

North American Energy Standards Board

What it is and its role in the Natural Gas Industry

Donna Scott

CrossCountry Energy
1331 Lamar
Houston, Texas 77010

INTRODUCTION

The North American Energy Standards Board (NAESB) was incorporated in 1994 as the Gas Industry Standards Board. The organization is an industry-led effort to develop business practice standards, communications and e-commerce protocols for the natural gas industry. The Gas Industry Standards Board was expanded in January 2002 to include the wholesale gas and electric and retail gas and electric sectors of the energy industry.

MISSION and GUIDING PRINCIPLES

The objectives of NAESB are to propose and adopt voluntary standards and model business practices designed to promote more competitive and efficient natural gas and electric service, as such standards apply to electronic data interchange (EDI) record formats and communication protocols and related business practices that streamline the transaction processes of the natural gas and electric industries.¹

The following principles guide NAESB's activities:

Independence. NAESB is an independent body. Though it may have informal liaisons with trade associations, other standard setting organizations, and government agencies, it is a fully independent organization.

Openness. NAESB conducts its meetings out in the open. Meetings, agendas, and items set for discussion and/or vote are publicly noticed, and interested parties, regardless of whether they are NAESB members, have the opportunity to participate.

Voluntary. Participation in NAESB is voluntary and adherence to its standards, from NAESB's perspective, is also voluntary.

Balance of Interest. Voting with respect to governance, standards, and operating procedures provides for balance among industry quadrants and segments so that no interest group or groups have undue influence over any decision.

Inclusivity. All interested parties have the opportunity to participate in and join NAESB. All participants should be associated with a segment and quadrant.

Consensus-Based Decisions. NAESB's voting rules encourage consensus-based decisions. To pass, standards need supermajorities and minimum votes per segment. This helps to ensure that quadrant and segment interests are protected.

No Advocacy. NAESB does not take advocacy positions on any of its standards.

Industry Driven. NAESB is industry driven. Any interested party may propose standards.

Develop Practices, Not Policy. NAESB's committees, subcommittees, and task forces avoid creating policy in their standards development activities absent a request from the Board.

Incorporate Best Practices. To the extent reasonable, NAESB standards reflect the best practices among existing and reasonable anticipated policies and procedures.

Broad Applicability. Standards are structured, to the extent reasonable, to be applicable to both the electric and the natural gas industries, and the industries work together to develop joint standards where appropriate. However, where operating requirements dictate the need for different approaches, standards are established separately by quadrant(s).

ANSI Accreditation. NAESB is an accredited American National Standards Institute Standards Development Organization.²

DESCRIPTION of the ORGANIZATION

To understand the standards setting process, you need a working knowledge of the organization itself and the development process. The organization structure is comprised of four quadrants that consist of segments that represent the interested parties in that quadrant. The Wholesale Gas Quadrant is organized into five segments represented by end users, local distribution companies, pipelines, producers and services. The Wholesale Electric Quadrant has five segments represented by end users, distribution, transmission, generation, and marketers/brokers. The Retail Gas and Electric Quadrants each have four segments represented by end users, distributors, service providers and suppliers. Each segment of the wholesale gas and electric quadrants elect five members of their segment to the Board of Directors and five members to serve on the Executive Committee. The retail gas and electric quadrants elect four members of their segment to the Board of Directors and four members to serve on the Executive Committee. The NAESB Board of Directors and Executive Committee have 95 members each. The whole organization follows the founding principles, voting requirements and process for developing standards. The quadrant specific

¹ NAESB Certification of Incorporation, Article II, Section 1.

² Bylaws of NAESB, Article II, Section 2.2 (b).

governance determines the segment makeup, pace for standards development and which standards apply to them.

STANDARDS DEVELOPMENT PROCESS

Each year the quadrants develop annual plans that lay the groundwork for subcommittees. Members and interested industry participants determine scope and priority of standards work by quadrant. The quadrant annual plans are prepared and submitted to the Board for approval. The quadrants only work on standards development that are pursuant to the annual plan or are submitted to NAESB as a request for standardization and found to be within scope and assigned to the appropriate subcommittee. The annual plans typically include high-level topics for standards development and can reflect request from state and federal agencies. The Executive Committee Chairman gives annual plan updates to the Board quarterly.

The business subcommittees of each quadrant utilize a “balanced” segment voting process to forward recommendations on standards development. The participants in the subcommittees are not required to be NAESB members. When work has been completed on a request or annual plan item the recommendations is posted for an industry comment period and then submitted to the Executive Committee for vote. The Executive Committee can approve, fail or send the recommendation back to committee for further consideration. If the recommendation passes the Executive Committee it is sent to the appropriate NAESB membership for ratification. If the recommendation is ratified by the membership it is incorporated into the standard related manuals.

The Wholesale Gas Quadrant has over 500 business practice standards for nominations, flowing gas, invoicing, capacity release and electronic delivery mechanism. During the past ten years the gas industry has standardized the gas day, nomination deadlines and created a standard base contract for short-term sales and purchases of natural gas. Information standards have been implemented to organize information into data elements and code values to be used for EDI, flat file transmissions and interactive web sites. Technical standards include EDI implementation to transfer standardized information from one trading partner’s computer to another trading partner’s computer. Protocols have been developed to use the Internet both for transferring standard files of information and for interactive web sites that display and process standard information. Security standards for encryption of standardized information have been developed for sending and receiving information across the Internet.

For 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 the standards. The Federal Energy Regulatory Commission has required pipelines to incorporate most of the wholesale gas standards into their pipeline tariffs.

MEASUREMENT STANDARDS

To date, NAESB WGQ has developed two measurement data sets that parties can use to electronically exchange measurement information. The data sets are located in the NAESB WGQ Flowing Gas Related Standards. The Measurement Information data set contains a subset of the information that has traditionally been considered a measurement statement. The data set is designed to provide gas measurement information to the operator and other parties at a metering location. The measurement information statement reflects volume and energy quantities and adjustments for a reporting period. The statement provides sufficient information for operational quantity confirmation and determination of custody transfer quantity necessary for invoicing. The Measured Volume Audit Statement contains gas component data that is used for calculation and audit purposes. There are two detail sections of the statement. The first identifies the physical meter characteristics of each meter at a station. The second detail identifies the flowing gas at each meter at a station.

The following NAESB WGQ standards apply specifically to measurement:

- 2.3.7 the cutoff for the closing of measurement is 5 business days after business month.
- 2.3.8 Measurement data available upstream of aggregated points should be sent to the allocating party and used to allocate the aggregated volume back to the upstream points.
- 2.3.9 Standardize the reporting basis for Btu as 14.73 psia and 60 degrees F.
- 2.3.10 For reporting purposes, BTU conversion factors should be reported to not less than 3 decimal places and Pressure Base conversion factors should be reported to not less than 6 decimal places. For calculation purposes, not less than 6 decimal places should be used for both conversion factors.
- 2.3.11 For treatment of measurement prior period adjustments, treat the adjustment by taking it back to the production month. A meter adjustment becomes a prior period adjustment after the fifth business day following the business month.
- 2.3.12 For reporting measurement prior period adjustments, report it with the restated line item with new total quantity for the day and the month.
- 2.3.13 Estimate missing or late measurement data and treat actual as a prior period adjustment, with the measuring party to provide the estimate.

2.3.14 Measurement data corrections should be processed within 6 months of the production month with a 3-month rebuttal period. This standard shall not apply in the case of deliberate omission or misrepresentation or mutual mistake of fact. Parties' other statutory or contractual rights shall not otherwise be diminished by this standard.

MEASUREMENT REQUESTS IN PROCESS

Currently the NAESB WGQ Business Practice Subcommittee is working on request R03035. The request has three sections and the NAESB Board has added part A to the WGQ 2004 Annual Plan. The request is to establish standards relating to gas quality specifications and measurement, as follows:

- A. Establish web-based reports for tracking all physical and chemical properties of natural gas defined in pipeline tariffs, including timelines for reporting.
- B. Develop a uniform process, including the underlying assumptions and methodologies, for determining gas quality specifications from measured data.
- C. Examine the need to establish gas quality specification standards taking into consideration, (i) the specification needs of end users and providers of service to end users, and (ii) sources of supply (e.g. land-based, the Gulf, LNG). Draft such standards as appropriate.

Portion B and C of this request have been deferred. The Natural Gas Council has established two working groups to:

1. Define hydrocarbon dew point measurement processes and create implementation protocols.
2. Define gas interchangeability methods and define a basis for how to select and apply.

Another request of interest is R03023. This request is a proposal for the development of XML as a new industry standard for exchange of natural gas custody transfer measurement data. The WGQ Business Practice Subcommittee will be working on this request at a future date. Several industry parties have expressed an interest in this electronic delivery methodology.

CONCLUSION

This year, NAESB celebrates its 10-year anniversary. The NAESB WGQ has streamlined many of the gas industry business processes to make information across the grid more timely, accurate and accessible. But, more work needs to be done to integrate the energy grid. With the expansion of the NAESB organization and the current emphasis on interchangeability and reliability it is becoming apparent that coordination efforts between the natural gas and electric markets and the procedures and services by which they interact will undergo changes in the near future. I believe that NAESB will be

instrumental in the development of standards for the energy market.

HOW TO PARTICIPATE

For more information about the NAESB organization go to www.naesb.org. The site is easy to navigate and includes an email information distribution system that allows interested parties to receive e-mail messages from the NAESB office about upcoming meetings and important documents. This is an easy way to stay informed on the activities within a quadrant that you may be interested in.