

North American Energy Standards Board

December 9, 2016

{ United States-Mexico Energy Forum
{ “Opportunities and Challenges”

Origin and Scope:

- The North American Energy Standards Board (NAESB), originally the Gas Industry Standards Board (GISB), serves as an industry forum for the development and promotion of standards which will lead to a seamless marketplace for wholesale and retail natural gas and electricity, as recognized by its customers, business community, participants, and regulatory entities.
- GISB est. 1994 / NAESB est. 2001
- Strong relationship with the Federal Energy Regulatory Commission (FERC), National Association of Regulatory Utility Commissioners (NARUC), Department of Energy (DoE), North American Electric Reliability Corporation (NERC), Department of Commerce (DoC), National Institute of Standards and Technology (NIST), National Petroleum Council (NPC) and various state regulators.

Standards and Other Products:

- Wholesale Electric Market Standards: ~2,000
 - OASIS, Cybersecurity, Energy Efficiency and Demand Response, Smart Grid, NERC Supportive
- Wholesale Gas Market Standards: ~600
 - Nominations, Confirmations, Invoicing, Gas Quality, Gas-Electric Coordination, Contracts
- Retail Market Standards: ~1,400
 - EDI – Billing and Payment, Dispute Resolution, Customer Enrollment, Drop and Information change, Energy Efficiency and Demand Response, Smart Grid
- Other Products
 - The Electric Industry Registry
 - e-Tag Functional Specification
 - Common Coding System for Interstate Pipelines

Organization by Quadrant and Segment:

Wholesale Gas – 5 Segments

1. End Users
2. Local Distribution
3. Pipelines
4. Producers
5. Services

Wholesale Electric – 7 Segments

1. End Users
2. Distribution/LSE
3. Transmission
4. Generation
5. Marketers/Brokers
6. Independent Grid Operators/Planners
7. Technology and Services

Retail Markets – 4 Segments

1. Retail Electric End Users/Public Agencies
2. Retail Gas Market Interests
3. Retail Electric Utilities
4. Retail Electric Service Providers/Suppliers

Standards Development Process:

- The process followed is ANSI accredited -- ANSI accredits organizations as Standards Development Organizations (“SDO”) based on their adherence to ANSI’s cardinal principles of standards-setting.
- The process is open and any interested party can participate and contribute to the standards development regardless of membership in NAESB.
- Non-member Meeting Participation Fee

How do the members create the standards?

- We average 30-35 meetings or calls per month
- We average more than 700 participants by phone per month (GEH had more than 300 per meeting!)
- We offer web casting to assist in the conference calls
- All participants, regardless of NAESB membership status, are welcomed to the meetings and subcommittee efforts

Voluntary Standards and Relationship to Energy Policy:

- From the organization's perspective, all standards are voluntary and may be provided to regulatory agencies as status reports as they are published.
- Regulatory agencies may choose to adopt standards or model business practices, but NAESB will not advocate such action.
- The organization will not monitor for compliance, provide performance measures for compliance, nor will it define sanctions for non-compliance.
- NAESB does not set policy.
- We defer to state and federal agencies in determining policy.
- Our work products are intended to focus on the implementation of policy decisions by providing a road map for the interactions between the various parties.

NAESB Coordination with CRE

➤ Contracts

- Additional standardization of special terms used in existing contracts that support the cross-border purchase and sale of natural gas may be helpful and could support the release of PEMEX contracts.

➤ Nomination Processes

- Education and/or standardization in the processes used to nominate and confirm gas in the U.S. and Mexico would be helpful for companies engaging in cross border transactions without prior experience.

➤ Grid Codes

- Sharing information about how common locations codes for pipeline points are used in the U.S. and Mexico

NAESB Current and Planned Activities

- NAESB Mexican Addendum to the Base Contract for the Purchase and Sale of Natural Gas
 - Initiated in December 2016 by addition to annual plan
 - Completion Date: 2017
- Translation of the NAESB Base Contract for the Purchase and Sale of Natural Gas
- Translation of the NAESB Credit Support Addendum

Moving Forward – Opportunities to Avoid Challenges

- Gas-Electric Coordination
 - Capacity and Efficiency
 - Market Synchronization
- Renewable Integration
- Physical and Cyber Security

How To Monitor Activities:

- Monthly Update Calls: https://www.naesb.org//monthly_update.asp
- Review updated annual plans quarterly: <https://www.naesb.org//materials/gov.asp>
- Review Current board minutes : <https://www.naesb.org//weq/default.asp>
- Sign up for email distribution notices on subcommittees of interest:
<https://www.naesb.org//EmailBroadCaster/NAESBLogin.aspx>
- Call NAESB office (713-356-0060, naesb@naesb.org)