March - July 2023 Volume 16, Issue 1

2023 Retail Annual Plan 2023 WEQ Annual Plan 2023 WGQ Annual Plan

NAESB Board of Directors

NAESB Executive Committee Members

NAESB Members

Membership Information

Copyright Report

2023 Calendar

August

- 8/8 WEQ SRS Call
- 8/9 WEQ CISS Call
- 8/9 RMQ ESPI Call
- 8/10 WGQ Executive Committee Call
- 8/14 WEQ BPS Call
- 8/15 WEQ OASIS Subcommittee Call
- 8/23 NAESB Update Call
- 8/24 WGQ BPS Call
- 8/29 Board Revenue Committee Call
- 8/30 WEQ CISS Call

September

- 9/4 Holiday Labor Day
 - (NAESB Closed)
- 9/7 NAESB Board of Directors Meeting
- 9/11 WEQ BPS Call
- 9/12 Understanding NAESB Contracts
- 9/13 WEQ SRS Call
- 9/14 WGQ Contracts Call
- 9/26 WEQ OASIS Call

October

- 10/4 Annual Plan Subcommittees Calls
- 10/9 Holiday Indigenous Peoples' Day (NAESB Closed)
- 10/18 NAESB Update Call
- 10/19 NAESB 101 Webinar
- 10/25 WEQ Executive Committee
- 10/25 WEQ OASIS Call
- 10/26 RMQ Executive Committee
- 10/26 WGQ Executive Committee

Gas-Electric Coordination: NAESB is pleased to announce the release of the NAESB Gas Electric Harmonization (GEH) Forum Report on July 28, 2023, which was submitted to FERC Chairman Willie Phillips and Jim Robb, President and CEO of NERC, on the same day. As described in a recent NAESB press release, the NAESB GEH Forum Report offers twenty recommendations intended for consideration by industry participants, FERC, the National Association of Regulatory Utility Commissioners (NARUC), state public utility commissions, and/or applicable state authorities, and the U.S. Department of Energy (DoE) to improve the reliability of the natural gas infrastructure as necessary to support the bulk electric system and to address the recurring challenges stemming from natural gaselectric interdependency. The recommendations for action included in the report and voted on by GEH Forum participants are intended to address a number of issues included in Key Recommendation 7 of the FERC, NERC, and Regional Entity Staff Report on the February 2021 Cold Weather Outages in Texas and the South-Central United States as well as other issues identified through the GEH Forum process. Specifically, recommendations focused on actions that could improve information sharing, including through utilization of an existing industry tool developed by Argonne National Laboratories, encourage weatherization of infrastructure, provide additional transparency in the intrastate markets, and improve synchronization between the gas and electric markets, among many others.

This effort was undertaken in response to the July 29, 2022 request of then FERC Chairman, Richard Glick and Mr. Robb that NAESB establish a forum to address Key Recommendation 7 of the FERC and NERC Report on Winter Storm Uri. Over the last year, the NAESB GEH Forum met fourteen times and garnered participation from 741 individuals representing more than 370 different organizations from all segments of the industry. Hundreds of recommendations for potential actions were suggested throughout the meetings and comment periods, all of which were captured in the publicly available record of the GEH Forum activities and included in the report. Throughout the process, NAESB received 145 sets of comments from 68 different entities. NAESB would like to thank the Chairs of the NAESB Gas Electric Harmonization Forum NAESB Advisory Council members Robert Gee, Dr. Sue Tierney, and Pat Wood, III, and industry participants that attended the meetings and/or participated in the comment periods and voting.

NAESB has undertaken multiple efforts over the last twenty years that were intended to strengthen coordination between the two markets. Collaboration has never been more critical, as reliance on natural gas as a fuel source for electric generation has intensified and the interdependencies of the two markets have continued to grow.

Green Button/Energy Services Provider Interface (ESPI): Per regulations adopted by Ontario in 2021, jurisdictional electric and gas utilities within the province will be required to implement Version 3.3 of the NAESB Energy Services Provider Interface (ESPI) Standards by November 1, 2023. The NAESB ESPI Standards serve as the foundation for the Green Button initiative to provide user-friendly access to retail customer energy usage information and facilitates the ability of utilities to provide the information to third-party applications with customer approval. By defining the communication protocol and technical framework that enables the customer authorization and data exchange, the ESPI Standards allow customers to better understand their energy usage information and make informed decisions regarding energy consumption.

Like other NAESB business practice standards, the NAESB ESPI Standard is updated by the industry from time-to-time to ensure the standards continue to meet market needs. The latest revisions, adopted by the RMQ Executive Committee in March 2023, provide clarifying information regarding the use of data elements and data flows. This October, the RMQ Executive Committee anticipates adopting a recommendation approve by the ESPI Task Force to update cybersecurity aspects of the standard. The proposed revisions will strengthen cybersecurity protections by incorporating more secure communication and encryption methodologies and aligning security requirements with other cybersecurity guidelines. Additionally, during its upcoming October 26, 2023 meeting, the RMQ Executive Committee will consider revisions intended to clarify the use of data elements and data flows. All changes adopted by the RMQ Executive Committee will be incorporated into the NAESB ESPI Standards and included within the Version 4.0 of the RMQ Model Business Practices publication anticipated to be released in the fourth quarter.

Distributed Energy Resources and Battery Storage: To promote greater consistency in market interactions and communication exchanges by grid-edge resources such as distributed energy resources and batteries, Version 004 of the NAESB WEQ Business Practice Standards includes for the first time the WEQ-025 Grid Services Supporting Wholesale Electric Interactions Business Practice Standards. Use of the technology-neutral framework established by the standards can assist in the identification of the types of market services a resource may be able to provide, as well as support more efficient communications between market participants offering services and system operators. Additionally, the standards can enable easier comparison by regulators of market information regarding the use of grid services across multiple jurisdictions.

Developed by the WEQ Business Practices Subcommittee (BPS) over the course of twelve meetings, this standards effort was undertaken in response to a request submitted jointly by the U.S. Department of Energy (DoE), Lawrence Berkeley National Laboratory, and Pacific Northwest National Laboratory to support the DoE Grid Modernization Laboratory Consortium activities regarding distributed energy resources. The new standards identify six categories of operationally-based grid services for the wholesale market: energy grid service, reserve grid service, regulation grid service, frequency response grid service, voltage management grid service, and blackstart grid service. For each category of grid service, the standards also describe the types of attributes which may be used by a system operator to define the unique requirements for services within their markets, such as location, timing, and performance determinations. Along with the wholesale electric standards, the request also proposed the development of similar standards applicable to the retail electric market. As identified in the request, standards that create a technology-neutral, service-oriented framework of distributionlevel services will provide a foundation to support the deployment of distributed energy resources by emerging retail markets. In April, following the conclusion of the WEQ standards development effort, the RMQ BPS held an initial planning meeting and discussed the examination of use cases from a retail perspective and leveraging the new WEQ-025 Business Practice Standards as a drafting template.

Helpful links on the NAESB Home Page:

- NAESB Bulletin
- What's Hot
- NAESB Standards and Implementation

WEQ Activities Supporting OASIS and e-Tag Transactions: On the heels of the industry implementation of WEQ Version 003.3, the WEQ OASIS Subcommittee has undertaken an effort to evaluate, and modify as necessary, the WEQ OASIS Business Practice Standards. As was done after the implementation of WEQ Version 003.2, the subcommittee participants are evaluating the operational experiences of industry participants to determine if any revisions are required to ensure the standards function as intended. During its August 15th and September 26th meetings, the subcommittee will discuss potential revisions to the standards concerning the customer confirmation time limits for resales. In a separate effort, the WEQ Coordinate Interchange Scheduling Subcommittee is in the process of developing modifications to the NAESB e-Tagging Functional Specification. As the specification describes the technical requirements to facilitate e-Tagging transactions, the subcommittee participants are meticulously reviewing the text not only to ensure it is supportive of the NAESB Business Practice Standards and the NERC Reliability Standards, but also to incorporate best practices in cybersecurity, where needed. Spurred on by this effort, NAESB received an industry request for standards development that proposes modifications to the WEQ-004 Coordinate Interchange Business Practice Standards. In response, the WEQ CISS voted out a recommendation providing clarity with regard to ramp times for e-Tagging. The recommendation will be considered by the WEQ Executive Committee during its October 25, 2023 meeting.

WEQ Version 004 Publication: On July 31, 2023, NAESB released Version 004 of the WEQ Business Practice Standards publication. That same day, an informational filing regarding the publication was submitted by NAESB to FERC. The new version of the WEQ standards incorporates over four hundred new and revised standards resulting from twenty-seven final actions and ten minor corrections approved by the WEQ between April 2020 and July 2023. These include standards developed in response to FERC Order Nos. 676-I and 676-J as well as modifications to complement the NERC Reliability Standards. Additionally, the publication contains the compilation of cybersecurity standards into the WEQ-024 Cybersecurity Business Practice Standards, the new WEQ-025 Grid Services Supporting Wholesale Electric Interactions Business Practice Standards, and the new NAESB Base Contract for Sale and Purchase of Voluntary Renewable Energy Certificates. Many thanks go to all members and participants who provided their expertise as these standards were developed. As you may recall, Version 003.3 of the NAESB WEQ Business Practice Standards was published and filed with the Commission on March 30, 2020. The FERC incorporated Version 003.3 by reference into its regulations on May 20, 2021 through FERC Order No. 676-J Standards for Business Practices and Communication Protocols for Public Utilities. Page 2

NERC Coordination: NAESB and NERC leadership ensure that the two organizations remain coordinated in the development of commercial business practice standards and reliability standards for the wholesale electric industry. Discussion topics between the staff members include the NAESB Electric Industry Registry (EIR) and the NAESB and NERC standards development planning processes, among other topics.

As there are several applications that utilize information published by the NAESB EIR, NAESB staff is currently coordinating with NERC staff to determine if the use of data housed in the NAESB EIR could enhance NERC automated data collection processes. The NAESB EIR serves as the central repository for information utilized by the wholesale electric industry to support commercial transactions. The registered information includes data relevant to scheduling and transmission management operations, as well as the individual entity registrations that are categorized by market functionality, such as balancing authorities and transmission service providers.

In a separate effort, on August 8th, in recognition of the importance of harmonization efforts between the two organizations, the WEQ Standards Review Subcommittee (SRS) conducted an annual review of the NERC Reliability Standards Development Plan (RSDP). This year, the subcommittee provided feedback to the NAESB Managing Committee on several of the current and upcoming NERC projects listed in the NERC 2024-2026 RSDP that could affect the NAESB WEQ Business Practice Standards.

Outside of the annual review of the RSDP, the WEQ SRS continues to monitor relevant NERC projects throughout the year. Currently, the subcommittee is following the NERC modifications to the definition for ACE Diversity Interchange and the project addressing Extreme Cold Weather Grid Operations, Preparedness, and Coordination, among other projects.

Distributed Ledger Technologies: This year, NAESB has continued to remain active in areas of standards development to facilitate the use of the NAESB Base Contract and its addendums on distributed ledger technologies. On August 10th, the WGQ Executive Committee will consider the technical implementations to support the use of the NAESB Certified Gas Addendum (NAESB CG Addendum) and the NAESB Renewable Natural Gas (RNG) Addendum to the *NAESB Base Contract for the Sale and Purchase of Natural Gas* (NAESB Base Contract) with distributed ledger technology.

Following a two-year standard development process, in 2020, the WGQ ratified an initial set of technical standards to define requirements to support the digitization of the NAESB Base Contract, enabling the contract to be traded and recorded utilizing a distributed ledger. With the support of the DoE, Tennessee Valley Authority and its selected trading partner engaged in an implementation test utilizing the NAESB Base Contract technical implementation standards to replicate two hundred and twenty-eight trades over the course of eleven months on a distributed ledger. A report on the implementation test was provided to the DoE describing the potential benefits that may be realized by utilizing blockchain technology to settle trades over traditional manual accounting and reconciliation processes for those same transactions. Specifically, increased cybersecurity of the transactions as well as efficiencies in settlement process were identified, and the report described how these enhancements to the trading processes may impact and improve market agility and liquidity. Now, a second phase of the test is underway to evaluate the impact of trading certified natural gas utilizing the NAESB Certified Gas Addendum on the distributed ledger platform.

Publications: This April, the Board Revenue Committee reviewed the feedback regarding publication dates from each of the quadrant Executive Committee discussions which took place during the March Executive Committee meetings. As discussed in its own section of this bulletin, on July 31, 2023, NAESB published Version 004 of the NAESB WEQ Business Practice Standards. The NAESB Board of Directors supported a WGQ Version 4 publication in late third quarter and an RMQ publication date will follow in the fourth quarter. The last WEQ publication, Version 003.3 was issued on March 30, 2020. The RMQ released its last publication, Version 3.3, on January 30, 2020 and the WGQ publication of Version 3.2 occurred in August of 2020. Both WEQ Version 003.3 and WGQ Version 3.2 were incorporated by reference, with few exceptions, as part of FERC regulations and mandated for jurisdictional entities through FERC Order No. 676-J and FERC Order No. 587-Z, respectively.

WGQ Contracting Efforts: In response to an industry submitted request, NAESB has initiated a standards development effort to review and consider potential revisions to the force majeure provisions of the NAESB Base Contract for the Sale and Purchase of Natural Gas. Over one hundred participants representing approximately seventy different companies attended the July kick-off meeting. Jointly submitted to NAESB by CenterPoint Energy, MISO Energy, PJM Interconnection, Southwest Power Pool, Texas Competitive Power Advocates, and UGI Utilities, the request seeks to provide additional clarity concerning notices, responsibilities, and the ability to invoke Force Majeure during weather events.

During the July meeting, a motion was made to take no action in response to R23001; however, as the meeting was a planning session, no vote was taken on the motion. At the request of the Chair of the WGQ Contracts Subcommittee, an informal comment period is being held on Standards Request R23001 and the written comments proposing no action submitted by Cheniere for subcommittee consideration during the July meeting. The informal comment period concludes on September 5, 2023 and, on September 14, 2023, the subcommittee will hold its second meeting to continue discussion and possibly vote on the request.

On August 10, 2023, the WGQ Executive Committee will hold a meeting to consider the adoption of two recommendations containing the technical standards that allow for the utilization of two existing addendums to the NAESB Base Contract on digital technologies – the NAESB Renewable Natural Gas Addendum and the NAESB Certified Gas Addendum. In order to complete each of these technical standards development efforts, the WGQ Contracts Subcommittee held joint meetings with the WGQ Business Practices Subcommittee to make several modifications to the NAESB Contracts Related Standards Manual. If approved during the August WGQ Executive Committee meeting, the recommendations will be posted for a thirty-day ratification period by the NAESB WGQ membership.

The effort to develop the technical standards was part two of a now completed two-part standards development plan. The development and ratification of each of the addendums was part one. The Renewable Natural Gas Addendum and the Certified Gas Addendum were both ratified by the NAESB membership on March 8th. In order to develop the NAESB Renewable Natural Gas Addendum the WGQ Contracts subcommittee held a total of thirty-three meetings. That addendum facilitates transactions in the renewable natural gas markets under both federal and state regulatory programs, and other voluntary programs. The NAESB Certified Gas Addendum was developed over the course of thirteen meetings of the WGQ Contracts Subcommittee and supports transactions in the voluntary market for natural gas that have been certified as meeting certain standards set by a third party. Step two in each of these efforts was the development of the recommendations containing the technical implementation that, as noted above, will be considered during the August WGQ Executive Committee meeting.

Cybersecurity: In order to better support the industry's ability to respond to any potential cybersecurity vulnerabilities, NAESB has compiled its existing cybersecurity-related standards into three quadrant-specific books. This effort was undertaken in response to direction from the NAESB Board of Directors and based on an informal recommendation from Sandia National Laboratories. As part of the 2019 surety assessment on the NAESB standards conducted Sandia National Laboratories, Sandia suggested that NAESB, consider ways to expedite the process by which cybersecurity-related standards are developed, adopted, and implemented. NAESB has kept FERC staff updated throughout the process and FERC staff had indicated support for NAESB to pursue the action.

As there were no new standards drafted or material modifications made as part of this reformatting effort, NAESB was able to undertake the compilation of the RMQ, WEQ, and WGQ Cybersecurity standards through the NAESB minor correction process. Per the NAESB process, minor corrections to existing standards include corrections made by a regulatory agency to standards that are of a jurisdictional nature; clarifications or corrections to the format, appearance, or descriptions of standards in standards documentation; corrections to add code values to tables; and corrections that do not materially change a standard. On May 1, 2023, two minor corrections became effective which resulted in the creation of the new WGQ Cybersecurity Related Standards Manual and RMQ Cybersecurity Model Business Practices. Over the course of seven joint meetings, the RMQ Information Requirements and Technical Electronic Implementation Subcommittee, WGQ Information Requirements, Technical, and WGQ Electronic Delivery Mechanisms Subcommittees worked together to develop, the recommendations for the minor corrections which were approved during the March Executive Committee meetings.

In a parallel effort, during its October 2022 meeting, the WEQ Executive Committee approved a recommendation to a minor correction that compiled the existing WEQ cybersecurity-related business practice standards into a new suite of WEQ Business Practice Standards, the WEQ-024 Cybersecurity Business Practice Standards. This new suite of standards was included in the July 31, 2023 Version 004 NAESB WEQ Business Practices filing to the Commission.

This year, the WEQ and RMQ will host joint meetings to review cybersecurity protections, such as PKI, that secure the electronic communications for distributed energy resources. Due to the similar nature of the efforts, the WEQ and RMQ anticipate working together and plan to hold a kick-off meeting in the coming months.

Non-member Access/Participation: For our participants who are non-members, from the NAESB Home Page you can access one of the four quadrant squares – wholesale electric, retail electric, wholesale gas and retail gas, you are directed to the "NAESB Non-member Access: NAESB Committees, Subcommittees and Task Forces" web page. For more information, please go to NAESB Current Committee Activities or contact NAESB Staff (naesb@naesb.org) for additional information.

NAESB Board and Board Committees Update: This April, the NAESB Board of Directors held a virtual meeting with presentations from Jay Costan, a partner in Dentons' Global Energy Practice, and Leslie Biddle, Senior Advisor to the Undersecretary for Infrastructure at the Department of Energy. Mr. Costan offered his perspectives on the current energy transition and the impact that the recent Supreme Court decision in West Virginia v. EPA may have on FERC activities on the horizon. Ms. Biddle's presentation provided an overview and status update on the Department of Energy's Hydrogen Hub programs resulting from the Bipartisan Infrastructure Law. Following the presentations, the board reviewed the progress of the standards development work underway in 2023, the most recent activities of our Board committees, and the status of the Gas Electric Harmonization Forum efforts.

This July, the NAESB Advisory Council, chaired by Bruce Ellsworth, met in Austin, Texas to discuss the key areas of activity for NAESB this year, including the NAESB Gas Electric Harmonization Forum, the development of NAESB contracts and addendums, and the NAESB distributed ledger activities. The Advisory Council also discussed the NAESB Strategic Direction for 2023-2024 and beyond. The guidance and direction that the Advisory Council has provided to NAESB over the years has been critical to the success of both NAESB and the Gas Industry Standards Board, NAESB's predecessor organization.

Resulting from discussions held by the Board Revenue Committee, NAESB has taken action to ensure its non-member policies continue to meet the goals of the organization and properly incentivize membership. The non-member individual meeting participation fee is now \$250 per day, and the meeting duration fee variation has been eliminated. The participation fee for yearly, individual participation within a single subcommittee is now \$2,000. Since the non-member participation fees were put in place, member fees have risen twice, while non-member participation fees have stayed the same. This raise in non-member fees was taken to incentivize membership within NAESB and to ensure that the NAESB members are not subsidizing non-member participation in the organization on behalf of the entire industry.

In preparation for the upcoming September Board of Directors meeting, the Board Revenue Committee will meet on August 29th. During the meeting the committee will address standing agenda items such as reviews of communication activities, financial and membership meeting reports, vacancies, and the member prospect list, among other items.

Copyright/NAESB Standards Access: NAESB copyrights its work products – a practice used by most standards organizations. As such, NAESB retains its rights to publication, reproduction, display, and distribution. As part of their benefits, NAESB members may obtain materials free of charge, but those benefits do not extend to their agents, affiliates or subsidiaries without prior approval and waivers from the NAESB office. Damages for copyright infringement can be significant, including fines, injunctions, the impounding of materials, the seizure of property, and awards 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. Waivers for longer periods can also be granted depending on use. 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.

NAESB Quadrant Membership Analysis:

Wholesale Gas Quadrant (WGQ) 116
Retail Markets Quadrant (RMQ) 34
Wholesale Electric Quadrant (WEQ) 129
Total Membership 279

NAESB New Members:

Philadelphia Gas Works (RMQ, Retail Gas Market Interests)
Chugach Electric Association, Inc. (WEQ, Generator)
Duke Energy Corporation (WEQ, Transmission)
Double E Pipeline, LLC (WGQ, Pipeline)
EQT Energy LLC (WGQ, Producer)
Vitol Inc. (WGQ, Services)

Avangrid Networks (Gas) (WGQ, LDC)

Upcoming NAESB Courses: Each year, NAESB holds a series of webinars and courses that support gas and electric industry development. On September 12, 2023, NAESB will once again offer the Understanding the NAESB WGQ Contracts Course. This popular webinar will provide a review of the NAESB Base Contract for Sale and Purchase of Natural Gas and its addendums taught by a subject matter expert.

As an annual fixture on the NAESB calendar, the NAESB 101 Webinar - scheduled for October 19th - provides a comprehensive introduction to the NAESB standards development process, useful information on the structure of the organization, and an overview of current activities within NAESB. In addition to the regular NAESB 101 Webinar, NAESB also hosts the course specifically for NARUC each year with a specific emphasis on the retail markets. Additional courses may be offered throughout the year to assist those submitting comments in response to Notices of Proposed Rulemaking or considering the implementation of new standards.

Over the years, the NAESB webinars have increased in popularity. The invaluable materials and information provided during these courses have assisted hundreds of gas and electric participants in their work towards industry goals. As the dates for webinars are scheduled, they are made available on the NAESB Primers and Training Courses Page.

Resources for Additional Information: The following hyperlinks provide more information on standards development efforts and other activities within NAESB. Please log into the NAESB website to access the members only links.

Regulatory Orders and Reports: July 28, 2023 NAESB Gas Electric Harmonization Forum Report, July 29, 2022 Joint FERC-NERC Letter to NAESB, November 16, 2021 - FERC, NERC, and Regional Entity Staff Report - The February 2021 Cold Weather Outages in Texas and the South Central United States, December 16, 2020 FERC Order No. 841, September 17, 2020 FERC Order No. 2222, December 16, 2021 FERC Order No. 881, May 20, 2021 FERC Order No. 676-J (WEQ, Version 003.3), July 15, 2021 FERC Order No. 587-Z (WGQ Version 3.2), and September 2, 2021 Green Button Ontario Regulation 633/21: Energy Data.

NAESB Filings: July 31, 2023 NAESB WEQ Version 004 Filing to the FERC.

NAESB Press Releases, Notices, and Correspondence: July 31, 2023 Press Release on Gas Electric Harmonization Forum Report, July 28, 2023 Michael Desselle Correspondence Concerning the NAESB GEH Forum Report, July 7, 2023 Press Release on Force Majeure, Eligible GEH Forum Voters List, GEH Recommendations and Voting Instructions, March 16, 2023 NAESB RNG and NAESB CG Addendum Press Release, August 1, 2022 NAESB Correspondence to FERC and NERC, NAESB GEH Forum Schedule of Meetings, NAESB GEH Reference and Educational Documentation List – February 15, 2023, July 14, 2023 EIR Update Announcement, June 21, 2023 EIR Update Announcement, May 17, 2023 EIR Update Announcement, and May 5, 2023 EIR Update Announcement.

NAESB Mail Subscriptions: Registration in the NAESB e-mail information distribution system (NAESB Mail) is a benefit of membership. By electing to participate in NAESB Mail, members will receive targeted e-mail messages from the NAESB Office about relevant NAESB events, including conference-calling information, as well as important documents. What you won't receive are duplicate messages – no matter how many groups you subscribe to, when the same message is sent to multiple groups, you'll receive only one copy.