
2.1. General Concepts	14
2.2. Registry Administrator Procedures	14
2.2.1. Administrator Base Data	14
2.2.2. Full Registry Publication.....	15
2.3. Entity — Initial Registration	15
2.3.1. Entity	16
2.3.2. Entity Identifier	16
2.3.3. Entity Affiliate.....	16
2.3.4. Entity Predecessor	16
2.3.5. Entity Code and Entity Role.....	17
2.3.6. Entity Contact and Entity Code Contact	18
2.4. Entity — Updates	19
2.4.1. Entity	19
2.4.2. Entity Identifier	19
2.4.3. Entity Affiliate.....	19
2.4.4. Entity Predecessor	19
2.4.5. Entity Code and Entity Role.....	19
2.4.6. Entity Contact and Entity Code Contact	20
2.4.7. Entity Code Service.....	20
2.5. Entity – Deactivation	20
2.5.1. Entity	20
2.5.2. Deactivation of an Entity Code	21
2.5.3. Entity Role.....	21
2.6. Client — Initial Registration	21
2.7. Client — Updates	22
2.7.1. Client Role.....	22
2.8. Client — Deactivation.....	22
2.9. Application — Initial Registration	22
2.9.1. Application Services.....	22
2.9.2. Application Attribute Value	22
2.10. Application — Updates.....	23
2.10.1. Application Service	23



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

2.10.2.	Entity Code Service.....	23
2.10.3.	Application Service Contact.....	23
2.10.4.	Application Attribute Values.....	23
2.11.	Application — Deactivation	24
2.11.1.	Application Service	24
2.11.2.	Application Attribute Value	24
2.12.	Topology — Initial Registration	24
2.12.1.	Interconnection.....	24
2.12.2.	Regional Reliability Organization.....	24
2.12.3.	Reliability Coordinator Area	24
2.12.4.	Market Area.....	24
2.12.5.	Balancing Area.....	25
2.12.6.	Control Zone/Local Balancing Authority Area	25
2.12.7.	Service Points	25
2.12.8.	Paths	26
2.12.9.	Adjacencies	26
2.12.10.	Balancing Authority Adjacencies.....	27
2.13.	Topology — Updates.....	27
2.13.1.	Interconnection.....	27
2.13.2.	Regional Reliability Organization.....	27
2.13.3.	Reliability Coordinator Area	27
2.13.4.	Market Area.....	27
2.13.5.	Balancing Area	27
2.13.6.	Control Zone	27
2.13.7.	Service Points.....	27
2.13.8.	Paths	28
2.13.9.	Adjacencies	28
2.14.	Topology — Deactivation	28
2.14.2.	Interconnection.....	28
2.14.2.	Regional Reliability Organization.....	28
2.14.3.	Reliability Area	28
2.14.4.	Market Area.....	28
2.14.5.	Balancing Area.....	28
2.14.6.	Control Zone	29
2.14.7.	Service Points.....	29
2.14.8.	Paths	29
2.14.9.	Adjacencies	29
2.14.10.	Balancing Authority Adjacencies.....	29
3.	User and Registry Interaction	30
3.1.	Browser Interface.....	30
3.2.	Encryption	30
3.3.	Data Access Rights.....	30
3.4.	Data Validation at Entry	30
3.5.	Data Validation after Entry	30
3.6.	Display Consistency	30



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

- 3.7. Color to Meaning Assignment 30
- 3.8. Application Programming Interface 30
- 3.9. Filtering and Sorting..... 31
- 4. Hardware and Software Standards 32**
 - 4.1. No Single Point of Failure 32
 - 4.2. Data Backup and Storage..... 32
 - 4.3. Disaster Recovery..... 32
 - 4.4. Structured and Coordinated Upgrades..... 32
 - 4.5. Sizing and Performance..... 32
 - 4.5.1. Moderate Activity State..... 33
 - 4.5.2. Heavy Activity State 33
 - 4.6. Availability..... 33
 - 4.7. Auditability..... 33
 - 4.8. Data Integrity 33
 - 4.9. NERC Cyber Security 33
- 5. Testing 34**
 - 5.1. Structured Test Document 34
 - 5.2. Problem Reporting..... 34
 - 5.2.1. Structured Problem Reporting..... 34
 - 5.2.2. Problem Classifications..... 34
 - 5.3. Factory Acceptance Testing 34
 - 5.4. Factory Performance Testing 35
 - 5.5. Site Acceptance Testing..... 35
 - 5.6. Site Performance Testing 35
- 6. Documentation..... 36**
 - 6.1. Technical Documentation..... 36
 - 6.2. User Documentation 36
 - 6.3. Automated Interface Documentation..... 36
- 7. Training..... 37**
 - 7.1. Technical Training..... 37
 - 7.2. User Training 37
 - 7.3. API Training..... 37
 - 7.4. Refresher and ongoing Training..... 37
- 8. Post Implementation Requirements 38**
 - 8.1. Problem Reporting and Enhancement Requests 38
 - 8.2. System Upgrades..... 38
 - 8.3. System Patches 38
 - 8.4. Virus Detection Updates..... 39



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

1. Introduction

This System Requirements Document describes the content and requirements for a central repository (or Registry) of information for various electric industry needs addressing both reliability and commercial interaction. The Registry must incorporate existing functionality provided by the current TSIN Registry 1.7 and accommodate new industry requirements to support OASIS, e-Tag, functional model registration, and other applications. Data residing in the Registry will be authenticated before being published for use. The Joint Interchange Scheduling Working Group (JISWG), in cooperation with NERC and NAESB staff, will oversee the development and implementation of the Registry.

In creating this specification, the JISWG was aware of the fact that roles and responsibilities for NERC and NAESB have yet to be finalized. Where it was undecided which entity(ies) would have responsibility for a specific function, the term “NAESB/NERC” was used.

1.1. Requirements Overview

The following is a brief summary of the existing regulatory and industry application requirements for information to be made available through a central registry NAESB Business Practices Standards; Order 638

- Entity Code
- Entity DUNS
- Transmission service attributes
- Ancillary service attributes
- Points of Receipt and Delivery (PORs/PODs)
- NAESB Standards and Communications Protocols for Open Access Same Time Information Systems (OASIS); Order 889-B, Order 605
 - OASIS Node Location (URL)
 - OTHER_CURTAILMENT_PRIORITY
 - PROCEDURE_NAME
 - PROCEDURE_LEVEL
 - REQUEST_TYPE
 - SECURITY_TYPE
 - SYSTEM_ATTRIBUTE
- NERC Reliability Standards and the e-Tag specification:
 - Tag Service Location (Agent/Authority/Approval/Forwarding URLs)
 - PSE Code
 - CA Code
 - TSP Code
 - SC Code
 - PORs/PODs
 - Sources/Sinks
 - Product codes

The current TSIN Registry 1.7 definition accommodates most of these requirements.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

The following are various Industry initiatives that could benefit from an expanded central registry of information:

- NAESB Wholesale Electric Quadrant (WEQ) Public Key Infrastructure (PKI)
 - Authorized Certification Authorities (CA)
 - Qualified CA Object Identifiers (OIDs)
 - CA Root Certificate Public Key
- e-tag Transaction Path Validation
 - TSP POR/POD Path and Scheduling Entity Association
 - TSP Path Adjacency
 - Source to TSP POR Adjacency
 - TSP POD to Sink Adjacency
- Seams Coordination and IDC Granularity
 - Book of Flowgates
 - AFC coordination data
 - Source/sink zones

These current and future Registry requirements are summarized in the following subsections according to the general functionality that will be required to be supported.

1.1.1. Registry Identifier

The Registry must include identifying information related to its publication, format, and applicability. Such information might include:

- Schema version
- Publication date/time
- Activation date/time

Schema version would reference an agreed to enumeration of revisions to the Registry, or might reference a specific XSD, if the Registry is published in an XML format. Publication date would be when this version of the Registry was created and made available. Activation date would be when this specific version of the Registry was to take effect.

Additional information may be included to provide assurance that the Registry is authentic and has not been altered. This information might include a “digest” of the Registry, digitally signed by the registry administrator, such that any corruption or modification of Registry information could be detected. This mechanism will be determined during the detailed design phase of the Registry project. Entities (Companies)



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Entity (Company) registration is one of the key functions of the current Registry and will be extended in the new Registry. Key attributes that are required for entity registration and integration with existing applications include:

- Entity Name
- Entity Location(s)
- Entity Contact(s)
- Entity Identifier(s)
- Entity Code(s)
- Entity-to-Entity Relationship(s)
- Entity Role(s) (Functions)
- Entity Certification(s)

The Registry must support the registration of the full business entity name and primary place of business. Entity registration must provide for the entry of effective start and end date/times. These dates may be in the future to take effect on, but not before, the specified start date/time.

The ability to support a one-to-many relationship between a given registered entity and each of the attributes for location, contact information, identifiers, codes, affiliations and roles must be provided.

Entity location information will consist of a street address for the entity. Contact information will be classified by the contact type. Contact types will be defined in the Registry by the registry administrator. For example, there may be administrative contacts, technical support contacts, emergency (24x7) contacts, etc. Contact types will be associated with the specific entity roles. The registry administrator may require that certain contact types be populated. The Registry implementation should enforce this requirement as part of automated data validation and constraint verification. Entity identifier would minimally support the registration of the entity's DUNS number required by the OASIS application. Various other industry recognized standard identifiers may be used in the future. The system design should anticipate the need to accommodate additional identifiers.

Entity code information is important to both the OASIS and the e-tag specifications. OASIS codes are the entity code itself. E-tag codes are the registered tag PSE codes currently consisting of the entity code with an appended tag desk code. Current requirements must be supported, but other restrictions should be relaxed with the only requirement that entity code must be unique at any given point in time, and once assigned should have limited ability to be re-used by another entity, e.g., only in the case of an acquisition/merger or divestiture. The ability to require and enforce an authorized third party (i.e. Registry administrator or designee)¹ approval of registered entity codes must be included in the Registry.

Entity-to-entity relationships must be supported to provide a trace of entity acquisitions/mergers and or divestitures, as well as inter-entity affiliations. Entity affiliations are required by the OASIS application to identify the merchant affiliates of each transmission provider.

Entity roles or functions must be extended from the limited set supported by the current TSIN Registry 1.7 to support the registration of entities performing the various functions defined by the NERC Functional Model. Registration of an entity role/function should provide the ability for third party (i.e. Registry administrator or designee) approval or "certification" that the entity has

¹ Note that "third party" identification depends on the type of information being registered.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

in fact been qualified to perform that function. The ability to enable or disable the requirement for third party approval of a registered entity role is required. (Flag: “or information” will be added where appropriate.) The EIR must include the capability for registering all functional model roles. Only certain functional model roles are required to register however, it must be possible for any entity to register as performing a defined role if allowed by the Registry administrator. The following are the initial set of entity roles to be considered in the Registry:

- Current O/SE (Operations) associated entity roles
 - RC — Reliability Coordinator
 - BA — Balancing Authority
 - MO — Market Operator
 - TO — Transmission Operator
 - TSP — Transmission Service Provider
 - IA – Interchange Authority
 - GO - Generator Operator
- Current TC/PSE (Merchant) associated entity roles
 - TC — Transmission Customer (i.e., OASIS customer code)
 - PSE — Purchasing Selling Entity (i.e., Tagging desk code)
 - LSE — Load Serving Entity (implies PSE)
 - GPE — Generation Providing Entity (implies PSE)
 - Generator Owner
- Additional Entity Roles
 - Registry Administrator
 - ASP — Application Service Provider
 - PKICA — PKI Certification Authority
 - ERO — Electric Reliability Organization
 - RRO — Regional Reliability Organization
 - IMM — Independent Market Monitor
 - Compliance Monitor
 - Distribution Provider
 - Planning Coordinator
 - Resource Planner
 - Standards Developer
 - Transmission Owner
 - Transmission Planner

The key registration requirement is that an entity may register one or more entity codes. Each of those entity codes may be associated with one or more entity roles. The combination of entity code and entity role determines the context within certain actions that may be performed or granted. For example, in e-tagging, the entity code allowed to appear in association with a source must be designated as having the entity role of GPE to be valid in the context of that tag.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

1.1.2. Clients (Users)

The Registry must support at least a rudimentary set of client/user registration functions to minimally identify who is able to access and update the Registry itself. There will also be requirements that certain applications will require the Registry to provide client authentication credentials.

Typical information that would be registered for a client would include:

- User's entity
- User name
- User credential(s)

User credentials may include different types of credentials, but would minimally support the x.509 certificate information for one or more certificates issued to that client. The Registry must support a one-to-many relationship between a client and their credentials. Certificate credentials require information from the certificate subject field and certificate issuer field for uniqueness.

1.1.3. Security

The NAESB WEQ PKI Certificate Policy and Authorized Certification Authority Accreditation and Certification program will identify those certification authority service providers that are authorized to issue certificates under the NAESB policy.

These certification authority service providers would be registered as an entity with the appropriate role of PKICA. A NAESB representative would be required to approve/certify these registrations. The following additional information will be registered for each authorized certification authority:

- Certificate Issuer(s)

The certificate issuers identify attributes that can be embedded in the certificates issued by this authorized certification authority.

1.1.4. Applications

The Registry must support the registration of specific applications and will require the registration of specific "enumerated" data types or attributes. This requirement is particularly true for OASIS. FERC and NAESB Business Practice Standards enumerate specific transmission and ancillary service attributes and additional data elements that may be "registered" by a transmission provider.

Applications may also require the identification or location of the server/service provided for the application. OASIS requires the registration of the OASIS node location (URL) for each transmission provider; e-tag requires the registration of the location (URL) for each of the tag services required to be provided by TSPs, CAs, and PSEs.

Each application that requires registration of specific information would appear in the Registry. Application "registration" is envisioned to be part of the base data established by the registry administrator. The specific application attributes would then be registered by either the industry at-large, or specific entities.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

1.1.4.1. Application Services

The Registry currently supports registration of various application services by the Uniform Resource Locator (URL) that is used to access that service/application. This includes:

- OASIS Nodes
- Tag Agent Services
- Tag Authority Services
- Tag Approval Services
- Tag Forwarding Services

It is expected that additional services may be registered in the future. Such information might include locations for web services related service URLs, XML schema, WSDL, or UDDI locators.

Application services are envisioned to be registered and maintained by those entities that support/provide the service (e.g., entity type of ASP). Contact information should be provided for each service (e.g., twenty-four hour support, administrative, etc.). Many potential entities could subscribe or use these services. The Registry must support an entity's registration as a user/subscriber to a specific registered service. The Registry will need to support a many-to-many relationship between services and entities. The Registry must support a many-to-many relationship between services and client certificates (certificate credentials).

The Registry must support mapping between application services and the applications they support. The exact nature of this association must recognize, but not limited to, the following types of existing relationships:

- Application = e-tag
 - Service = Tag Agent URL
 - Service = Tag Authority URL
 - Service = Tag Approval URL
 - Service = Tag Forwarder URL
- Application = OASIS
 - Service = OASIS URL
- Application = IDC
 - Service = IDC URL

1.1.4.2. Application Attributes

Each application appearing in the Registry may require the definition of unique registered attributes. OASIS requires such information for the transmission service attributes for data elements TS_CLASS, TS_TYPE, SERVICE_INCREMENT, etc. The e-tag application also requires definition of product codes and curtailment priorities.

Capabilities must be provided for a Registry administrator or designee to review and "approve" registration of attributes.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

The basic information that is required to be captured related to application attributes would include:

- Application (name or identifier)
- Application Attribute (e.g., TS_CLASS, etc.)
- Application Attribute Value (e.g., FIRM, etc.)
- Registering Entity
- Approval Entity

1.1.5. Topology

The Registry must support the registration and association between physical, commercial, and reliability topology information for use in a variety of applications.

These applications would include:

- Definition of metered areas (balancing areas) controlled by registered balancing authorities (BAs)
- Definition of the metered areas (balancing areas) overseen by registered reliability coordinators (RC) (reliability coordinator areas)
- Definition of metered areas participating in a centralized market overseen by a registered market operator (MO) (market areas)
- Contract path or e-tag path adjacencies between transmission providers (TSPs), and scheduling entities (SEs)
- Location of commercial service points (PORs, PODs, sources, or sinks) with respect to commercial markets and with respect to reliability related areas (BAs/RCs)
- Mapping of commercial service points to reliability or network modeled elements recognized by reliability applications (e.g., OASIS POR/PODs mapped to IDC flowgates or MMWG elements)

OASIS and e-tag currently require the registration of PORs, PODs, sources, and sinks and the association of Control Areas to Reliability Coordinators. This functionality must be retained and updated to reflect the NERC Functional Model. Registry administrator or designee (e.g., MO, TSP, or BA) approval of registered topology information must be supported. The approval (authentication) of data will vary by data element. Any element must be able to be mapped to any registered entity as the “approval entity.” Many of the data elements included in the EIR will be under the control solely of the user authorized to enter data into the Registry and will require no approval. The JISWG will work with the vendor to provide a mapping between 1) data elements requiring authentication and 2) the authenticating party.

The most significant immediate extension needed by the industry is a means to validate tag path information through the Registry. The requirements for this extension are discussed in the following subsections along with some of the simpler topological relationships that may be represented in the Registry.

1.1.5.1. Interconnection

The Registry must provide for a hierarchical model of inter-relationships to represent the different topologies, physical, commercial, and/or political that is needed by the industry. Definition of the three major synchronous Interconnections, Western, Eastern, and ERCOT, must be included in the Registry as a foundational element.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

Creation and maintenance of Interconnection registration may be the responsibility of the registry administrator.

1.1.5.2. Electric Reliability Organization

The registry must allow the registration of the Electric Reliability Organization (ERO). The ERO will have a role in authorizing certain data elements (such as RROs and RCs).

1.1.5.3. Regional Reliability Organization

Regional Reliability Organizations (RROs) may be included in the Registry to identify the overseeing RRO that has responsibility for a reliability area and/or balancing area.

RROs must be registered and associated with a single entity/entity code acting as that RRO. Registration of reliability areas and/or balancing areas as being associated with a given RRO must be supported. The possibility of a given reliability area being associated with more than one RRO must be supported.

1.1.5.4. Reliability Area

Reliability authorities/coordinators must have the ability to define their specific areas of influence. It is assumed that a reliability area would not cross an Interconnection. It may be related to one or more Regional Reliability Organizations and, it would include one or more balancing areas.

Reliability areas must be registered and associated with a single entity/entity code acting as Reliability Coordinator. The registry administrator may take on the responsibility for creating and maintaining registration of reliability areas.

1.1.5.5. Market Area

The boundaries of centrally administered markets may be registered. This information may be used by applications such as e-tagging to limit market operator re-dispatch of tagged transactions to only those balancing areas over which they have such authority. It is assumed that a market area can span one or more reliability areas, one or more Regional Reliability Organizations, but will contain, in its entirety, one or more balancing areas. The Registry must support market area registration. Market Operator adjustments would depend on this information.

Market areas must be registered and associated with a single entity/entity code acting as market operator. The registry administrator may take on the responsibility for creating and maintaining registration of market areas.

1.1.5.6. Balancing Area

The balancing area represents a named metered area overseen by a single certified balancing authority. It is assumed that a BA will be within one and only one Interconnection and one and only one market area (if any) and one and only one reliability area. The BA may span one or more Regional Reliability Organizations.

Balancing areas must be registered and associated with a single entity/entity code certified to act as a BA. The registry administrator may take on the responsibility for creating and maintaining registration of balancing areas.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

1.1.5.7. Control Zone (or Little Balancing Area/LBA)

The Registry must be able to support the concept of control zones that represent subsets of a balancing area. This supports the potential for increased granularity for system reliability tools when identifying the impact of certain transactions on network elements. By default, the BA is the control zone. At least one control zone must be registered for each balancing area. Where increased model granularity must be recognized, the ability to associate multiple control zones within a single balancing area must be supported (e.g., PJM as balancing area has control zones of CE, AEP, DPL, etc.).

Control zones may be registered by the single entity/entity code certified to act as the BA that contains that control zone. Definition of control zones must be coordinated by those responsible for wide-area network modeling and maintenance of reliability tools that rely on those models. The registry administrator may take on the responsibility for creating and maintaining registration of control zones.

1.1.5.8. Service Points

The current Registry provides for transmission service provider definition of the commercial PORs and PODs used in OASIS. The Registry also provides for PSEs to define e-tag sources (for GPEs) and sinks (for LSEs). This functionality must be retained. However, a more rigorous process for Registry administrator or designee validation of these service point registrations should be instituted.

When registered, the relationship of each commercial service point to the entity making the registration (e.g., TSP for PORs/PODs), and the various “areas” in which the point is located (e.g., Interconnection, reliability area, market area, balancing areas, etc.) such that all the operational entities that may be involved with commercial or reliability issues associated with that point may be identified.

The Registry must provide for the association of a given source or sink with one and only one control zone. The Registry must also provide for the association of which registered entity/entity code of type GPE may reference a given source and the association of which registered entity/entity code of type LSE may reference a given sink.

Currently, GPEs/LSEs are allowed to submit registrations of sources and/or sinks with approval granted to the referenced BA and/or MO. Since this information is so integrally tied into market and reliability processes and systems, the industry may elect to change the registration procedure to be controlled by operational entities rather than merchant entities. The Registry implementation must be flexible to allow control over source/sink registration by PSEs with approval of a balancing authority or market operator or limit registration to only be submitted and maintained by the BA/MO.

1.1.5.9. Paths

The Registry must support the definition of commercial transmission paths by each entity/entity code registered as a TSP. A path is defined as a valid POR and POD pair that may be scheduled with a designated scheduling entity (SE). There must be no restriction that a given named path may be associated with multiple POR/POD pairs, or that a given POR/POD pair may be associated with multiple paths. The combination of TSP, POR, POD, Scheduling Entity, and path name must be unique. Registration of



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

paths and their associated POR/POD pair and Scheduling Entity must support the OASIS S&CP path naming convention.

For TSPs that have many Interconnections, physical and/or contractual, with other TSPs, the number of unique POR/POD pairs that represent valid commercial paths within their systems can be voluminous. The Registry implementation must provide for the ability to define paths using wildcard designations or other user interface or application programming interface structures to provide for an efficient mechanism to manage this large volume of information. The internal representation of path information in the Registry, however, may be very explicit to simplify programmatic use of the information.

That is, a TSP that has ten POR/PODs, and all possible pair-wise combinations of POR and POD are legitimate scheduling paths with a given Scheduling Entity, must be able to register and manage this information in an efficient manner even though the actual Registry may contain the explicit definition of the paths that result from those ten POR/PODs.

1.1.5.10. Path Adjacency

The Registry must support the ability to identify adjacencies between TSPs and Scheduling Entities'. This information is intended to be used specifically for e-tag scheduling path validations. Many constructs could be used to register and identify these adjacencies. The most direct method would be to identify which specific TSP registered paths (POR, POD, Scheduling Entity, Path combination) are adjacent to both any upstream TSP (i.e., TSP POR adjacent to upstream POD) and downstream TSP (i.e., TSP POD adjacent to downstream POR).

The Registry must recognize the many permutations of physical and contractual adjacencies that must be supported in order to accurately represent valid scheduling paths between TSPs and controlled by Scheduling Entities'. As with path definitions, this data can be voluminous and shorthand, efficient methods to enter and maintain the necessary associations must be implemented.

1.1.5.11. Source-POR Adjacency

The current source and POR registration must be extended to provide a mechanism to register the commercial relationship between a source resource and the TSP PORs over-which transmission service must be secured to schedule energy. Alternatively, source to path adjacency could be used to define this relationship more explicitly.

1.1.5.12. POD-Sink Adjacency

The current sink and POD registration must be extended to provide a mechanism to register the commercial relationship between a sink resource and the TSP PODs over-which transmission service must be secured to schedule energy. Alternatively, source to path adjacency could be used to define this relationship more explicitly.

1.1.6. Reference Documents

The following reference documents provide additional information on the various functional requirements that must be met by the TSIN Registry 1.7. The latest version of the following documents (where applicable):



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

- Standards and Communication Protocols for Open Access Same Time Information System (OASIS), FERC Docket No. RM95-9-014.
- Standards for Business Practices and Communication Protocols for Public Utilities Docket No. RM05-5-003; Order No. 676-B
- Master Registry Definition Document, Version 1.7, NERC.
- Electronic Tagging — Functional Specifications, Version 1.8, NERC.
- Electronic Tagging — Registry Definition, Version 1.7.04, NERC.
- Registry Technical Specification, Version 2.0.3, NERC.
- NAESB WEQ-001 Business Practices for Open Access Same-Time Information Systems (OASIS)
- NAESB WEQ-002 Open Access Same-Time Information Systems (OASIS) Standards and Communications Protocols
- NAESB WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary
- NAESB WEQ 012 Public Key Infrastructure (PKI) Standards
- NAESB WEQ 013 OASIS Implementation Guide
- NERC Functional Model version 4

1.2. Glossary

Any definitions not contained herein may be found in the NERC Glossary of Terms Used in Reliability Standards, the NAESB WEQ Standards, or FERC Glossary.

- 1.2.1. Application Programming Interface (API)** – A language and message format used by an application program to communicate with the operating system or some other control program such as a database management system (DBMS) or communications protocol.
- 1.2.2. Application Service Provider (ASP)** – An **ASP** is a business that provides computer-based services to customers over a network. The most limited sense of this business is that of providing access to a particular application program (such as medical billing) using a standard protocol such as HTTP.
- 1.2.3. Balancing Authority (BA)** – The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.
- 1.2.4. Certification Authority (CA)** – The organization that issues and manages certificates.
- 1.2.5. Certificate issuer** – The Certification Authority
- 1.2.6. Certificate OID** – Each certificate policy is uniquely represented by an "object identifier" (OID) which is a numeric string that is contained in a field of each certificate that is issued according to a given certificate policy. In order to ensure interoperability and uniqueness of each OID, these are registered with recognized international bodies according to a structure defined in X.208 from the International Telecommunications Union (ITU) (the structure can be examined at <http://www.alvestrand.no/objectid/top.html>).
- 1.2.7. Client certificate** – X.509 Digital Certificate received (by a "client") from a Certification Authority.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

- 1.2.8. Digital certificate** – The digital equivalent of an ID card used in conjunction with a public key encryption system. Also called "digital IDs," digital certificates are issued by a trusted third party known as a "certification authority" (CA) such as VeriSign (www.verisign.com) and Thawte (www.thawte.com). The CA verifies that a public key belongs to a specific company or individual (the "subject"), and the validation process it goes through to determine if the subject is who it claims to be depends on the level of certification and the CA itself.
- 1.2.9. Data Universal Numbering System® (DUNS)** – The **Data Universal Numbering System®**, abbreviated as **D-U-N-S®**, is a system developed and regulated by Dun & Bradstreet (D&B) which assigns a unique numeric identifier to a single business entity. This numeric identifier is commonly referred to as a D-U-N-S number.
- 1.2.10. Electric Reliability Organization** – Responsible organization authorized under the Federal Power Act to develop and enforce Reliability Standards that provide for an adequate level of reliability of the Bulk-Power System.
- 1.2.11. Entity affiliate** – An organization that is associated with another organization as a subordinate, subsidiary, or member.
- 1.2.12. Entity predecessor** – The organization that preceded the current organization. This typically follows a reorganization, merger, acquisition, or divestiture.
- 1.2.13. Extensible Markup Language (XML)** – A metalanguage written in SGML that allows one to design a markup language, used to allow for the easy interchange of documents on the World Wide Web.
- 1.2.14. Generation Providing Entity (GPE)** – Merchant selling energy from owned, affiliated, or contractually bound generation.
- 1.2.15. Global attribute** – Industry defined attributes such as TS_CLASS FIRM.
- 1.2.16. Independent market monitor** – An organization that is not affiliated with any electric industry Market Participant, Market Operator, or Transmission Service Provider that is responsible for monitoring market activities.
- 1.2.17. Load-Serving Entity (LSE)** – Secures energy and transmission service (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers.
- 1.2.18. Local attribute** – An attribute defined by the TSP such as SERVICE_INCREMENT SEASONAL.
- 1.2.19. Local Balancing Authority (LBA)** - control zone that represents a subset of a Balancing Authority Area.
- 1.2.20. Market Operator (MO)** – Entities registered as market operators and serving as either source or sink for a TRANSACTION may exercise such functions in order to indicate correct flow based on market clearing.
- 1.2.21. PKI certification authority (PKICA)** – In cryptography, a certificate authority or certification authority (CA) is an entity which issues digital certificates for use by other parties. It is an example of a trusted third party. CA's are characteristic of many public key infrastructure (PKI) schemes.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

- 1.2.22. Point Of Delivery (POD)** – A location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction leaves or a Load-Serving Entity receives its energy.
- 1.2.23. Point Of A Receipt (POR)** – A location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction enters or a Generator delivers its output.
- 1.2.24. Purchasing Selling Entity** – The entity that purchases or sells, or takes title to, energy, capacity, and Interconnected Operations Services. Purchasing-Selling Entities may be affiliated or unaffiliated merchants and may or may not be own generating facilities.
- 1.2.25. Reliability Coordinator(RC)** – The entity that is the highest level of authority who is responsible for the reliable operation of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operator’s vision.
- 1.2.25. Root CA identifier** – Unique OID of the Root CA.
- 1.2.26. Root CA Public key** – The public key of the Root Certificate Authority X.509 digital certificate that is provided to the Root CA’s subordinate Certificate Authorities.
- 1.2.27. Root Certificate** – In cryptography and computer security, a **Root Certificate** is an unsigned public key certificate, or a self-signed certificate, and is part of a public key infrastructure scheme. The most common commercial variety is based on the ISO X.509 standard. Normally an X.509 certificate includes a digital signature from a certification authority (CA) which vouches for correctness of the data contained in a certificate.
- 1.2.28. Scheduling Entity (SE)** – An entity responsible for approving and implementing Interchange Schedules.
- 1.2.29. Transmission Operator (TO)** – The entity responsible for the reliability of its “local” transmission system, and that operates or directs the operations of the transmission facilities.
- 1.2.30. Transmission Service Provider (TSP)** – The entity that administers the transmission tariff and provides Transmission Service to Transmission Customers under applicable transmission service agreements.
- 1.2.31. Unaffiliated entity** – Any of two or more organizations that are not associated with each other as a subordinate, subsidiary, or member.
- 1.2.32. Uniform Resource Locator (URL)** – The address that defines the route to a file on an Internet server (Web server, FTP server, mail server, etc.). URLs are typed into a Web browser to access Web pages and files, and URLs are embedded within the pages themselves as hypertext links.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

2. Registry Processes and Procedures

2.1. General Concepts

Due to the industry's heavy reliance on the existing TSIN Registry 1.7 in the e-tag application, the existing TSIN will need to continue to be populated with data changes in parallel with the new EIR for a period of 6 months after EIR implementation. Every Registry entry must also support tracking of the following key information:

- Creation Date – date/time the entry was first inserted into the Registry
- Activation Date – date/time the entry becomes active or in use
- Deactivation Date – date/time the entry is no longer to be used
- Last Update – date/time the registry was last updated
- Modified By – identifying information for the person or software application that created/modified the Registry entry

The registry design must also consider providing a general mechanism to audit Registry changes and reconstruct the Registry at a given point in time. Consideration should be given to a uniform database table update process whereby the record to be updated is marked as 'deactivated' and the updated data inserted as a new record with a corresponding 'activation' date/time.

2.2. Registry Administrator Procedures

2.2.1. Administrator Base Data

Certain base data information will need to be established and maintained by the registry administrator. Such information might include:

- Entity Identifier Types — DUNS, etc.
- Entity Role Types — BA, LSE, ASP, etc.
- Client Role Types — Entity Admin, Registry Admin, etc.
- Contact Types — Administrative, 24-Hour, Technical Support, etc.
- Applications — OASIS, e-tag, etc.
- Application Service (Server) Types — OASIS, Tag Agent, etc.
- Application Attributes — TS_CLASS, SECURITY_TYPE, etc.
- Interconnections — Eastern, Western, ERCOT
- Regions — MAAC, WECC, etc.
- Service Point Role Types — Source, POD, etc.

Additions, updates, and deletions (deactivation) of records within these tables will be restricted to the registry administrator only at the direction of an authorized entity (NAESB, NERC, DOE, etc). The user interface will allow the registry administrator to view, add, and modify records in these tables as necessary. General access to these tables by all other users will be restricted to read only access. Addition of new information in these tables may be initiated by industry participants through an off-line administrative procedure with appropriate "checks and balances" as established by the registry administrator.

The registry administrator, under the direction of a NAESB representative, will assume responsibility for maintaining the content of the following Cyber-Security related base data:



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

- Certificate Root – Authorized Certification Authority (CA) Root Certificate
- Certificate Policy – Authorized CA OID(s) for certificates issued
- Certificate Issuer – Distinguished name of Authorized CA Issuing Authority(ies)

2.2.2. Full Registry Publication

The registry administrator is responsible for the periodic publication of the full Registry and potentially selected subsets of that registry. This could conceivably be an automated process. The publication of the registry requires taking a snapshot of the Registry at the time indicated in the Registry Version and Publication Date field. The Registry will then be made available for download in the following formats:

- XML via defined web services using SOAP encapsulation and XML schema(s)

The current publication frequency is:

- Registry published daily at midnight.
- Published Registry's activation date set for midnight twenty-four hours after publication.

The new Registry may be published more or less frequently than the current TSIN Registry. This publication schedule may change in the future dependent on how frequently Registry data is modified.

The Registry may be cleaned of all spurious data corrections made between publications due to mistakes, typos, etc., made during the registration process. The registry administrator may archive all records whose creation date AND deactivation date is greater than the last publication date but less than the publication date (i.e., records that never became active in the Registry).

Rather than periodic publication of the Registry on a fixed schedule, the registry administrator may elect to only publish a new Registry when information has changed since it was last published. The ability for any registered entity/entity code to subscribe for notification of the availability of a new Registry must be provided. This notification must include support for unsolicited XML (SOAP Method) documents sent to the entity who registered for notification indicating that the EIR has been modified and a new one is available for download.

It must be possible for an entity to request the “changes since <date>” for the EIR. This would include any updates or additions. (Updates include any changes to deactivation date).

2.3. Entity — Initial Registration

The following information must be collected as part of the initial registration process for a new entity:

- User — information regarding the individual submitting the initial entity registration; this information will populate an initial client associated with the entity and assigned the role of "Entity Administrator" (See Client – Initial Registration);
- Entity — information including official/legal entity name, business address, etc.;
- Entity Code — one or more short acronyms to be associated with the entity with one or more entity role(s) can be assigned to each entity code;
- Entity Identifier — one or more industry recognized legal entity identifiers (e.g., DUNS) if any entity code assigned the role of TSP (transmission service provider), or TC (transmission customer). Additional validations/requirements may depend on other roles assigned to the entity ;(Determined at a later date.)



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

- Entity Affiliates — zero or more identifications of any active, registered entities to which the new entity is affiliated;
- Entity Predecessor — zero or more associations to existing registered entities, which gave rise to formation of the new entity (e.g., merger, acquisition, divestiture, etc.).

The following subsections describe specific requirements relative to the validation and processing of the entity's initial registration.

2.3.1. Entity

Desired "activation date" will default to the Registry Version Activation Date unless an alternative date in the future is supplied by the user (activation date in the past must be flagged as an error).

The activation date will apply to all entity related information records inserted into the Registry during initial registration.

Prior to insertion into the database, a unique master registry identifier must be assigned to the entity being registered. This identifier should be used as the reference identifier in all data registered by that entity. Changes in information such as entity address, etc., should not constitute registration of a new entity. Mechanisms must be supported that allow the transfer of all existing registered information associated with one entity to another through a user request.

2.3.2. Entity Identifier

Entity identifier information submitted must supply both the value for the identifier (e.g., DUNS number) along with the "type" of identifier represented by that value (e.g., "DUNS"). Entity identifier information submitted must be verified for uniqueness. If the entity has attempted to register an entity code with entity role of TSP or TC, the registration information must contain a DUNS number as at least one of their entity identifiers to comply with OASIS registration requirements.

2.3.3. Entity Affiliate

Entity affiliate information, if any, must verify that the affiliated entity is still a valid/active entity. Entities and affiliates must mutually approve the establishment of the relationship.

2.3.4. Entity Predecessor

Entity predecessor information, if any, must verify the validity of the preceding entity registration(s). This information would most likely be presented and submitted from the UI when the user seeks to change an existing registered entity to reflect merger, divestiture, etc. If an existing entity is being replaced, both the predecessor and the successor must agree to this relationship. Predecessor entities do not necessarily have to be active to be associated with a new entity registration.

Along with identifying any predecessor entity, the reason for the change in entity registration must be identified from a set of enumerated reasons including:

- Merger
- Acquisition
- Divestiture
- Reorganization



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

- Other

2.3.5. Entity Code and Entity Role

At least one entity code must be provided and associated with at least one entity role. The entity role of "unaffiliated entity" (or any of its specific associated roles) must be the only entity role selected and be associated with only a single entity code, i.e., unaffiliated entities are limited to one registered entity code and only the role of "unaffiliated entity".

There is no restriction on a given entity registering separate entity codes as both an "O/SE" and "TC/PSE". If not explicitly supplied, the O/SE and/or TC/PSE role will be assumed by default for the first entity code registered that has one or more of the specific O/SE or TC/PSE roles defined as shown below. In addition, the role of PSE will be assumed if either GPE or LSE is selected.

The EIR will need to allow entities to register for any role identified in the NERC Functional Model. This document is subject to change and the EIR must be flexible enough to accommodate changes to the NERC Functional Model.

- Current O/SE (Operations) associated entity roles
 - RC — Reliability Coordinator (formerly Security Coordinator)
 - BA — Balancing Authority (formerly Control Area)
 - MO — Market Operator
 - TO — Transmission Operator
 - TSP — Transmission Service Provider
 - IA – Interchange Authority
 - GO - Generator Operator
- Current TC/PSE (Merchant) associated entity roles
 - TC — Transmission Customer (i.e., OASIS customer code)
 - PSE — Purchasing Selling Entity (i.e., Tagging desk code)
 - LSE — Load Serving Entity (implies PSE)
 - GPE — Generation Providing Entity (implies PSE)
 - Generator Owner
- Additional Entity Roles
 - Registry Administrator
 - ASP — Application Service Provider
 - PKICA — PKI Certification Authority
 - ERO — Electric Reliability Organization
 - RRO — Regional Reliability Organization
 - IMM — Independent Market Monitor
 - Compliance Monitor
 - Distribution Provider
 - Planning Coordinator
 - Resource Planner
 - Standards Developer



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

- Transmission Owner
- Transmission Planner
- Compliance Monitor
- Distribution Provider
- Generator Operator
- Generator Owner
- Interchange Authority
- Planning Coordinator
- Resource Planner
- Standards Developer
- Transmission Owner
- Reliability Coordinator

Certain restrictions may be required that would make some combinations of entity roles mutually exclusive, i.e., registration of an entity code as both a TSP and PSE may be invalid. All submitted entity codes must be verified for uniqueness. Prior to insertion into the Registry, a unique master registry identifier may be assigned to each of the Entity Codes being registered.

The capability to designate an entity with registration approval rights over the registered entity code/entity role must be provided unless the entity code is registered with any of the entity role of "other". These entities may represent regulatory agencies, universities, consulting groups, etc., that do not have an active merchant or operations role in the electric industry. These entity registrations may be required to designate a Sponsoring Entity (i.e., one with merchant or operations role) that will serve as the registrant's approval entity. Alternatively, the registry administrator may take on this approval role.

Following submission of the registration of an entity code table, as a triggered event or controlled by a batch script procedure, e-mail notifications must be generated to the administrative contact for the entity identified as having approval rights over the entity code registration. Similarly, once an entity code registration has been approved, an e-mail notification must be sent to that entity's administrative contact.

2.3.6. Entity Contact and Entity Code Contact

Registration of contact information must be provided at both the entity level and at the entity code/role level. User information identifying the registrant will be used to create an initial client record associated with the new entity registration. By default, entity contact and entity code contact information create a mapping of this client to the "Administrative" contact for the entity as a whole and for each supplied entity code. The administrative contact will then be responsible for adding additional client records in association with the various contacts, which may be associated with the entity and/or entity code(s) after the initial registration (e.g., 24 hour, Technical Support, etc.).

The following enumerated contact types must be supported:

- Administrative
- Technical
- 24 hour
- Operations — Real-time



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

- Operations — Day-ahead/pre-schedule
- Customer relations

Not all contact types are required or applicable to each of the various entity roles. Certain contact types may be required by industry standards and practices in association with specific entity roles, and such requirements must be modeled in the Registry.

2.4. Entity — Updates

2.4.1. Entity

Authorized "Entity Administrators" may update information associated with their entity registration. These updates would be to legal business entity name and/or location. Update operation is effected by deactivating the current record and inserting a new record with the updated information activated coincident with the deactivation of the original record. Entity relationships within the various registered objects must key to unique identifiers assigned to the entity and maintained across updates to that entity's registered information and not to specific table record identifiers. This ensures that the Registry contains both current and all historic records associated with the entity. Similar constructs must be applied to all registered objects.

2.4.2. Entity Identifier

New entity identifiers may be registered by authorized entity administrators. Entity identifiers may be updated to reflect corrections or changes in the value of any registered identifier by first deactivating the current registered information and then inserting the updated information into the entity identifier table.

2.4.3. Entity Affiliate

New entity affiliate associations may be inserted by authorized entity administrators. New information will be verified in the same manner as performed for the initial entity registration. Termination of entity affiliate relationship records is accomplished by updating the deactivation date field to reflect when the affiliation was terminated, and may occur at any time without restriction. There is no information that may be updated with respect to entity affiliation.

2.4.4. Entity Predecessor

New entity predecessor associations may be inserted by authorized entity administrators. New information will be verified in the same manner as performed for the initial entity registration. Entity predecessor information is restricted to being registered by the succeeding entity only. Modification of existing information will be accomplished by deactivating the current information and inserting the updated/corrected information.

Deletion of entity predecessor records is accomplished by updating the deactivation date field to reflect when the association between the entities was terminated; this is assumed to mainly be the result of correcting an error on registration.

2.4.5. Entity Code and Entity Role

Updates to entity code information are restricted to the addition or deactivation of entity role information. The entity code itself may only be altered if it has not been approved, and is subject to all uniqueness checks as described for initial entity registration.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

New entity code and entity role associations may be submitted for an existing entity. Entity code and entity role information will be validated to insure it passes all validations as described for a new entity registration.

Entity code and entity role associations must support the ability to track approval of that code/role by an authorized third party, i.e., NERC would have approval of entities registering with the balancing authority role as part of their certification program.

See discussion below for restriction on deactivation of entity code or entity role information.

2.4.6. Entity Contact and Entity Code Contact

Contact information associating entity or entity code/role with a client may be added, updated or deactivated. Updating an entity contact or entity code/role contact record to reference a new client must result in deactivation of the existing record and insertion of a new record. Deactivation of an entity contact or entity code contact record may occur at any time without restriction. Insertion of new entity contact or entity code contact records requires only that the associate client record is currently active.

2.4.7. Entity Code Service

Certain entity codes must be mapped to appropriate application services (servers), e.g., PSEs mapped to TagAgent Server, TSP mapped to OASIS Server, etc. The entity administrator may insert, update or deactivate entity code service registrations at anytime without restriction. Update of entity code service associations is accomplished by deactivating the current record and inserting a new entity code service association. Note that the actual service registrations are performed by the entity providing that service.

2.5. Entity – Deactivation

The following subsections describe specific constraints or requirements for deactivation of Entity and related Registry information.

2.5.1. Entity

Deactivation of an entity requires the simultaneous deactivation of all associated records containing the following information/associations:

- Entity affiliate associations
- Entity codes
- Entity contacts
- Entity identifiers
- Clients

Each of these may have further constraints or requirements for deactivation of associated records.

Presence of active records associated with the entity to be deactivated for the following information will block deactivation of the entity. The user/administrator must deactivate these records prior to attempting to deactivate the entity.

- Services (for ASP entities)
- Certificate root (for PKICA entities)
- Certificate issuer (for PKICA entities)



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

2.5.2. Deactivation of an Entity Code

Entity code requires the simultaneous deactivation of all the following associated registry information:

- Entity roles
- Entity code contacts
- Entity code services
- Entity code service points (for TSP, GPE and LSE entities)
- Entity code paths (for TSP entities)
- All topology related mappings to entity code

Each of these may have further constraints or requirements for deactivation of associated records.

2.5.3. Entity Role

Deactivation of an entity role associated with a given entity code is subject to the following constraints:

- If the entity role to be deactivated is an entity role type of RC, there must be no active reliability coordinator area registrations associated with the entity code
- If the entity role to be deactivated is an entity role type of BA or CA, there must be no active balancing area registrations associated with the entity code
- If the entity role to be deactivated is an entity role type of MO, there must be no active market area registrations associated with the entity code
- If the entity role to be deactivated is an entity role type of TSP, there must be no active POR/POD, path or path adjacency registrations associated with the entity code
- If the entity role to be deactivated is an entity role type of PSE, there should be no active source/ sink associated with the entity code
- If the entity role to be deactivated is entity role type of ASP, there must be no active application service registrations associated with the entity code

Any such active registrations referencing an entity role to be deactivated must first be deactivated or assigned to another entity code prior to deactivation of the entity role record.

2.6. Client — Initial Registration

Submission of client information is subject to uniqueness and validation checks. Initial registration of an entity always must result in insertion of an active client record associated with the role of entity administrator. At a minimum, client registration information will be used for Registry Access Control.

Submission of client information may be performed by clients associated with active, approved, registered entities where the client has been assigned the role of user administrator. All information is subject to uniqueness and validation checks. Information required for registration of a client includes designation of name and contact information. Additional information may be submitted to define associated:

- Client certificates (or more generic client credentials)
- Client roles

Contact information associated with entities, entity codes, or services may be modeled as registered clients and mapped to entity, entity code, or service and contact type information, or maintained separately from the client registration.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Prior to insertion into the database, a unique master registry identifier must be assigned to the client being registered.

2.7. Client — Updates

2.7.1. Client Role

Association/disassociation of roles to an active client may occur at anytime without restriction. Now, the only roles envisioned are those required to implement Registry Access Control, including but not limited to:

- Entity administrator
- User administrator

2.8. Client — Deactivation

Deactivation of a client record is subject to the following constraints and/or requirements:

- All active client role records associated with the client to be deactivated must be deactivated simultaneously

If client registrations are used to identify contacts, the following additional constraints are required:

- All active entity contact registrations associated with the client to be deactivated must be deactivated simultaneously
- All active entity code contact records associated with the client to be deactivated must be deactivated simultaneously
- All active service contact records associated with the client to be deactivated must be deactivated simultaneously

2.9. Application — Initial Registration

The only application related registration information accepted from external entities is registered Application Services and Application Attribute Values. All other application related registry information is maintained by the registry administrator. This includes the identification of the registered applications and associated application service types (e.g., e-tag Tag Agent Service).

2.9.1. Application Services

Submission of service registration information may be performed by clients of an active, approved registered entity with at least one entity code assigned the role of ASP. All information is subject to uniqueness and validation checks.

Information required for registration of a service includes designation of the service type, URI, and a description. Additional information may be submitted to identify one or more service contact information (e.g., technical support, etc.).

Prior to insertion into the database, a unique master registry identifier must be assigned to the service being registered.

2.9.2. Application Attribute Value

Submission of application attribute value information includes the name of the application as defined in the application base data and the particular data element whose value is being registered as defined in the application attribute name base data.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

Currently, submissions of application attribute values are only allowed for the OASIS application and may only be submitted by clients whose parent entity contains an active, approved entity code designated with the entity role of TSP.

The application attribute base data defines whether the application attribute value is subject to approval by another entity and which entity is granted approval rights. If approval is not required, the registry administrator will be the approval entity and the registered value will be automatically approved on insertion into the database.

If approval is required, an e-mail notification must be sent to the administrative contact(s) associated with the approval entity. Once that entity updates the record to indicate approval (or disapproval), an e-mail notification will be sent to the registering entity's administrative contact.

Attributes that require approval must be considered 'global' attributes that any TSP may reference or use (e.g. TS_CLASS). Attributes not requiring approval must be considered 'local' and apply only to the entity that registered that attribute value.

2.10. Application — Updates

2.10.1. Application Service

Authorized ASP entity administrators may update information associated with their service registrations. These updates would be to service URL or description. Update operation is effected by deactivating the current registration and inserting a new record with the updated information.

2.10.2. Entity Code Service

Addition, update or deactivation of registered entity code service associations are controlled by the entity owning that entity code. Activation of new records or deactivation of existing records may occur at any time without restriction. Update of existing records, i.e., changing service association, must be accomplished by deactivating the current record and inserting a new record with the updated information.

2.10.3. Application Service Contact

Contact information associated with a service may be added, updated or deactivated. Updating a service contact registration will result in deactivation of the existing record and insertion of a new record. Deactivation of a registered service contact may occur at any time without restriction.

2.10.4. Application Attribute Values

Once registered, OASIS application attribute value registrations may only be deactivated by the entity that approved the registration. The registering entity may update the value and associated description fields prior to approval of the registration only, i.e., for correction of errors or on the advice of the approval entity. Once approved, no updates will be allowed except for deactivation by the approval entity. Transmission and ancillary service attributes are examples of OASIS attributes, which require oversight and approval. Once these attributes are registered by one TSP, they must be re-useable by any other TSP. This would prevent unnecessary duplication of effort and eliminate a possible source of inconsistencies.

Certain OASIS application attributes are private to the TSP (local), such as REDUCTION_TYPE, SYSTEM_ATTRIBUTE, etc. No Registry administrator or designee approval is required for these attributes, and they may be updated by the entity that registered the attribute.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

2.11. Application — Deactivation

2.11.1. Application Service

Deactivation of a registered application service is subject to the following constraints and requirements:

- All application service contact records associated with the service to be deactivated must be deactivated simultaneously
- Any active entity code service associations to the service to be deactivated must block deactivation of the service

The Registry may support the registration of application services, which are 'voluntary' in nature. These services may be registered, updated and deactivated at will by the registering entity without affecting operations of any other services.

2.11.2. Application Attribute Value

Registered application attribute value records may be deactivated as described in the update process at any time. Global attributes must be deactivated by the entity that approved the registration; local attribute values may be deactivated by the registering entity.

2.12. Topology — Initial Registration

The following subsections outline the basic processes required for initial registration of topology information.

2.12.1. Interconnection

The registry administrator will assume responsibility for establishing the base definitions for the electrical system synchronous interconnections.

2.12.2. Regional Reliability Organization

The registry administrator will assume responsibility for establishing the base definitions for the Regional Reliability Organizations at the direction of NERC.

2.12.3. Reliability Coordinator Area

A registered and approved (by NERC) reliability coordinator must have the ability to register a reliability coordinator area. Key attributes are:

- Area name
- Association to the reliability coordinator
- Association to one or more Balancing Areas

The entity that approved the registration of the reliability coordinator must also have the rights to define the reliability coordinator area on the RCs behalf.

The registry administrator at the direction of NERC will establish the initial set of Reliability Coordinators and areas.

2.12.4. Market Area

A registered and approved market operator must have the ability to register a market area. Key attributes are:



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

- Area name
- Association to the market operator
- Association to one or more balancing areas

The entity that approved the registration of the market operator must also have the rights to define the market area on the MOs behalf.

A validation rule must be enforced that a given balancing area may not appear in multiple market areas.

2.12.5. Balancing Area

A registered and approved (by NERC) balancing authority must have the ability to register a balancing area. Key attributes are:

- Area name
- Association to the balancing authority
- Association to one or more control zones
- Association to the market area (if any)
- Association to one reliability areas
- Association to one or more Regional Reliability Organization (optional)

The entity that approved the registration of the balancing authority must also have the rights to define the balancing area on the BAs behalf.

The registry administrator at the direction of NERC will most likely establish the initial set of balancing authorities and areas.

2.12.6. Control Zone/Local Balancing Authority Area

Control zones are subsets of balancing areas that allow reliability tools, such as IDC, to have increased granularity over transaction impacts than for the balancing area as a whole. Control zone definitions require coordination between NERC, network modeling groups, reliability tool developers, etc. A registered and approved (by NERC) balancing authority must have the ability to register a control zone. By default, each balancing area must have one control zone registered whose name is identical to the parent balancing area. Key attributes are:

- Zone name
- Association to the balancing area
- Association to one or more service points (sources/sinks)

The entity that approved the registration of the balancing authority must also have the rights to define the control zone on the BAs behalf.

The registry administrator, at the direction of NERC, will most likely establish the initial set of balancing areas and control zones.

2.12.7. Service Points

NAESB Business Practice Standards require registration of PORs and PODs by TSPs. Key attributes include:

- Point name



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

- Role (POR and/or POD)
- Association to the transmission service provider

No approval should be required for an entity code with role of TSP to register PORs and PODs.

Registration of sources and sinks is currently handled by purchasing selling entities with approval granted by the balancing authority. Provisions must be made to allow sources and sinks to be registered directly by the balancing authority or market operator (for BAs within their market) in coordination with the PSE(s). Key attributes include:

- Point name
- Role (source and/or sink)
- Association to one or more purchasing selling entity
- Association to the control zone

PSEs associated with a source point must have the additional entity role of GPE; PSEs associated with a sink point must have the additional entity role of LSE.

No approval should be required for an entity code with role of TSP to register PORs and PODs.

2.12.8. Paths

To support tag path validation, TSPs will be required to register all valid commercial transmission service paths and their associated upstream and downstream adjacencies. Key elements of a registered path are:

- Path name
- POR
- POD
- Association to the transmission service provider
- Association to the scheduling entity

Paths are uniquely identified by the combination of all five attributes. Due to the large volume of data this represents for each TSP, the UI forms for registering paths must make efficient use of wildcards.

The OASIS S&CP identifies the following sub-attributes of a standardized path name:

- Region code
- Provider code
- Path code
- Optional code
- Spare code

2.12.9. Adjacencies

Path and source/sink adjacency information must be registered by the TSP. Path adjacency information would indicate:

- Association to upstream path
- Association to downstream path

Source adjacency information would indicate:



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

- Association to source service point
- Association to downstream path

Sink adjacency information would indicate:

- Association to upstream path
- Association to sink service point

2.12.10. Balancing Authority Adjacencies

Balancing Authorities are adjacent at specific points of interconnection (POI). The EIR must contain BA Adjacency information by POI. Impacted parties would approve this data.

2.13. Topology — Updates

2.13.1. Interconnection

The registry administrator will assume responsibility for performing any updates on the definitions for the electrical system synchronous Interconnections.

2.13.2. Regional Reliability Organization

The registry administrator will assume responsibility for performing any updates on the definitions for the Regional Reliability Organizations at the direction of NERC.

2.13.3. Reliability Coordinator Area

The reliability coordinators or the entity that approved the RCs registration must be able to update the registration of the reliability coordinator area. This would be limited to changing the area name, the associations of balancing areas to the reliability coordinator area, and assignment of responsibility from the current owning reliability coordinator to another approved RC.

2.13.4. Market Area

The market operator must be able to update the registration of the market area. This would be limited to changing the area name, the associations of balancing areas to the market area, and assignment of responsibility from the current owning market operator to another approved MO.

2.13.5. Balancing Area

The balancing authorities or the entity that approved the BAs registration must be able to update the registration of the balancing area. This would be limited to changing the area name, the associations of control zone(s) to the balancing area, and assignment of responsibility from the current owning balancing authority to another approved BA.

2.13.6. Control Zone

The balancing authorities or the entity that approved the BAs registration must be able to update the registration of the control zone. This would be limited to updating the control zone's name, or adding/removing source/sink points.

2.13.7. Service Points

TSPs must have the ability to update their POR/POD service point registrations.

BAs and or MOs whose balancing areas are under the control of the MO must have the ability to approve and/or update their source/sink service point registrations.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

2.13.8. Paths

TSPs must have the ability to update their path registrations.

2.13.9. Adjacencies

TSPs must have the ability to update the path adjacencies associated with any of the TSPs defined paths. Adjacency registration should be coordinated by the adjacent entities and responsibility delegated to one or the other parties to avoid conflicts.

TSPs must also have the ability to update the path to source/sink adjacencies in coordination with the source/sink balancing authority.

2.14. Topology — Deactivation

Deactivation of topology data at the request of any authorized entity shall be deferred for 30 days pending notice to all industry participants, unless an immediate change to the registry is requested by the entity through the Registry Administrator. Deactivation of topology data by the Registry Administrator shall typically be scheduled with 30 days notice to all industry participants, but may be scheduled for any appropriate time at the discretion of the registry administrator.

2.14.2. Interconnection

The registry administrator will assume responsibility for performing any deactivations of the definitions for the electrical system synchronous Interconnections.

2.14.2. Regional Reliability Organization

The registry administrator will assume responsibility for performing any deactivations of the definitions for the Regional Reliability Organizations at the direction of NERC.

Deactivation of a Regional Reliability Organization will simultaneously deactivate all associations of the RRO to balancing authorities (if any).

2.14.3. Reliability Area

The Reliability Coordinator or the entity approving the RC must have the ability to deactivate a reliability area.

Deactivation of a reliability area will simultaneously deactivate all associations of the RC to balancing authorities (if any).

2.14.4. Market Area

The market operator must have the ability to deactivate a market area.

Deactivation of a market area will simultaneously deactivate all associations of the MO to balancing authorities (if any).

2.14.5. Balancing Area

The balancing authorities or the entity that approved the BAs registration must be able to deactivate the registration of the balancing area. Deactivation of the balancing area must simultaneously deactivate the area's associations to registered RROs, reliability areas, and/or market areas. Deactivation must be blocked if there are any active control zones associated with the balancing area.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

2.14.6. Control Zone

The balancing authorities or the entity that approved the BAs registration must be able to deactivate the registration of the control zone. Deactivation of the control zone must simultaneously deactivate the zone's associations to register the balancing area. Deactivation must be blocked if there are any active service points associated with the control zone.

2.14.7. Service Points

TSPs must be allowed to deactivate service points. Deactivation of a POR/POD must be blocked if the service point is associated with an active path. . Deactivation of a source/sink must simultaneously deactivate that point's association with the control zone, and any of the point's path adjacencies.

2.14.8. Paths

TSPs must be allowed to deactivate paths. Deactivation of a path must simultaneously deactivate any path adjacencies referencing that path.

2.14.9. Adjacencies

TSPs must be allowed to deactivate path adjacencies at will.

2.14.10. Balancing Authority Adjacencies

BAs must be allowed to deactivate BA adjacencies at will. Impacted parties would approve this data.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

3. User and Registry Interaction

3.1. Browser Interface

The registry shall implement a web browser user interface, allowing users to access and manually register and enter data into the Registry without requiring any special software installations.

3.2. Encryption

The vendor shall require the user to use 128 bit SSL.

3.3. Data Access Rights

Users (including programmatic users via API) shall be allowed access to data based on their registered and approved data access rights. Registered users will be allowed only read access rights to data “belonging” to other entities (as described in section 2). Users may only modify, delete, or create data that “belongs” to them. NAESB and NERC may initiate deletion of invalid data according to the procedures described in section 2.

3.4. Data Validation at Entry

The system shall validate data content and format on data entry wherever possible providing meaningful error messages to the user that will allow the user to determine how to correct the data entry error.

3.5. Data Validation after Entry

The accuracy and validity of registry entries MUST be verified by automated and/or manual processes prior to use by industry participants. Prior to populating the “production” or “active” Registry, updates to the Registry must be confirmed with the appropriate stakeholders. The vendor will work with NERC to determine the appropriate data validation procedures and practices and then optimize the efficiency of this validation.

3.6. Display Consistency

Display formats and function must be consistent across all displays. NAESB staff will have final authority on determining if the vendor has met these requirements. If NAESB believes that the display is deficient in some manner, then they will provide the vendor with a specific description of what the vendor must change in order to achieve compliance with this requirement.

3.7. Color to Meaning Assignment

If the registry imparts information by color, then this color should be used to mean the same thing on all displays. For example, if the color RED is used to show a data format problem, it must not also be used to highlight data in an “accepted” state.

3.8. Application Programming Interface

The registry will provide the ability to upload data to and download data from the Registry using XML files defined by a published XML schema. Standards consistent with e-tag and WECC’s EIDE system shall be used including, SOAP and GMT for time representation. Any XML schemas used in the API must be provided to NAESB for public distribution. The XML API shall use 128 bit SSL.

The registry shall also provide registry data in a CSV file format that can be downloaded using https. The SSL required for this download is 128 bit.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

3.9. Filtering and Sorting

All user data displays must include filter and sort capability as appropriate.

Columns in displays shall all be able to be sorted in both ascending and descending order by any column (i.e. Source, Sink, POR, POD, etc.).

Displays shall all be able to be filtered based on the values in any meaningful column. Numeric columns shall be filterable based on both absolute and range values. Text columns must be filterable based on partial string matches and exact matches with negation. String filtering shall not be case sensitive. It shall be possible to enter up to 20 text strings for a single field that shall be logically “OR”d together.

Examples:

- PointID=6007,
- NERCID between 511 and 801,
- POR contains NYPD,
- PSE does not contain ENRN,
- POD = MALN OR CAPJ.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

4. Hardware and Software Standards

4.1. No Single Point of Failure

The Registry shall be designed so that there are no single points of failure that would result in the Registry being unavailable for greater than one hour. For example, the system could be fully redundant with hot standby/failover functions. This availability requirement extends to the Internet connections, which could also be redundant and through two, independent Internet service providers. All failover, including network failover, must be automatic.

The Registry shall be designed so that there is no single point of failure that would result in the loss of Registry data for greater than one hour. For example, disks could be mirrored and configured in an array with hot spares.

Internet and Registry system redundancy could be satisfied by replication between diverse sites.

4.2. Data Backup and Storage

The Registry data must be backed up at least daily, with data being moved offsite at least weekly. The data must be under the protection of access controls such that no single employee has access to the offsite data storage. EIR vendor management approval must be required to access the offsite data. There are no historical data storage requirements other than what is needed for disaster recovery.

4.3. Disaster Recovery

The Registry system must be capable of being restored entirely assuming the destruction of the entire registry system. Documentation and procedures must be available that provide for the complete re-installation/re-construction of the Registry hardware, software, and data. The EIR vendor must demonstrate that the documentation and procedures are accurate by having NAESB staff or their designees perform or witness the building of the system from scratch.

4.4. Structured and Coordinated Upgrades

Upgrades/modifications to any component of the Registry that would affect the users must be coordinated with NAESB staff and the Registry user community. Upgrades that would change an API must be implemented following a structured implementation plan. This plan must include reasonable periods of at least three weeks for the Registry users to have access to the revised XML schema or whatever else is necessary for the Registry users to implement and test changes in their automated systems. The three-week period must be followed by two weeks of testing with a near-continuous test Registry available for the users to test against. This system must be populated with either test, or actual data.

4.5. Sizing and Performance

The system must be sized and designed so that it provides robust performance for both current and expected usage.

- CPU utilization, averaged over one minute, must be below 20% 95% of the time.
- Disk space utilization at full expected size of the Registry must be 50% or less.
- RAM must be sized sufficiently on all systems (including database servers) so that disk swapping does not exceed 20 pages per minute.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

4.5.1. Moderate Activity State

Display call up times and API retrieval times shall be measured when the system is in a *moderate activity state*, carrying out normal functions, while 50 users simultaneously use the interface for normal activities and the API is being used by 50 systems to retrieve data.

Under this loading state:

- User displays call up and display change must not exceed five seconds (excluding internet latency and browser start up times).
- Response to SOAP method calls shall be within five seconds.

4.5.2. Heavy Activity State

Display call up times and API retrieval times shall be measured when the system is in a *heavy activity state*, carrying out *peak* normal functions, while 50 users simultaneously use the interface for normal activities and the API is being used by 150 systems to retrieve data.

Under this loading state:

- User displays call up and display change must not exceed ten seconds (excluding internet latency and browser start up times).
- Response to SOAP method calls shall be within ten seconds.

4.6. Availability

The Registry must be available 99.5% of the time measured over any rolling 30-day period.

4.7. Auditability

The database and registry systems must be auditable. While maintaining records with start/stop dates partially accomplishes this goal, other values need to be tracked for audit purposes. These at a minimum include the user requesting data modifications (inserts, updates, deletes), timestamp, and similar information for the approval/authorization process (NAESB staff member/timestamp for example). XML input documents must also be retained for a configurable number of days.

4.8. Data Integrity

Database and data integrity must be guaranteed. The registry can choose from a number of different tools and procedures to ensure this.

4.9. NERC Cyber Security

The Registry and related components are critical to both operational and commercial sectors of the power industry. As such, NAESB classifies the entire system as a Critical Cyber Asset and requires that the Registry and any subsequent entities maintaining the Registry comply with applicable NERC CIP standards.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

5. Testing

5.1. Structured Test Document

The vendor shall provide a structured test document that tests all functional and performance requirements of the Registry. Both NERC and NAESB members and staff will be given the opportunity to review the document and provide input and corrections which must be incorporated prior to the start of structured testing. The test document must contain numbered sections consistent with the system requirements document so that testers may easily reference required functionality and compare it to test results.

5.2. Problem Reporting

The vendor shall provide a structured method of reporting, classifying, and tracking problems.

5.2.1. Structured Problem Reporting

Each identified possible problem shall be assigned a unique number and assigned a classification.

5.2.2. Problem Classifications

Problems will be classified as:

- R — Required Functionality (In the System Requirements Document)
- E — Enhancement (Identified as necessary but not in the System Requirements Document)
- B — Bug (Software or Hardware Problem)
- D — Disputed (Agreement cannot be reached)

Problems will further be classified as:

- C — Critical (Required for system to be considered operational)
- H — High priority (Not required but very important)
- M — Medium priority
- L — Low priority

5.3. Factory Acceptance Testing

Factory Acceptance Testing (FAT) shall be conducted on-site. Certain client functions may be tested remotely at the client facilities.

The FAT will consist of both structured testing and unstructured testing. Structured testing will be conducted first.

Unstructured testing will include testing of any required functions in any order at any loading level.

FAT may be conducted several times. Passing FAT is defined as completion of structured and unstructured testing without finding any problems above those classified as low priority.

FAT testing will continue until the NAESB staffs or vendor staffs determine that system problems are so severe that no further testing should be done until the problems are corrected.

At completion of FAT testing, if FAT is not passed, the vendor shall correct all problems classified above low priority and another FAT shall be started. This will include re-testing of functions already tested since corrections of problems may cause problems elsewhere in the system.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

The vendor will perform a minimal set of FAT and provide results of that testing to NAESB before scheduling on site FAT. (Hopefully minimizes travel to on-site location)

5.4. Factory Performance Testing

Factory Performance Testing (FPT) shall be conducted on-site. Certain client functions may be tested remotely at the client facilities.

The FPT will consist of confirmation that the system meets sizing and performance requirements. The vendor will be responsible for loading the system to both the medium and heavy activity state. NAESB staff will have ultimate approval and confirmation rights that these activity states are met for the duration of the appropriate performance tests.

Either the vendor or the NAESB staff may devise mutually agreeable timing tests (including the use of a stopwatch, performance monitors, or software timers).

5.5. Site Acceptance Testing

Site Acceptance Testing (SAT) shall be conducted at the Registry host facility (ies). Client functions will be tested remotely at the participating client facilities.

SAT is a repeat of FAT with the exception that passing SAT is defined as completion of structured and unstructured testing without finding *any* problems. SAT testing will be open to any NAESB member.

5.6. Site Performance Testing

Site Performance Testing (SPT) shall be conducted at the Registry host facility (ies). Certain client functions may be tested remotely at the client facilities.

SPT is a repeat of FPT.

SPT *may be* waived by NAESB at their discretion.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

6. Documentation

The vendor will be responsible for providing hardware and software documentation. NAESB staff shall have approval rights over all documentation provided. The documentation requirements are not waived if the successful vendor provides the Registry service via an application service provider. For example, technical documentation, meeting the requirements described herein, will still be required to be provided to the vendor's own technical staff in this case.

NAESB must have the capability to modify and maintain the documentation described in this section or the vendor must maintain it. The intent is that the documentation be kept up to date as changes are made to the Registry system.

Frequently Asked Question (FAQ) documents must also be created and made available online. Provisions must be provided so that these may be maintained on an ongoing basis.

6.1. Technical Documentation

The vendor shall provide NAESB with technical documentation describing the hardware architecture and software architecture of the system. The intent of the technical documentation is to allow NAESB or their appointees to maintain the system. Since a number of methods are possible for describing the system, including UML, DFD's, etc, there will be no specific requirement in this document as to the form of this documentation. The only requirement is that the intent be met.

6.2. User Documentation

The vendor shall provide the Registry users with user documentation that describes how the client interface is used and all of its possible functions. NAESB staff will have approval rights over this documentation.

The documentation must be provided online at the Registry site. Documentation on user registration must be provided online at the NAESB Web site.

Documentation must include examples where appropriate.

6.3. Automated Interface Documentation

The vendor shall provide NAESB with API documentation that describes, in detail, how users may install and/or utilize the API to the Registry. Any related XML schemas shall be provided to the users so that they may implement their own XML processor independent of any specific vendor solution.

The documentation must be provided online at the Registry site.

Documentation must include examples where appropriate.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

7. Training

The vendor will be responsible for providing training courses. NAESB staff has approval rights over course content and quality. The vendor must provide courses that meet NAESB approval. Training must be presented both in person and online via webex.

These classes may need to be presented in a variety of locations over a number of different days in order to provide access to all Registry users. NAESB staff will coordinate training class locations and dates with NAESB members and ensure that all NAESB members are provided with access to training.

7.1. Technical Training

The vendor shall provide technical training to NAESB staff or their appointees in order to assure that they have sufficient knowledge to maintain the system (depending on the final roles) and interact with it (for data confirmation, deletion procedures, etc.).

7.2. User Training

The vendor shall provide training to the Registry users so that at the end of the course, the users are proficient at using the client interface and understand all of its functions.

7.3. API Training

The vendor shall provide technical training to Registry users on the use of the API so that the users, at the end of the course, have a thorough understanding of the interface and how to use it.

7.4. Refresher and ongoing Training

The vendor will provide updated training for system upgrades and changes so that ongoing training may be conducted and available.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

8. Post Implementation Requirements

The vendor will be responsible for providing a number of services after implementation of the Registry. All upgrades or modifications to software described in this section must be implemented following requirements outlined in previous sections 4.0, 5.0, 6.0 and 7.0 of this document.

8.1. Problem Reporting and Enhancement Requests

The vendor shall provide a mechanism for both NAESB staff and NAESB members to report and classify problems and enhancement requests. These will be assigned priority levels by NAESB members and staff as follows:

- C — Critical (Required for system to be considered operational)
- H — High priority (Not required but very important)
- M — Medium priority
- L — Low priority

They will also be assigned a classification as follows:

- E — Enhancement
- B — Bug (software or hardware problem)
- D — Disputed (Agreement cannot be reached)

The vendor will allocate resources to correct the identified problems consistent with the priority level assigned as follows:

- C = Immediate mitigation effort required and will be continuous until problem is resolved. Daily status updates from the vendor will be required.
- H = Mitigation efforts must start no later than the next working day and continue during normal working hours until complete. Daily status updates from the vendor will be required.
- M = Mitigation efforts must start within the next ten working days. Vendor will provide an estimate for completion acceptable to NAESB Staff. Staff and vendor will work together to prioritize “M” issues. Weekly status updates from the vendor will be required.
- L = Vendor will provide an estimate for completion acceptable to NAESB staff. Staff and vendor will work together to prioritize “L” issues. Weekly status updates from the vendor will be required.

8.2. System Upgrades

NAESB staff or the vendor, with agreement from NAESB staff, may initiate system hardware and/or software upgrades in order to remain current with external vendor support levels (such as the operating system, programming language, or database vendor) or improve performance or reliability.

Responsibilities for staff performing the upgrades need to be established with the vendor in the Registry contract or according to sections 4.0, 5.0, 6.0 and 7.0 of this document as a minimum.

8.3. System Patches

NAESB staff and the vendor must establish a method by which critical operating system patches, database system patches, and any other applicable patches required for ensuring system security, implementing bug fixes, and implementing enhancements will be applied. Patches that correct security issues must be applied as soon as possible. Patch application must conform to NERC Cyber Security standards.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

8.4. Virus Detection Updates

Virus detection software must be installed and continuously running on the Registry computer systems. NAESB staff and the vendor must establish a method by which virus detection software is updated. Updates must be downloaded and applied daily.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD

2010 Annual Plan for the Wholesale Gas Quadrant as Approved by the Board of Directors on 12-10-09 with Changes Offered by the WGQ Leadership

Item Description	Completion ¹	Assignment ²
1. Gas-Electric Interdependency		
Respond to directives of FERC Order No. 698 issued 6-25-07 , Docket Nos. RM05-5-001 and RM96-1-027 as related to the NAESB reports submitted in Docket No. RM05-28-000 :		
a. Provide for Enhanced Granularity for Public Utilities in Identifying Critical Operational Flow Orders. (R08020) Status: Completed	4th Q, 2009	BPS, IR/Tech jointly with WEQ BPS
2. Promotion of a More Efficient Capacity Release Market		
Review FERC Order Nos. 712 and 712A and modify NAESB standards as appropriate (Docket Nos. RM08-1-000, RM08-1-001).		
a. Review recent FERC order on flow-through of Discounted or Negotiated Rates (Docket No. RP09-70 et al, October 15, 2009) and develop business practice standards as appropriate Status: Not Started	2 nd Q, 2010	BPS/Interpretations
3. Capacity Release EDI Review		
Review capacity release transactions upload and related responses to determine suitability for EDI		
a. Develop Business Practice Standards as appropriate Status: Underway	2 nd Q, 2010	BPS
b. Prepare fully staffed recommendation Status: Underway (Adjustments may be made to Completion Dates based on report from Item 3.a)	3 rd Q, 2010	BPS, IR/Technical
4. Customer Security Administration		
Review and develop standards as appropriate to support Customer Security Administration Standards (Comment Submittal, 10-29-07) Status: Not started (Scoping to take place 1 st Q, 2010 after which a Completion Date will be set)	2010	BPS
5. Electronic Delivery Mechanisms		
Review minimum technical characteristics in Appendices B, C, and D of the WGQ QEDM Manual, and make changes as appropriate. Status: Not Started	2 nd Q, 2010	EDM
6. FERC Strategic Plan FY2009-2014		
a. For the FERC Strategic Plan , under the section "Promote efficient design and operation of natural gas facilities", review and develop standards as needed to support EBB posting requirements regarding waste heat feasibility (NAESB Standard No. 4.2.23) Status: Not Started	1 st Q, 2010	BPS



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD

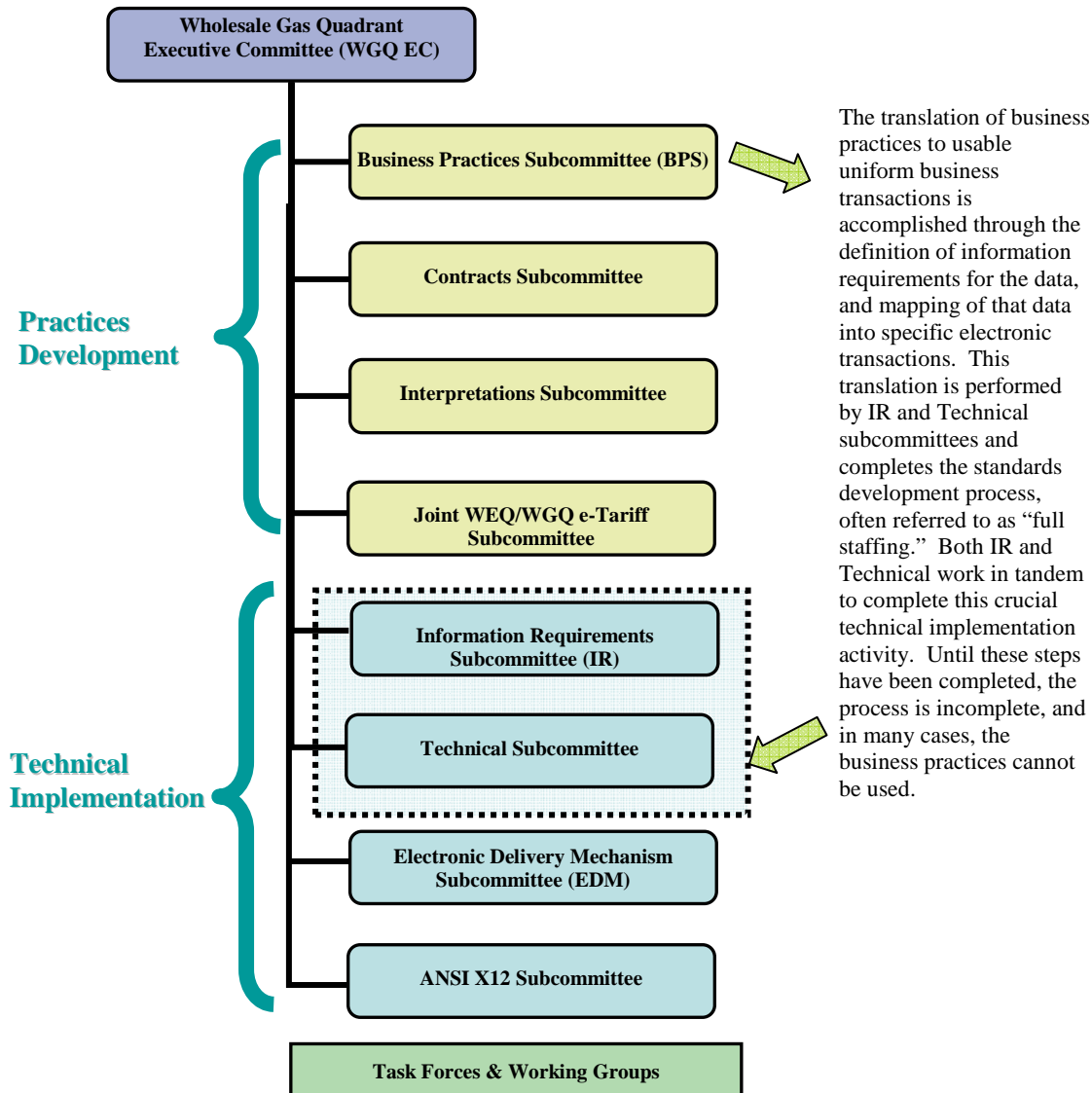
2010 Annual Plan for the Wholesale Gas Quadrant as Approved by the Board of Directors on 12-10-09 with Changes Offered by the WGQ Leadership

Item Description	Completion ¹	Assignment ²
7. Common Codes		
a. Review common code specifications for common location codes and determine if changes are necessary to the existing specifications to support both intrastate and interstate pipelines Status: Not Started	4 th Q, 2010	BPS
Program of Standards Maintenance & Fully Staffed Standards Work		
Business Practice Requests	Ongoing	Assigned by the EC ³
Continue review against plan for migration to ANSI ASC X12 new versions as needed and coordinate such activities with DISA.	Ongoing	ANSI X12 Subcommittee
Information Requirements and Technical Mapping of Business Practices	Ongoing	Assigned by the EC ³
Interpretations for Clarifying Language Ambiguities	Ongoing	Assigned by the EC ³
Maintenance of Code Values and Other Technical Matters	Ongoing	Assigned by the EC ³
Maintenance of Contracts Standards	As Requested	Contracts Subcommittee
Maintenance of eTariff Standards	As Requested	Assigned by the EC ³
Provisional Activities		
1 Review and develop standards as needed, related to Docket No. RM09-2-000 , (Contract Reporting Requirements of Intrastate Natural Gas Companies).		
2 Review and develop standards as needed related to the FERC Strategic Plan 2009-2014		



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org



The translation of business practices to usable uniform business transactions is accomplished through the definition of information requirements for the data, and mapping of that data into specific electronic transactions. This translation is performed by IR and Technical subcommittees and completes the standards development process, often referred to as "full staffing." Both IR and Technical work in tandem to complete this crucial technical implementation activity. Until these steps have been completed, the process is incomplete, and in many cases, the business practices cannot be used.

NAESB 2010 WGQ EC and Subcommittee Leadership:

- Executive Committee: Jim Buccigross, Chair and Dale Davis, Vice-Chair
- Business Practices Subcommittee: Kim Van Pelt, Valerie Crockett, Steve Abbey, Mike Novak and Richard Smith
- Information Requirements Subcommittee: Dale Davis
- Technical Subcommittee: Mike Stender, Kim Van Pelt
- Contracts Subcommittee: Keith Sappenfield
- Electronic Delivery Mechanism Subcommittee: Leigh Spangler, Christopher Burden
- Interpretations Subcommittee: Paul Love
- Joint WEQ/WGQ e-Tariff Subcommittee: Keith Sappenfield, Jane Daly



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

End Notes, WGQ 2010 Annual Plan:

¹ Dates in the completion column are by end of the quarter for completion by the assigned committee. The dates do not necessarily mean that the standards are fully staffed to be implementable by the industry, and/or ratified by membership. If one item is completed earlier than planned, another item can begin earlier and possibly complete earlier than planned. There are no begin dates on the plan.

² The assignments are abbreviated. The abbreviations and committee structure can be found at the end of the annual plan document.

³ The EC assigns maintenance of existing standards on a request-by-request basis.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD
2010 ANNUAL PLAN for the RETAIL GAS and ELECTRIC QUADRANTS
As Approved by the NAESB Board of Directors on December 10, 2009 with Redlined Proposed Changes from the Retail ECs on February 3, 2010

Item Number & Description ¹	Completion ²	Assignment ^{3,4}
1. Develop Technical Electronic Implementation Standards and Data Dictionaries – Book 10: Customer Enrollment, Drop and Account Information Change		
a.. For the Distribution Company Registration Model Registration Agent Model Status: Not Started	4 th Q, 2010	TEIS
2. Develop NAESB Certification checklist criteria for Retail Quadrants to be used in the NAESB Certification Program. The certification checklist may address test scripts, a checklist of items to be tested, data connectivity for test scripts and EDM testing. Status: Not Started. Dependent upon publication of Version 2.0 at a minimum, but more dependent upon completion of Customer Choice efforts, expected 1 st Q 2011 at the earliest.	2011	Ad Hoc EC Certification Group
3. Review and develop needed model business practices for a standardized method for quantifying benefits, savings, cost avoidance and/or the reduction in energy demand and usage derived from the implementation of demand side management and energy efficiency programs. This effort will include demand side response, energy efficiency programs and metering, including the 'curtailment service provider' program. The wholesale and retail demand response work groups and the Smart Grid 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.	Ongoing	Joint WEQ/REQ DSM Subcommittee
a. Develop glossary for business practice standards Status: Ongoing	Ongoing	Joint WEQ/REQ DSM Subcommittee
b. Develop business practice standards used to measure and verify reductions in energy and demand from energy efficiency in wholesale and retail markets. ⁵ This includes developing business practice standards to measure and verify energy reductions that are made to comply with a Renewable Portfolio Standard that included energy efficiency or a stand-alone Energy Efficiency Portfolio Standard. Status: Underway (An estimated completion date will be established in 1 st Q, 2010 after the new subcommittee has been formalized)	4 th Q, 2010	Joint WEQ/REQ DSM-EE Subcommittee
c. Support the second phase of retail development of model business practice standards for demand response programs Status: Started	2 nd Q, 2010	REQ Section of the Joint WEQ/REQ DSM Subcommittee
4. Billing and Payments		
a. Develop Process Flows to be included as models in Book 3 – Billing and Payments Status: Underway	2 nd Q, 2010	BPS
b. If the development of Process Flows indicate a gap in the model business practices, then develop new model business practices to address the gap. Status: Underway	2 nd Q, 2010	BPS



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD
2010 ANNUAL PLAN for the RETAIL GAS and ELECTRIC QUADRANTS
As Approved by the NAESB Board of Directors on December 10, 2009 with Redlined Proposed Changes from the Retail ECs on February 3, 2010

Item Number & Description ¹	Completion ²	Assignment ³⁴
5. Model Business Practices User Guide Add a new section to Book 0 to describe what Books have been developed, how the Books are laid out, and revised the title of the Book to reflect the additions Status: Underway	3 rd Q, 2010	BPS
6. Additional Registration Agent Processes		
a. Review all existing Model Business Practices to determine if the Customer Information process is already covered, and if necessary develop any new Model Business Practices required Status: Completed	1 st Q, 2010	BPS
b. Review all existing Model Business Practices to determine if the disconnection and reconnection process is already covered, and if necessary develop any new Model Business Practices required. Status: Completed		
i. Create MBPs for disconnection/reconnection initiated by the supplier Status: Completed	4 th Q, 2009	BPS
ii. Create MBPs for disconnection/reconnection initiated by the distribution company Status: Completed	4 th Q, 2009	BPS
c. Review all existing Model Business Practices to determine if there are other Registration Agent Model processes not covered, and develop a prioritized list of those processes, if any. Status: Underway	3 rd Q, 2010	BPS
d. Develop Model Business Practices and Process Flows for those Registration Agent Model processes on the prioritized list developed in (c) above, if any. Status: Underway	3 rd Q, 2010	BPS
e. Develop Technical Electronic Implementation Standards and Data Dictionaries to support Model Business Practices of Book 14 – Service Requests, Disconnections and Reconnections in the registration Agent Model Status: Underway	3 rd Q, 2010	IR/TEIS
f. Develop Technical Electronic Implementation Standards and Data Dictionaries to support any Model Business Practices developed in (d) above Status: Underway	3 rd Q, 2010	IR/TEIS
7. Supplier Certification Develop practices for Distribution Companies to register/certify new Suppliers when they seek to begin doing business in the Distribution Company's service area. Status: Not Started	4 th Q, 2010	BPS
8. Supplier Marketing Practices Develop Model Business Practices providing for a "Consumer Disclosure Statement" to be presented to residential and small commercial customers describing the Supplier's service offering and related contract provisions. This statement would also	4 th Q, 2010	BPS



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD
2010 ANNUAL PLAN for the RETAIL GAS and ELECTRIC QUADRANTS
As Approved by the NAESB Board of Directors on December 10, 2009 with Redlined Proposed Changes from the Retail ECs on February 3, 2010

Item Number & Description ¹	Completion ²	Assignment ³⁴
<p>identify how certain Supplier-Customer interactions are conducted.</p> <p>Amongst the topics to be considered for inclusion on the statement would be the following:</p> <ul style="list-style-type: none"> • the most important terms of the Supplier agreement, such as the contract's term and termination fee provisions; • training and identification of Supplier marketing representatives; • protocols for Supplier in-person and telephone contacts with customers; • added measures for protecting non-English speaking customers; and • Processes for handling customer complaints and resolving disputes arising from Supplier marketing activities. <p>Status: Not Started</p>		
9. Develop Smart Grid Wholesale and Retail Electric Standards		
<p>a. Develop Requirements and Use Cases for PAP 03 – Pricing Model, Phase 1 Status: Underway</p>	1 st Q, 2010	Joint WEQ/REQ SGS Task Force
<p>b. Develop Requirements and Use Cases for PAP 04 – Scheduling Model, Phase 1 Status: Underway</p>	1 st Q, 2010	Joint WEQ/REQ SGS Task Force
<p>c. Develop Requirements and Use Cases for PAP 09 – Demand Response/Distributed Energy Resources, Phase 1 Status: Underway</p>	1 st Q, 2010	REQ Section of the Joint WEQ/REQ SGS Task Force
<p>d. Act as a convener (develop and implement a plan to expedite harmonized standards development and adoption within the associated standards bodies) and develop business practice standards as needed and assigned to NAESB for PAP 10 – Standard Energy Usage Information Status: Not Started</p>	2010	Joint WEQ/REQ SGS Task Force
10. Reserved (Items added under action item 6)		
<p>11. Master List of Defined Terms: Review the definitions of all Defined Terms in Book 0 – Master List of Defined Terms, including other Ratified Terms not yet published, and revise the definitions of all Defined Terms not specifically related solely to the competitive marketplace to broaden their applicability to conform to NAESB's expanded scope. Status: Not Started</p>	2 nd Q, 2010	Glossary

Program of Standards Maintenance & Fully Staffed Standards Work⁶

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



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD
2010 ANNUAL PLAN for the RETAIL GAS and ELECTRIC QUADRANTS
As Approved by the NAESB Board of Directors on December 10, 2009 with Redlined Proposed Changes from the Retail ECs on February 3, 2010

Item Number & Description ¹	Completion ²	Assignment ³⁴
		EC
Ongoing Development and Maintenance of Definitions	Ongoing	Glossary

Provisional Activities

Joint Effort:

- Modify TPA as necessary.
- Review security standards as may be deemed necessary, such as Public Key Infrastructure (PKI).
- Review existing body of model business practices for consistency and develop or modify model business practices as needed.

Retail Electric Quadrant Effort Only:

- Retail Meter Data Validation, Editing & Estimating: Develop procedures for insuring the integrity and validity of retail customer metering data that is needed by utilities and suppliers for billing, etc. Issues related to unbundled or competitive metering are not to be considered.
- Settlement Process: Reconcile energy schedules and energy delivered by suppliers within a given market. Note: will need to be coordinated with the WEQ for the REQ.
- Develop business practice standards for cap and trade programs for green house gas (See action item 6h).

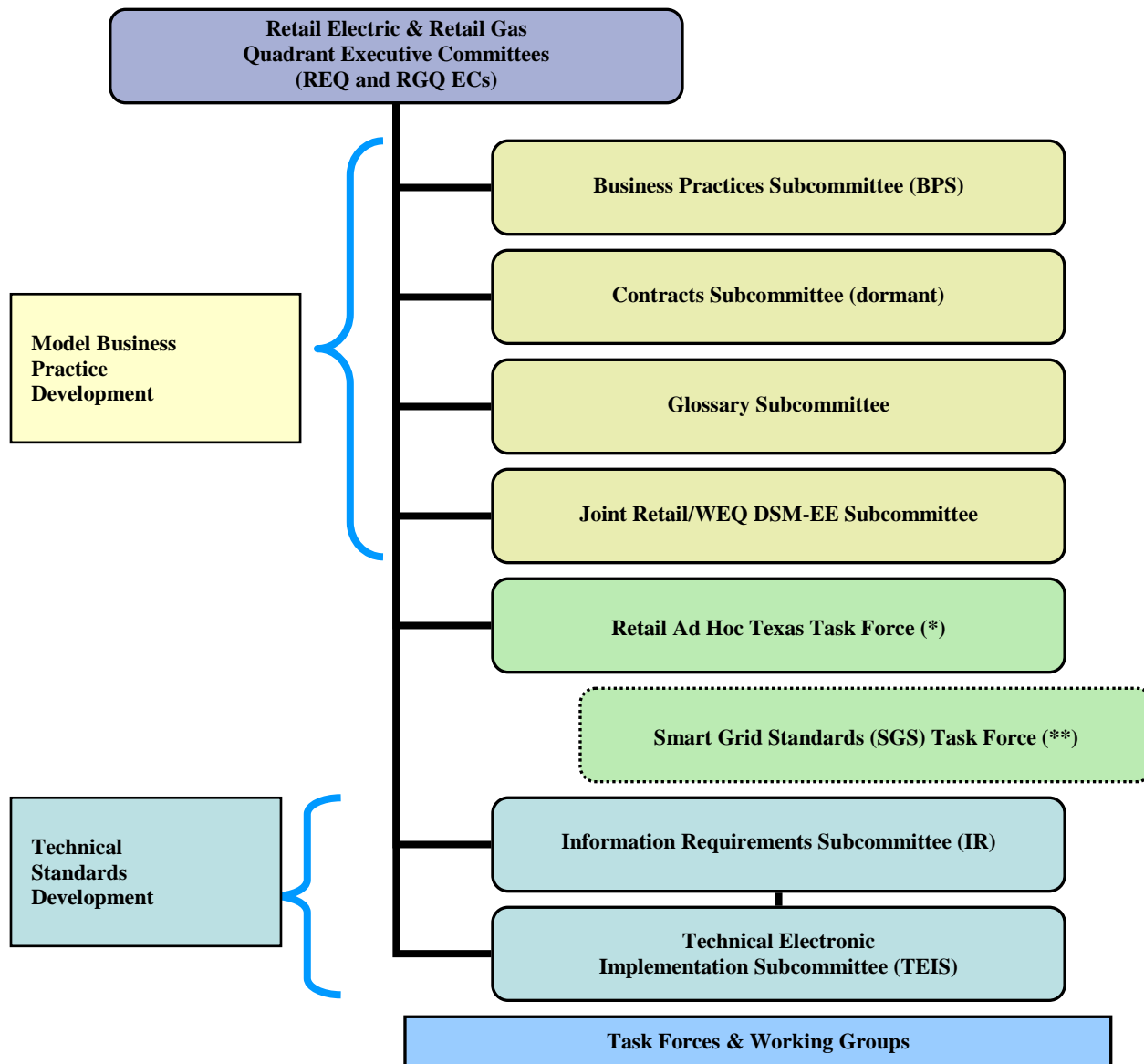
Retail Gas Quadrant Effort Only:

- Examine Wholesale Gas Quadrant Non-EDM Standards for applicability to retail business practices.
- Settlement Process: Reconcile energy schedules and energy delivered by suppliers within a given market.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org



NAESB Retail Subcommittee Leadership: ⁷

- Executive Committee: Mike Novak, Chair (RGQ), Phil Precht, Chair (REQ)
- Business Practices Subcommittee: Phil Precht (RGQ), Dan Jones (REQ)
- Information Requirements Subcommittee: Jennifer Teel (REQ)
- Technical Electronic Implementation Subcommittee: TBD
- Glossary Subcommittee: Patrick Eynon (REQ)
- DSM-EE Subcommittee: Ruth Kiselewich, David Koogler (REQ), Roy True (WEQ), and Paul Wattles (WEQ)
- Retail Ad Hoc Texas Task Force: Debbie McKeever (REQ) and Susan Munson (REQ)

(*) The Retail Ad Hoc Texas Task Force may draft MBPs, process flows, implementation guides and technical standards supportive of the Registration Agent. The group is chaired by Debbie McKeever and Susan Munson.

(**) The Smart Grid Task Force 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 to the NAESB Board Smart Grid Strategic Steering Committee. The group is chaired by Brent Hodges, Wayne Longcore, Joe Zhou and Robert Burke.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002

Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org

Home Page: www.naesb.org

Retail 2010 Annual Plan End Notes:

¹ As outlined in the NAESB Bylaws, the REQ and RGQ will also address requests submitted by members and assigned to the REQ and RGQ through the Triage Process.

² Dates in the completion column are by end of the quarter for completion by the assigned committee. The dates do not necessarily mean that the standards are fully staffed to be implementable by the industry, and/or ratified by membership. If one item is completed earlier than planned, another item can begin earlier and possibly complete earlier than planned. There are no begin dates on the plan.

³ The assignments are abbreviated. The abbreviations and committee structure can be found at the end of the annual plan document.

⁴ The DSM-EE subcommittee is expected to be split into several separate subcommittees to support concurrent development of separate standards sets. The split is to take place at the end of May after which the assignments will be modified.

⁵ Energy efficiency may be a wholesale product, such as capacity. Energy efficiency in retail markets may be from individual energy efficiency measures at the project level or a portfolio of projects that make up an energy efficiency program.

⁶ This work is considered routine maintenance and thus the items are not separately numbered. The REQ and RGQ ECs will assign maintenance efforts on a request-by-request basis.

⁷ The ECs and the subcommittees can create task forces and working groups to support their development activities for development of model business practices and technical standards.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD

2010 ANNUAL PLAN for the WHOLESALE ELECTRIC QUADRANT

As Approved by NAESB Board of Directors on December 10, 2009 With Redlined Changes from WEQ Leadership

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.	2010	BPS
Note: Consideration should be given to provisional item 4. Work is being coordinated with the NERC IDC Working Group.		
Status: Underway		
b) Time Error and Inadvertent (BAL-004 and BAL-006) Coordination with NERC	TBD	TIMTF
Status: Monitor. (Upon initiation of this item by NAESB, a completion date will be determined. Based on discussions with NERC staff regarding the Balancing Authority Controls Standards Drafting Team's timeline the completion date has been changed to tbd.)		
c) DCS and AGC (BAL-002 and BAL-005) Coordination with NERC	TBD	TIMTF
Status Monitor. (Upon initiation of this item by NAESB, a completion date will be determined. Based on discussions with NERC staff regarding the Balancing Authority Controls Standards Drafting Team's timeline the completion date has been changed to tbd.)		
2 Develop business practice standards in support of the FERC RM05-25-000 and RM05-17-000 (OATT Reform)¹		
a) Develop version 2 business practice standards to better coordinate the use of the transmission system among neighboring transmission providers. Such business practice standards would be based on recommendations from NERC's Long Term ATC/AFC Task Force and would involve revised procedures for the ATC calculation and/or revised protocols as determined by the final order.		
Status: Underway		
Development is using joint standards development process with NERC. Request R050004 was expanded to include the Order No. 890 (Docket Nos. RM05-25-000 and RM05-17-000) and Order No. 890-A (Docket Nos. RM05-17-001, 002 and RM05-25-001, 002), "Preventing Undue Discrimination and Preference in Transmission Services," issued April 11, 2007).		
i) Group 3: Network Service On OASIS		
1) Use of OASIS to Make Electronic Requests to Designate and Terminate Network Resource	2 nd Q, 2010	OASIS
Status: Underway		

¹ FERC Order No. 890, issued February 16, 2007 can be accessed from the following link - http://www.naesb.org/doc_view4.asp?doc=ferc021607.doc



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD

2010 ANNUAL PLAN for the WHOLESALE ELECTRIC QUADRANT

As Approved by NAESB Board of Directors on December 10, 2009 With Redlined Changes from WEQ Leadership

	Item Description	Completion ¹	Assignment ²
2)	Ability to Query Requests to Designate and Terminate Network Resources and Allow for Queries of All Information Provided with Designation Requests Status: Underway	2 nd Q, 2010	OASIS
3)	Masking of Designated Network Resource Operating Restrictions and Generating Cost Information Status: Underway	2 nd Q, 2010	OASIS
4)	Procedural Requirements for Submitting Designations over new OASIS Functionality Status: Underway	2 nd Q, 2010	OASIS
5)	Specify How Designated Network Service Informational Postings are Posted on OASIS Status: Underway	2 nd Q, 2010	OASIS
6)	Develop standards for the treatment of OASIS Requests when the Customer Fails to Provide the Necessary Attestation Status: Underway	2 nd Q, 2010	OASIS
7)	Procedural Requirements for Submitting Both Temporary and Indefinite Terminations of Network Resources Status: Underway	2 nd Q, 2010	OASIS
8)	Procedures for Submitting and Processing Requests for Concomitant Evaluations of Transmission Requests and Temporary Terminations Status: Underway	2 nd Q, 2010	OASIS
ii)	Group 4: Pre-Emption; Request No. R05019		
1)	Pre-Emption Status: Not Started	2011	OASIS
2)	Request No. R05019 Status: Not Started	2011	OASIS



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD

2010 ANNUAL PLAN for the WHOLESALE ELECTRIC QUADRANT

As Approved by NAESB Board of Directors on December 10, 2009 With Redlined Changes from WEQ Leadership

	Item Description	Completion ¹	Assignment ²
iii)	Group 5: Paragraph 1377 ² – Group 5 work should precede group 4 work		
	1) Paragraph 1377 Status: Underway	4 th Q, 2010	OASIS
	2) Re-Bid Of Partial Service across Multiple Transmission Providers’ Systems Status: Underway, Scoping Group identified in 2-2-10 WEQ EC meeting	4 th Q, 2010	OASIS
	3) Group DNR requests from a system with point-to-point requests on other systems for synchronization Status: Not Started	2nd Q, 2010	OASIS

² Paragraph 1377 of FERC Order No. 890, issued February 16, 2007: The Commission agrees that transmission requests across multiple transmission systems should be coordinated by the relevant transmission providers. We will not, however, amend the pro forma OATT to require such coordination. Rather, we require transmission providers working through NAESB to develop business practice standards related to coordination of requests across multiple transmission systems. In order to provide guidance to NAESB, we will articulate the principles that should govern processing across multiple systems. All the transmission providers involved in a request across multiple systems should consider a request that requires studies across multiple systems to be a single application for purposes of establishing the deadlines for rendering an agreement for service, revising queue status, eliciting deposits and commencing service. In order to preserve the rights of other transmission customers with studies in the queue, the priority for the single application should be based on the latest priority across the transmission providers involved in the multiple system request. We note that regional entities like westTTrans are already coordinating requests across multiple transmission systems and we believe such coordination is an acceptable solution to this issue.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD

2010 ANNUAL PLAN for the WHOLESALE ELECTRIC QUADRANT

As Approved by NAESB Board of Directors on December 10, 2009 With Redlined Changes from WEQ Leadership

	Item Description	Completion ¹	Assignment ²
iv)	Group 6: Miscellaneous (Paragraphs 1390 ³ and 1627 ⁴ of FERC Order No. 890)		
	1) Paragraph 1390 of Order 890 Status: Not Started	2011	OASIS
	2) Paragraphs 1627 of Order 890 Status: Not Started	2011	OASIS
	3) Redispatch Cost Posting to allow for posting of third party offers of planning redispatch services. Status: Not Started	2011	OASIS
b)	Develop the needed business practices as companion to the NERC standards for ATC related efforts		
	i) Develop standards to support existing Request No. R05004 .		

³ Paragraph 1390 of FERC Order No. 890, issued February 16, 2007: We will not modify the pro forma OATT to address requests to allow the transmission provider to terminate idle transmission service requests. NAESB’s business practice 001-4.11 allows the transmission provider to retract a request if the transmission customer does not respond to an acceptance within the time established in NAESB business practice standard 001-4.13. Therefore, we interpret TDU Systems comments to refer to circumstances when a transmission customer fails to respond to the transmission provider’s request for additional information during the course of a request study. As discussed above, by the time the transmission provider offers a system impact study agreement, it should have all of the information that it needs to complete the study. Pursuant to section 17.4 of the pro forma OATT, the transmission provider can deem a transmission service request deficient if the transmission customer does not provide all of the information the transmission provider needs to evaluate the request for service. We will revise section 17.7 of the pro forma OATT so that the transmission provider is able to terminate a request for transmission service if a transmission customer that is extending the commencement of service does not pay the required annual reservation fee within 15 days of notifying the transmission provider that it would like to extend the commencement of service. We will not change the pro forma OATT to allow the transmission provider to terminate a transmission service request if the transmission customer changes its application for service. We believe the existing pro forma OATT is sufficient to allow a transmission provider to manage situations where the transmission customer modifies its application for service to the point that the customer is requesting transmission service that is meaningfully different than its initial request.

⁴ Paragraph 1627 of FERC Order No. 890, issued February 16, 2007: We agree with suggestions for the posting of additional curtailment information on OASIS and, therefore, require transmission providers, working through NAESB, to develop a detailed template for the posting of additional information on OASIS regarding firm transmission curtailments. Transmission providers need not implement this new OASIS functionality and any related business practices until NAESB develops appropriate standards. These postings must include all circumstances and events contributing to the need for a firm service curtailment, specific services and customers curtailed (including the transmission provider’s own retail loads), and the duration of the curtailment. This information is in addition to the Commission’s existing requirements: (1) when any transmission is curtailed or interrupted, the transmission provider must post notice of the curtailment or interruption on OASIS, and the transmission provider must state on OASIS the reason why the transaction could not be continued or completed; (2) information to support any such curtailment or interruption, including the operating status of facilities involved in the constraint or interruption, must be maintained for three years and made available upon request to the curtailed or interrupted customer, the Commission’s Staff, and any other person who requests it; and, (3) any offer to adjust the operation of the transmission provider’s system to restore a curtailed or interrupted transaction must be posted and made available to all curtailed and interrupted transmission customers at the same time.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD

2010 ANNUAL PLAN for the WHOLESALE ELECTRIC QUADRANT

As Approved by NAESB Board of Directors on December 10, 2009 With Redlined Changes from WEQ Leadership

Item Description	Completion ¹	Assignment ²
1) The processing of transmission service requests, which use TTC/ATC/AFC, in coordination with NERC changes to MOD 001 where the allocation of flowgate capability based on historical Network Native Load impacts the evaluation of transmission service requests, requiring the posting of those allocation values in conjunction with queries of service offerings on OASIS Status: Underway	2 nd Q, 2010	OASIS
3 Develop business practices standards to improve the current operation of the wholesale electric market and develop and maintain business practice and communication standards for OASIS and Electronic Scheduling		
a) Develop and/or maintain business practice standards as needed for OASIS and electronic scheduling. Specific items to address include:		
i) Network Services: Determine and develop needed business practice standards or other support is needed to support use of OASIS for Network Service transactions (R04006E). (Related to AP 2(a)(iii)) Status: Underway	2 nd Q, 2010	OASIS
ii) Registry (TSIN): Determine and develop needed business practice standards to support the registry functions currently supported by NERC (R04037 , R06027).		
1) Transition the TSIN Registry from NERC to NAESB as the enhanced Electric Industry Registry (EIR), (R06027). Status: Underway	2010	NAESB/NERC Administration, JESS
iii) Document procedures used to implement the displacement/interruption terms of the Pro Forma tariff (R05019). Status: Deleted as a duplicate of 2009 AP item 2.a.ii.2	2011	OASIS
iv) Make remaining incremental enhancements to OASIS as an outgrowth of the NAESB March 29, 2005 conference on the future of OASIS (R05026). Scoping statement completed by SRS and assignments made to BPS and OASIS.		
1) Eliminate Masking of TSR tag source and sink when requested status is denied, withdrawn refused, displaced, invalid, declined, annulled or retracted Status: Not Started	2011	OASIS
2) Initiate standard that eliminates the disparity of posting "sensitive" information. This standard should also include procedures of user certification that allows access to this class of information. Status: Underway (upon further development of this item by NAESB, a completion date will be determined)	2011	OASIS



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD

2010 ANNUAL PLAN for the WHOLESALE ELECTRIC QUADRANT

As Approved by NAESB Board of Directors on December 10, 2009 With Redlined Changes from WEQ Leadership

	Item Description	Completion ¹	Assignment ²
3)	Enhance the TSR result postings to allow showing of (i) limiting transmission elements and (ii) available generation dispatch options that would allow acceptance of reservation request. Status: Not Started (upon initiation of this item by NAESB, a completion date will be determined)	2011	OASIS
v)	Develop, coordinate interoperability testing, and implement e-Tag version 1.8.1 Status: Underway	1 st Q, 2010	JESS
vi)	Review and correct WEQ-004 Coordinate Interchange Business Practice Standard as needed based on activities in NERC Project 2008-12, Coordinate Interchange Standards Revisions and supporting EOP-002-2 R4 and R6. [note: this is a new item] Status: Not started – dependent on currently projected NERC activity (upon initiation of this item by NAESB, a completion date will be determined)	2010	JESS
b)	Develop and/or maintain standard communication protocols and cyber-security business practices as needed.		
i)	Develop PKI certification program for e-Tag and OASIS Status: Not Started (upon initiation of this item by NAESB, a completion date will be determined)	2010	Board Certification Program Committee
ii)	Develop PKI standards for OASIS. Status: Not Started (upon initiation of this item by NAESB, a completion date will be determined)	2011	OASIS
iii)	Develop Industry Implementation Plan for meeting PKI Standard requirements for e-tagging. Status: Underway. Full e-Tag implementation (server & client side) is linked to the transition of the Registry from NERC to NAESB and NAESB implementation..	TBD – dependent on item above (i) and EIR	JESS



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD

2010 ANNUAL PLAN for the WHOLESALE ELECTRIC QUADRANT

As Approved by NAESB Board of Directors on December 10, 2009 With Redlined Changes from WEQ Leadership

Item Description	Completion ¹	Assignment ²
<p>4 Review and develop business practices standards to Demand Response, Demand Side Management and Energy Efficiency Programs</p>		
<p>Review and develop needed model business practices for a standardized method for quantifying benefits, savings, cost avoidance and/or the reduction in energy demand and usage derived from the implementation of demand side management and energy efficiency programs. This effort will include demand side response, energy efficiency programs and metering, including the 'curtailment service provider' program.</p>		
<p>a) Review the NAESB Business Practices for Measurement and Verification of Wholesale Electricity Demand Response (WEQ-015) in conjunction with the IRC developed Demand Response Matrix and identify business practice requirements that could be improved or made clearer through the addition of specific technical detail. The wholesale and retail demand response work groups and the Smart Grid 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.</p>	Phase 2	WEQ Section of the Joint WEQ/REQ DSM-EE Subcommittee
<p>Status: In Progress</p>		
<p>b) For each performance evaluation type/service type combination identified in WEQ-015, using the IRC matrix as a starting point, assess and determine what standards or guidelines, if any, should be developed to aid all participants in the use of measurement and verification methods for demand response programs in organized wholesale electric markets. If the determination is made that standards or guidelines will be developed, those items will be added as sub-items to 4(b).</p>	Phase 2	WEQ Section of the Joint WEQ/REQ DSM-EE Subcommittee
<p>Status: In Progress</p>		
<p>c) Develop glossary for business practice standards</p>	Ongoing	Joint WEQ/REQ DSM Subcommittee
<p>Status: Ongoing</p>		
<p>d) Develop business practice standards used to measure and verify reductions in energy and demand from energy efficiency in wholesale and retail markets.³ This includes developing business practice standards to measure and verify energy reductions that are made to comply with a Renewable Portfolio Standard that included energy efficiency or a stand-alone Energy Efficiency Portfolio Standard.</p>	2010	Joint WEQ/REQ DSM-EE Subcommittee
<p>Status: Underway (An estimated completion date will be established in 1st Q, 2010 after the new subcommittee has been formalized)</p>		
<p>5 Maintain existing body of Version 2.x standards</p>		
<p>a) Make consistency changes to Version 2.2 standards as directed by the WEQ Leadership Committee on December 12, 2007 OASIS Consistency Changes (R08001, R08002, R08003, R08005)</p>	2011	OASIS
<p>Status: Not Started (upon initiation of this item by NAESB, a completion date will be determined)</p>		



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD

2010 ANNUAL PLAN for the WHOLESALE ELECTRIC QUADRANT

As Approved by NAESB Board of Directors on December 10, 2009 With Redlined Changes from WEQ Leadership

Item Description	Completion ¹	Assignment ²
b) Consistent with ¶51 of FERC Order No. 890-A, add AFC and TFC values to the “System_Attribute” data element of the NAESB Standard WEQ-003: OASIS S&CP Data Dictionaries. (R08011) Status: Not Started. This Standards Request was assigned to the OASIS in May 2008.	2011	OASIS
c) Correct WEQ 013-2.6.7.2. – Resale off OASIS (R08027) Status: Not Started	TBD	OASIS
d) Add language to WEQ-001-4 Online Negotiation and Confirmation process to clarify Table 4-3 (R09003) Status: Not Started	TBD	OASIS
e) Create a new OASIS mechanism that allows for the merger of like reservations without the use of the resale mechanism (R09015) Status: Not Started	TBD	OASIS
6. Develop Smart Grid Wholesale and Retail Electric Standards - The wholesale and retail demand response work groups and the Smart Grid task force should actively and timely communicate and coordinate work products to ensure consistency between the three work groups. Each work group should take into account the work products developed by the other.		
a) Develop requirements and use cases for PAP 03 – Pricing Model Status: Underway	1 st Q, 2010	Joint WEQ/REQ SGS Task Force
b) Develop requirements and use cases for PAP 04 – Scheduling Model Status: Underway	1 st Q, 2010	Joint WEQ/REQ SGS Task Force
c) Develop requirements and use cases for PAP 09 – Demand Response/Distributed Energy Resources Status: Underway	1 st Q, 2010	Joint WEQ/REQ SGS Task Force
d) Act as a convener (develop and implement a plan to expedite harmonized standards development and adoption within the associated standards bodies) and develop business practice standards as needed and assigned to NAESB for PAP 10 – Standard Energy Usage Information Status: Underway	2010	Joint WEQ/REQ SGS Task Force
7. Develop or modify standards to Support FERC Order No. 676-E, (Docket No. RM 05-5-013)		
a) Review standards 001-14.1.3 and 001-15.1.2 based on FERC Order No. 676-E (See ¶ 39 ⁵) Status: Not Started	2011	OASIS

⁵ 39. In regards to Entergy’s question of whether the transmission provider’s calculated and posted available flowgate capability values should be used to fulfill the posting requirements set forth in Standard 001-14 and 001-15 in instances where 2010 WEQ Annual Plan as approved by the Board of Directors on December 10, 2009 With Redlined Changes from WEQ Leadership
Page 8 of 12



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD

2010 ANNUAL PLAN for the WHOLESALE ELECTRIC QUADRANT

As Approved by NAESB Board of Directors on December 10, 2009 With Redlined Changes from WEQ Leadership

Item Description	Completion ¹	Assignment ²
b) Develop standards to support the Transmission Provider right to reassess the availability of conditional firm (See ¶ 72 ⁶) Status: Not Started	2011	OASIS
c) Prepare status reports every six months regarding the development of standards for the coordination of transmission service requests across multiple transmission systems (See ¶ 105 ⁷). This annual plan item is tied to Annual Plan Item 2(a)(iii) Status: Not Started	Ongoing	NAESB Office

there is no requirement to convert this calculation to available transfer capability values, we agree with Entergy that this requirement can be met by the transmission provider posting its available flowgate capability values. As to EPSC's argument that Standard 001-15 falls short of the goals of Order No. 890, we find that, with the exception of Standard 001-15.1.2, compliance with Standard 001-15 provides all of the information required by Order No. 890. However, Standards 001-14.1.3 and 001-15.1.2 permit transmission providers to post an available transfer capability change narrative within five business days of meeting the criteria under which a narrative is required to be posted. In Order No. 890, the Commission rejected calls for delays prior to posting data and required posting as soon as possible. We do not find the NAESB standard meets this criterion and therefore decline to incorporate Standards 001-14.1.3 and 001-15.1.2 by reference. Transmission providers must post their narratives as soon as feasibly possible. Posting within one day would appear in most cases to be reasonable.

⁶ 72. However, we reiterate here the Commission's finding in Order No. 890 that a transmission provider is permitted to extend its right to reassess the availability of conditional firm service. Since the Version 002.1 Standards do not specifically address this issue, we would ask the industry, working through NAESB, to continue to look at additional business practice standards facilitating a transmission provider's extension of its right to perform a reassessment

⁷ 105. We agree that insufficient progress has been made on this issue. While we acknowledge that development of standards addressing this issue is included in NAESB's 2009 WEQ Annual Plan, we nevertheless urge NAESB to address this issue as soon as possible. Accordingly, we request that NAESB provide the Commission with a status report concerning its progress on this issue every six months, counting from the date this final rule is published in the Federal Register, until NAESB's adoption of the applicable standard(s).



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

NORTH AMERICAN ENERGY STANDARDS BOARD
2010 ANNUAL PLAN for the WHOLESALE ELECTRIC QUADRANT
as Approved By the NAESB Board of Directors on December 10, 2009 With Redlined Changes from WEQ Leadership

PROVISIONAL ITEMS

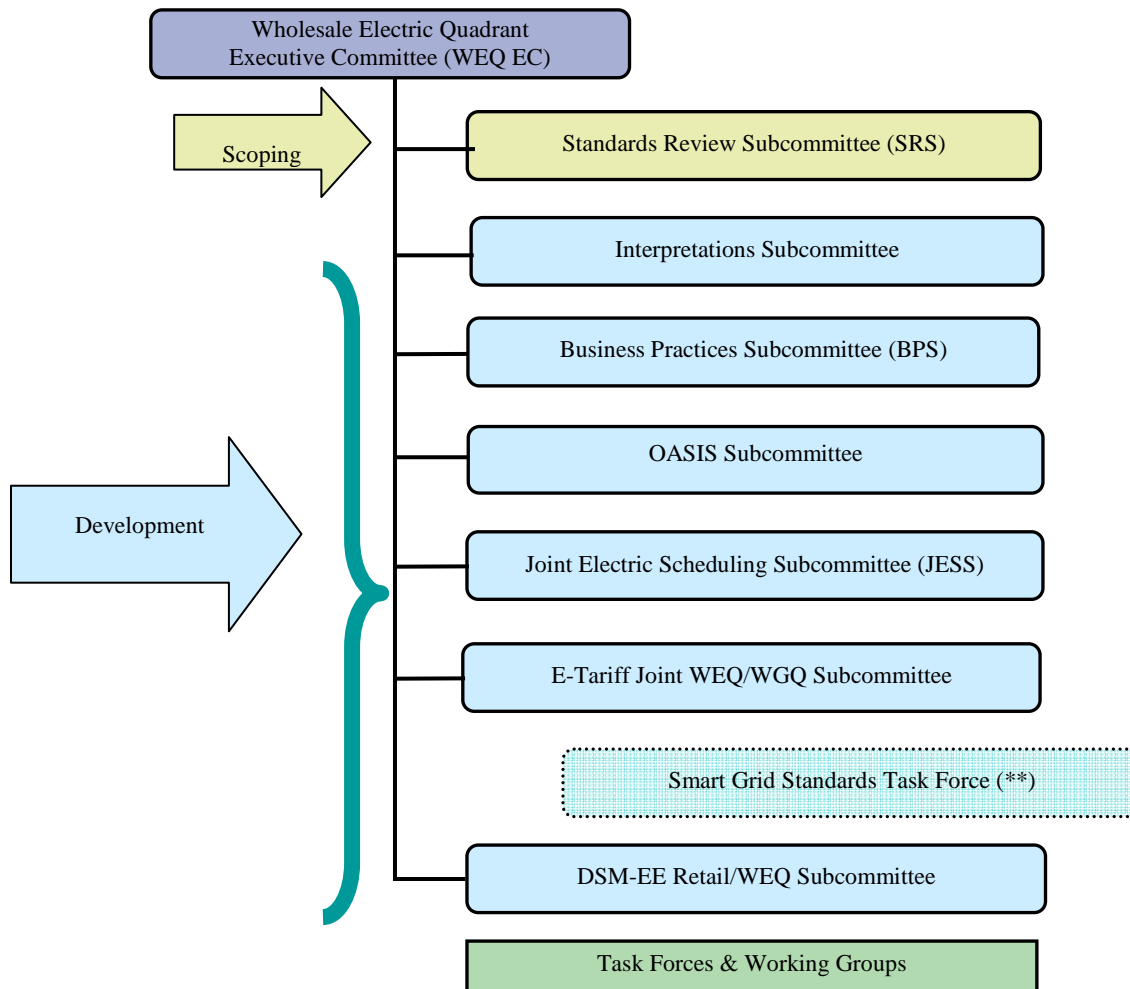
- 1 Develop and or modify business practices related to support of NERC effort on the NERC Resources and Transmission Adequacy (Project 2009-05 Resource Adequacy Assessment).
- 2 Develop business practices for allocating capacity among requests received during a submittal window Order 890-A ([Docket Nos. RM05-17-001, 002 and RM05-25-001, 002](#) - Paragraph 805).
- 3 Determine any needed NAESB action in support of the Interchange Distribution Calculator (IDC) and develop any necessary standards.
- 4 Prepare recommendations for future path for TLR (equity concerns) in concert with NERC, which may include alternative congestion management procedures⁴. Work on this activity is dependent on completing 2010 WEQ Annual Plan 1.a (Parallel Flow Visualization/Mitigation for Reliability Coordinators in the Eastern Interconnection).
- 5 Develop complementary standards that align with NERC Project 2008-01 Voltage and Reactive Control, for which a white paper is expected after the SAR is authorized to proceed by the NERC Standards Committee.
- 6 Develop NAESB business practices as needed to complement NERC reliability standards for FAC-012 and FAC-013.
- 7 Determine NAESB action needed to support FERC Action Plan for Smart Grid Technology.
- 8 Develop business practice standards for cap and trade programs for green house gas
- 9 Conduct assessment to determine if Electric Industry Requirements documented in WEQ-011 Gas / Electric Coordination should be considered reliability requirements and transition to NERC.
- 10 Develop needed business practice standards for organization/company codes for NAESB standards – and address current issues on the use of DUNs numbers. Common code usage is linked to the transition of the Registry from NERC to NAESB.
- 11 Support the second phase of retail development of model business practice standards for demand response programs (Shown as Item 3e on the Retail 2010 Annual Plan).
- 12 Review the need for, and develop standards where appropriate, in response to issues raised by FERC's National Action Plan on Demand Response.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

WHOLESALE ELECTRIC QUADRANT EXECUTIVE COMMITTEE AND SUBCOMMITTEE STRUCTURE



NAESB WEQ EC and Subcommittee Leadership:

Executive Committee: Kathy York (WEQ EC Chair) and Alan Johnson (WEQ EC Vice Chair)

Standards Review Subcommittee: Narinder Saini, Ed Skiba

Interpretations Subcommittee: Robert Schwermann

Business Practices Subcommittee & Task Forces: Jim Busbin (TLR), Ed Skiba

Open Access Same Time Information System (OASIS): Paul Sorenson, J.T. Wood, Marcie Otondo

Joint Electric Scheduling Subcommittee (JESS): Bob Harshbarger (NAESB), Jim Hansen (NERC)

e-Tariff Joint WEQ/WGQ Subcommittee (e-Tariff): Jane Daly (WEQ), Keith Sappenfield (WGQ)

DSM-EE REQ/WEQ Subcommittee: Ruth Kiselewich and David Koogler (Retail), Roy True and Paul Wattles (WEQ)

(**) The Smart Grid Task Force 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 UCAlug, among others. Direction may be given from NIST, DoE or FERC and the group reports to the NAESB Board Smart Grid Strategic Steering Committee. The group is chaired by Brent Hodges, Joe Zhou, Wayne Longcore and Robert Burke.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
Home Page: www.naesb.org

End Notes WEQ 2010 Annual Plan:

¹ Dates in the completion column are by end of the quarter for completion by the assigned committee, sub-committee or task force. The dates do not necessarily mean that the standards are fully staffed to be implementable by the industry, and/or ratified by membership. If one item is completed earlier than planned, another item can begin earlier and possibly complete earlier than planned. There are no begin dates on the plan.

² The assignments are abbreviated. The abbreviations and sub-committee structure can be found at the end of the annual plan document.

³ Energy efficiency may be a wholesale product, such as capacity. Energy efficiency in retail markets may be from individual energy efficiency measures at the project level or a portfolio of projects that make up an energy efficiency program.

⁴ For additional information, please see comments submitted by PJM and MISO for this Annual Plan Item:

http://www.naesb.org/pdf3/weq_aplan102907w1.pdf.



North American Energy Standards Board

1301 Fannin, Suite 2350, Houston, Texas 77002
 Phone: (713) 356-0060, Fax: (713) 356-0067, E-mail: naesb@naesb.org
 Home Page: www.naesb.org

December 10, 2009

TO: NAESB Executive Committee
FROM: Rae McQuade
RE: Schedule of 2010 Meetings

Below is the schedule of 2010 meetings for the Board of Directors, Advisory Council and Executive Committee.

2010 Calendar of Board and Advisory Council Meetings

Date	Meeting	Location
February 13	Advisory Council Meeting	Washington D.C. – Renaissance Washington Hotel (in conjunction with NARUC Winter Meeting)
March 25	Board of Directors	Houston – Marriott IAH
June 24	Board of Directors	Houston – Marriott IAH
September 23	Board of Directors, Meeting of the Members and Strategic Session	Houston – Marriott IAH
December 9	Board of Directors	Houston – Marriott IAH

2010 Calendar of Executive Committee Meetings

Date	Meeting	Location
February 2-4	Executive Committee (WEQ, Retail, WGQ)	Phoenix, AZ hosted by Salt River Project
May 4-6	Executive Committee (WEQ, Retail, WGQ)	Harrisburg, PA hosted by the Pennsylvania PUC
August 17-19	Executive Committee (WEQ, Retail, WGQ)	Colorado Springs, CO hosted El Paso Western Pipeline
October 26-28	Executive Committee (WEQ, Retail, WGQ)	Glen Allen, VA hosted by Dominion

The Retail Executive Committee meetings will be held by conference call and web cast unless otherwise determined by the retail leadership. The Wholesale Gas Executive committee meetings may be changed to only be held as a conference call/web cast dependent on the agenda items.

NAESB Bulletin

January - March 2010

Volume 3, Issue 1

[2010 Retail Annual Plan](#)
[2010 WEQ Annual Plan](#)
[2010 WGO Annual Plan](#)
[NAESB Board of Directors](#)
[NAESB Executive Committee Members](#)
[NAESB Members](#)
[Membership Information](#)
[Copyright Report](#)

2010 Calendar:

February 2010

02/02 - WEQ Executive Committee Meeting (Phoenix, AZ)
 02/02-03 - Joint WGO IR/Technical Meeting (Phoenix, AZ)
 02/03 - Retail Executive Committee Meeting (Phoenix, AZ)
 02/03-04 - WEQ OASIS Meeting (Phoenix, AZ)
 02/04 - WGO Executive Committee Meeting (Phoenix, AZ)
 02/05 - Smart Grid Standards Task Force Conf. Call
 02/11 - WGO BPS Conf. Call
 02/11 - Smart Grid Standards Task Force Conf. Call
 02/13 - NAESB Advisory Council Meeting (Washington, DC)
 02/15 - Holiday - President's Day (NAESB Closed)
 02/16 - WEQ SRS Conf. Call
 02/17 - WEQ OASIS Conf. Call
 02/18 - DSM/EE Retail Response Work Group Conf. Call
 02/23-24 - WEQ BPS Meeting (Houston, TX)
 02/23 - DSM/EE Wholesale /Retail Energy Efficiency Work Group Conf. Call
 02/25 - DSM/EE Wholesale Demand Response Work Group Conf. Call

March 2010

03/02-04 - WEQ OASIS Meeting (Houston, TX)
 03/05 - Retail BPS Conf. Call
 03/10 - NAESB Monthly Update Conf. Call
 03/16 - WEQ SRS Conf. Call
 03/17-18 - WEQ BPS Meeting (Norristown, PA)
 03/23 - WEQ OASIS Conf. Call
 03/23-24 - Joint WGO IR/Technical Meeting (Houston, TX)
 03/24 - NAESB Board Reception & Dinner with Guest Speaker (Houston, TX)
 03/25 - NAESB Board Resources Meeting (Houston, TX)
 03/25 - NASB Board of Directors Meeting (Houston, TX)

April 2010

04/01 - WEQ BPS Meeting (New Orleans, LA)
 04/02 - Holiday - Good Friday (NAESB Closed)
 04/13 - WEQ SRS Conf. Call
 04/13-15 - WEQ OASIS Meeting (Little Rock, AR)
 04/13-15 - Joint WGO IR/Technical Meeting (Colorado Springs, CO)
 04/28 - WEQ OASIS Conf. Call

NAESB Membership Total - 300

Membership by quadrant is:

122 Wholesale Gas Quadrant
 20 Retail Electric Quadrant
 19 Retail Gas Quadrant
 139 Wholesale Electric Quadrant

Update your membership -
 NAESB Mail Subscription
 Services [Click Here](#)

STANDARDS DEVELOPMENT

Parallel Flow Visualization Transmission Loading Relief (PFV – TLR) Standards Development:

The Parallel Flow Visualization Transmission Loading Relief (PFV – TLR) project addresses three issues: (1) the use of static data in Native and Network Load calculation, (2) Reliability Coordinators in Eastern Interconnection lack visualization as to the source and magnitude of parallel flows when they experience congestion, and (3) priorities of generation to load impacts during firm curtailment.

The PFV-TLR will provide a more accurate and efficient means of curtailing electricity using parallel flow visualization to identify how much and what services should be curtailed. In today's environment, the IDC (Interchange Distribution Calculator) uses static data that may not provide as accurate a picture of the electricity flows depending on how much the data has changed since it was processed in the calculator. The data, resident in System Data Exchange (SDX) files, may be refreshed as often as every 20 minutes, or where it is not expected that the data will change, as infrequently as once a day. The project is a collaboration of NERC and NAESB activities, including:

NERC – Developing standards for upload of data on a more frequent basis, targeting every 15 minutes and making needed changes to the IDC.

NAESB – Developing standards to support curtailment activities in the event of system congestion based on (1) classification of generator usage, (2) allocation rules for curtailing, and (3) standardization of firm and non-firm service.

As you can see, this is a key development project for NAESB and demonstrates the strong relationship NERC and NAESB have in joint developments. The PFV-TLR project will continue its efforts into 2011, including (1) NAESB identification of the generation-to-load flows priorities to be collected for the IDC, (2) working with NERC to have the IDC ready to accommodate the increased frequency and additional granularity of the data in the appropriate priorities – firm or non-firm service, (3) a 12-18 month testing by NERC, and (4) any fine tuning of the IDC and priority assignments by both NERC and NAESB resulting from the tests. The IDC testing should begin in November of this year.

Ed Skiba, Consulting Advisor for Midwest ISO and a key leader for this effort, noted that he is hopeful that the NAESB and NERC standards resulting from the project will provide for a more efficient approach for managing congestion in the Eastern Interconnection.

For more information, please go to ([NAESB WEQ BPS Web Page](#)) or contact Denise Rager (drager@naesb.org) to be added to the distribution list.

Network Integration Transmission Services (NITS) Standards Development:

Continuing its support of FERC Order No. 890, the WEQ OASIS subcommittee has had a national discussion focused for the last several months on standards development for Network Integration Transmission Services (NITS), and Marcie Otondo, Regulatory Compliance Advisor for Arizona Public Service Company and a co-leader for the effort, expects to have business practice standards and technical standards to the WEQ Executive Committee in second quarter 2010. The OASIS systems that utilities use to manage the electronic scheduling of wholesale electricity were designed to support point-to-point transmission services and will be revised to support NITS as well – and Paul Sorenson, Vice President of Central Markets Strategy for Open Access Technology International, another co-leader of the effort, noted the considerable number of standards that will be added to NAESB standards WEQ-001, WEQ-002, WEQ-003 and WEQ-013 to support the addition of NITS. J.T Wood, Reliability Standards Project Manager for Southern Company Transmission and the third co-leader of the group, noted that in addition to the considerable body of work to support NITS, accommodating the existing regional differences added complexity to the standards development work. The three co-leaders all expect that the business practices standards under development will add uniformity and transparency for transmission services and provide an overall benefit to the marketplace. Once completed, the business practices standards supporting NITS will be published in Version 002.2 of the WEQ standards, expected in the third quarter 2010. This is a key development effort for the WEQ and one of the more complex standards development activities in support of FERC Order No. 890.

For more information, please go to ([NAESB WEQ BPS Web Page](#)) or contact Denise Rager (drager@naesb.org) to be added to the distribution list.

Click on any underlined text and you can access more detailed reports.

NAESB Bulletin

STANDARDS DEVELOPMENT *(continued)*

Smart Grid Activities: For both the wholesale and retail electricity markets, NAESB has a task force working diligently on four priority action plans (PAP) identified by the National Institute of Standards and Technology. The task force is addressing business practices, information requirements, use cases, actor lists and specifications to support: (1) PAP 3 – Common Price Communication Model, (2) PAP 4 – Common Scheduling Mechanism, (3) PAP 9 – Standard Demand Response and Distributed Energy Resources Signals, and most recently, (4) PAP 10 – Energy Usage Information. There are 13 other PAPs identified, for a total of 17. It is expected for the PAPs 3, 4 and 9, the NAESB task force will vote out the first phase of standards in February, after which work will continue to provide more granularity on the business practices and information requirements in phase 2 of the development. Phase 1 of the development will be provided to several other standards and related groups including OASIS, CalConnect, FIX Protocol and IETF, who will use the work as input to their standards development. As can be seen, the development work requires a number of liaisons with other groups and is iterative in nature.

NAESB development is taking the track of developing retail and wholesale standards in tandem, yet separate, so that as differences between the two markets are identified, they can be correctly reflected in either the wholesale standards or the retail standards. The question of how the standards are to be provided to regulatory bodies – either federal or state, has not been clarified as of yet. As such, NAESB is preparing the typical documentation to provide full transparency and accountability for the decisions made – including participants lists, announcements, agendas, meeting minutes, comments, minority positions, transcripts, standards drafts and all related work papers used to draft the standards, voting records – which can be used to determine how decisions were made, who made them and how issues that were raised during deliberation were addressed. Similarly, the NAESB process and the process for change control of not only the standards but for the process itself is documented and provided. Conversations are underway between NAESB, FERC and NIST on how the NAESB standards will be submitted, and to whom they will be submitted.

For more information, please go to ([NAESB Smart Grid SSD Web Page](#), [PAP03](#), [PAP04](#), [PAP09](#), [PAP10](#)) or contact Denise Rager (drager@naesb.org) to be added to the relevant distribution lists.

Demand-Side Management and Energy Efficiency: The first phase of standards for wholesale and retail electric DSM-EE were adopted in 2009 and addressed the measurement and verification standards supportive of the quantity characteristics of demand response products and services (wholesale) and demand response programs (retail). The subcommittee has separated into several single topic work groups to address market specific development items.

To date, the wholesale work group is addressing phase 2 standards for M&V for demand response products and services, which include guidelines to support additional uniformity in performance

evaluation methodologies for new programs and services, additional technical standards to support the business practice standards already adopted in phase 1, and a review of the glossary to ensure greater consistency between the wholesale and retail markets. The draft work products will be reviewed on February 25 by the wholesale work group.

For retail standards development to support M&V for demand response programs, the basis of the phase 2 development can be found in a review of the comments provided for phase 1. On February 18, the retail group will meet to review the work products drafts.

For energy efficiency, also a joint effort between wholesale and retail electric interests, the effort began in January. The retail work group is taking the lead in drafting standards and their first draft should be reviewed on February 23, and the retail and wholesale development for EE in occurring in tandem. The wholesale effort should begin shortly and will be based on the existing wholesale EE programs in effect today. Roy True, Manager of Regulatory and Market Affairs for ACES Power Marketing and a co-chair of the full subcommittee and the lead for the wholesale phase 2 effort, noted that significant work is underway to further the work products that were created as part of phase 1. He added that he expects both the DR standards and the EE standards to provide support to both the states and the federal agencies as they rely more on DR and EE programs to further their policies.

For more information, please go to ([NAESB DSM-EE Web Page](#), [NAESB DSM-EE Distribution List](#), [NAESB Wholesale Final Action](#), [NAESB Retail Final Action](#)) or contact Denise Rager (drager@naesb.org) to be added to the relevant distribution lists.

Wholesale Gas (FERC Order Nos. 712, 712-A and 712-B) - Promotion of a More Efficient Capacity Release: NAESB efforts to support standards development for FERC Order Nos. 712, 712-A and 712-B have been included in Version 1.9 of the WGQ standards. The initial order, issued in 2008, removed the rate cap on short-term capacity release transactions and allowed for asset management arrangements to manage capacity. These orders significantly impacted the NAESB wholesale gas standards for capacity release transactions, requiring many modifications to the data requirements and data sets themselves. These modifications have been incorporated into version 1.9, which was submitted to the FERC September 2009, pending its consideration. A notice of proposed rulemaking on version 1.9 was issued by the FERC in November of 2009.

For more information, please go to ([NAESB WGO Final Actions](#), [NAESB WGO Version 1.9 FERC Filing](#), [FERC NOPR on NAESB WGO Version 1.9](#)) or contact Denise Rager (drager@naesb.org) for additional information.

NAESB Calendar of Action Items: For an update on current action items please reference the [Calendar of Action Items](#).

NAESB Bulletin

STANDARDS DEVELOPMENT *(continued)*

NAESB Retail 2010 Annual Plans and the Release of Version 1.2: The Retail Gas and Retail Electric Quadrants published twice in 2009, which is unusual for any quadrant. However, after Version 1.1 was published in June, Version 1.2 was published in December to include work completed for support of demand response projects. These two releases provide for extensive additions to model business practices in support of customer choice programs. In the model business practices, state regulatory and regional differences are accommodated such that, when needed, separate standards are developed. In addition to the practices developed to support retail choice, a significant body of work on measurement and verification standards to support retail demand response programs was developed in tandem with similar efforts for the demand response programs operational in the wholesale markets. As the Retail Quadrants move into 2010, the retail annual plan has tasks outlined that continue the work to support demand response and smart grid projects, but is also expanded to include renewables and energy efficiency related development. Continuing to support the customer choice programs, work is outlined in the annual plan for completion of model business practices and technical standards supportive of billing & payment functions and standards that include registration agent model functions. Phil Precht, Management Consultant for Pricing and Regulatory Services for Baltimore Gas & Electric and the incoming 2010 chair of the Retail Electric Executive Committee, noted that as is demonstrated in the annual plans, the retail gas and electric quadrant members have significant standards development work ahead of them that will prove relevant to the efficient operations of the retail markets.

For more information, please go to ([2010 Retail Annual Plan, NAESB Retail Standards Web Page](#)) or contact Denise Rager (drager@naesb.org) to be added to the relevant distribution lists.

OASIS versus OASIS: To add further confusion to the Smart Grid work, there is an acronym that is used and has two totally separate meanings. OASIS, the Open Access Same Time Information Systems, is a term coined by FERC in its regulatory proceedings related to non-discriminatory open access to transmission systems in wholesale electric markets (FERC Order No. 889). OASIS the group – is an acronym for the Organization for Advancement of Structured Information Standards. OASIS is a consortium that drives the development, convergence and adoption of open standards for the global information society. As you can tell - quite different meanings for the same acronym!

To ensure that NAESB and OASIS – the organization stay in sync for Smart Grid standards development and for any other

work that would bring us both together, both organizations have provided reciprocal memberships. The Executive Director of OASIS, Laurent Liscia noted "NAESB has been a valued and extraordinarily effective partner for OASIS in our common quest to create the standards that will usher in the North American Smart Grid. Our two organizations have many values in common, not the least of which are a commitment to innovation and cooperation." We look forward to working with OASIS and with Laurent over the next several years as the Smart Grid becomes a reality.

For more information, please go to ([NAESB WEO OASIS Web Page, FERC Order No. 889 Final Rule issued April 24, 1996](#))

Update on NAESB use of EDI (Electronic Data Interchange) and Capacity Release: Like its predecessor the Gas Industry Standards Board, NAESB continues to support EDI as an electronic communication methodology to transact 57 different business processes identified by the wholesale gas quadrant. As NAESB creates the wholesale gas business practices to support regulatory or market policies, the next step in development is to define the information requirements needed to support the transactions identified in the business practices. Once the information requirements are known – the data and data usage, then the means for communicating the data is needed. In many cases, this electronic means for communicating the data is EDI. It can also be online electronic bulletin boards and web based efforts, XML or flat files. When these standards are completely developed – the business practices, information requirements, and electronic means of communication, NAESB considered the standards “fully staffed.” Fully staffed standards allow companies to completely implement policy or market directions. In this manner, we deliver standards that explain and outline the business practices to support policy or market requirements, we provide the information requirements that allow for uniform communication for the transactions related to the business practices, and we provide the telecommunication protocols and technical mapping needed for uniform electronic transactions – in essence, the full package of requirements for implementation.

For EDI, the 2010 wholesale gas annual plan includes an item to review the need for EDI transactions supportive of capacity release uploads. Jim Buccigross, vice president for 8760, Inc. and the chair of the WGQ Executive Committee, noted that to keep current with market needs, it is reasonable to re-evaluate the EDI transaction sets for possible discontinuation of EDI transactions that are not being utilized, yet consume limited resources to maintain. It is not expected that this item will be completed until fourth quarter 2010. This effort is not intended to affect the current capacity release informational downloads or transactional reports.

For more information, please go to ([2010 WGQ Annual Plan, NAESB WGQ Version 1.9 Capacity Release Manual](#)) or contact Denise Rager (drager@naesb.org) to be added to the relevant distribution lists.

NAESB Bulletin

Wholesale Electric Quadrant Restructuring: In January, the changes to create a new segment in NAESB for the wholesale electric quadrant were completed. For membership in the new segment, Technology & Services, any entity in North America engaged in providing hardware and software applications and technology related services to the North American wholesale electric market is eligible. For the population of the new Technology & Services Segment in the WEQ, the NAESB office is in the process of contacting those who have expressed interest. Should you or your colleagues have interest in membership in this new segment, or in Board or EC seats in this new segment, please contact Denise Rager at drager@naesb.org or 713-356-0060.

For more information, please contact Denise Rager (drager@naesb.org) for additional information.

Membership: At the last meeting of the Board Resources Committee, Mr. R. Scott Brown of Exelon Corporation and the chair of the committee, asked board members to get involved in outreach to companies involved in demand side management (DSM), smart grid, wind and solar projects, as well as to their colleagues who may not be NAESB members. Board members can forward contact information for prospective members to the NAESB office (Denise Rager at drager@naesb.org or 713-356-0060) for the distribution of membership information packets.

The wholesale electric quadrant of NAESB is seeking members for the new technology & services segment, which allows technology companies currently working with NAESB on smart grid activities to join NAESB. Mr. Brown noted that he is pleased about the addition of the new technology and services segment, looks forward to the success of the wholesale electric quadrant in adding new members to this segment, and feels sure that they will soon be in a position to elect representatives to the NAESB Board of Directors and Executive Committee. If you know of companies that would be interested in membership in NAESB, please contact Denise Rager, drager@naesb.org or 713-356-0060.

For more information, please go to ([NAESB Members, Membership Information](#)) or contact Denise Rager (drager@naesb.org) for additional information.



Copyright/NAESB Standards Access: As everyone should be aware, NAESB copyrights its work products – a practice used by most standards organizations. The copyrights are considered a subset of intellectual property law, and NAESB retains the rights to publication, reproduction, display and distribution. NAESB members may obtain materials free of charge as part of their benefits, but these benefits do not extend to their agents, affiliates or subsidiaries without prior approval from the NAESB office. Damages for copyright infringement can be significant, including penalties of \$100,000+, injunction, impounding of materials, seizure of property, and award of punitive damages. At the same time, NAESB is very liberal in its policies towards sharing information, and has granted waivers to regulators and educational institutions depending on the intended use. There is also a process by which anyone can request a three day waiver to review the work products, as they consider whether they should purchase them. NAESB's control of copyrighted material provides a small revenue stream which offsets some of its standards development expenses and thus those of its members in the creation of the work products. More importantly, as entities must come to NAESB for its standards material, it assures that they will have access to the most current version.

For more information, please go to ([Copyright, NAESB Material Order Form](#)) or contact Denise Rager (drager@naesb.org) for additional information.

Advisory Council: The NAESB Advisory Council will meet on February 13 in Washington, DC at the Renaissance Hotel. The meeting is open to all interested parties. During the meeting, a review of development activities and a review of the development process itself will be covered.

For more information, please go to ([Advisory Council](#)) or contact Denise Rager (drager@naesb.org) for additional information.

NAESB Primers and Training Courses: Please monitor the [NAESB Primers and Training Courses](#) web page for scheduling of upcoming courses.



Certification: NAESB has certification programs defined for the wholesale gas quadrant that have been in use for several versions of the standards. The NAESB WGQ certification program is fully optional and any entity can make their programs available for third party certification to insure that a software solution is compliant with a version of the NAESB WGQ standards. Southern Star, for example, has undertaken V 1.8 certification for their EBB and congratulations are in order. Doug Field, Southern Star Central Gas Pipeline, noted that “the NAESB business standards play a significant role in Southern Star’s FERC compliance. Having a third party audit our NAESB compliance, training our employees on the current version of those standards, and successfully certifying our Customer Services Innovations (CSI) website as NAESB compliant are three tangible steps we have taken to improve our compliance, raise our overall awareness of the NAESB standards and visibly demonstrate our commitment to NAESB compliance.” Meanwhile, the compliance requirements for version 1.9 are nearing completion, and soon certification for version 1.9 will also be available for standards support for web site, data, and EDM certification. Version 1.9 is the subject of a FERC notice of proposed rulemaking. Jim Buccigross, vice president for 8760, Inc. and the chair of the WGQ Executive Committee, noted that the WGQ certification program is a method which allows companies to demonstrate and certify compliance with the applicable NAESB standards.

For more information, please go to ([NAESB Certification Web Page](#)) or contact Denise Rager (drager@naesb.org) for additional information.