August - October 2023 Volume 16, Issue 2

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 WEO SRS Call
- 9/14 WGQ BPS Call
- 9/14 WGQ Contracts Call
- 9/19 Joint WGQ IR/Technical Call
- 9/26 WEQ OASIS Call

October

- 10/2 Retail ESPI Call
- 10/4 Annual Plan Subcommittees Calls
- 10/5 Joint WEQ BPS, WEQ CSS, and RMQ BPS Call
- 10/6 Retail ESPI Call
- 10/9 Holiday Indigenous Peoples' Day (NAESB Closed)
- 10/18 NAESB Update Call
- 10/23 WEO OASIS Call
- 10/23 Joint WEQ BPS, WEQ CSS, and RMQ BPS Call
- 10/25 WEQ Executive Committee
- 10/25 WEQ OASIS Call
- 10/26 RMQ Executive Committee
- 10/26 WGQ Executive Committee
- 10/27 Retail ESPI Call

Gas-Electric Coordination: As described in the previous bulletin, NAESB submitted the Gas Electric Harmonization (GEH) Forum Report on July 28, 2023 to FERC Chairman Willie Phillips, and Jim Robb, President and CEO of North American Electric Reliability Corporation (NERC), Greg White, Executive Director of National Association of Regulatory Utility Commissioners (NARUC). The report contained twenty recommendations for consideration 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 gas-electric interdependency. The report addressed 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 actions that could improve information sharing, encourage weatherization of infrastructure, provide transparency in the intrastate markets, and improve synchronization between gas and electric markets.

Since the submission of the GEH report, the chairs of the GEH forum, NAESB staff, and NAESB leadership, have been asked to review the report at several different industry meetings including at the NERC Board of Trustees and working group meetings, several NARUC and other state and market regional entity meetings, and other industry meeting with agendas focusing on market harmonization. Recognizing the potential for follow up activities based upon the recommendations in the report, the Wholesale Electric Quadrant (WEQ) and Wholesale Gas Quadrant (WGQ) added the following provisional items during its meetings in October, respectively, "Develop and/or modify business practice standards, as needed, in response to the FERC-NERC-Regional Entity Staff Report: February 2021 Cold Weather Outages in Texas and the South Central United States or from the report on Winter Storm Elliott" and "Upon a request or as directed by NAESB Board or a relevant jurisdictional entity, develop and/or modify business practice standards, as needed, in response to the FERC-NERC-Regional Entity Staff Report: February 2021 Cold Weather Outages in Texas and the South Central United States or from the final report on Winter Storm Elliott." Though the GEH forum was not a standards development effort, the provisional items are intended to follow the NAESB standards development process.

Green Button/Energy Services Provider Interface (ESPI): On December 13, 2023, NAESB will release the Version 4.0 publication of the NAESB Retail Markets Quadrant (RMQ) Model Business Practices, which includes the revised and updated ESPI Model Business Practices. Spurred by the standards requests submitted from the Green Button Alliance, two recommendations were recently developed that modify the ESPI model business practices to provide a third party application the ability to retrieve a PDF or other digital representation of a customer's utility billing. After approval of part 1 of the recommendation, the ESPI Task Force found that additional UML diagrams, the revised Retail Customer schema itself, and other implementation would also need to be included in ESPI, so they developed Part 2 of the recommendation which is currently posted for a ratification period that ends in December 12, 2023.

Additionally, the NAESB RMQ EC reviewed an annual plan item over the course of four meetings, which made changes to cybersecurity aspects and references to the cipher suites that were not allowed under the TLS 1.3 of the ESPI Model Business Practices. A minor correction was also approved during the October EC meeting and included revisions to the ESPI Model Business Practices to clarify whether certain stereotype representations are navigable and to insert and erroneously deleted phrase back into the recommendation. The changes included that were adopted the RMQ EC will be included in the NAESB ESPI Standards for publication of Version 4.0.

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NERC Coordination: NAESB and NERC staff continue to work together to support areas of coordination between the two organizations. This includes frequent staff-to-staff communications as well as monthly calls to discuss activities in areas that may involve commercial and reliability considerations for the wholesale electric industry. Recent discussion topics have included annual standards development planning and distributed energy resources (DERs).

To help ensure cross-over areas of the WEQ Business Practice Standards and NERC Reliability Standards remain complementary, NAESB and NERC staffs discuss new standard development efforts, including the creation of new NAESB Annual Plans and NERC Reliability Standards Development Plans (RSDP). In August, the WEQ Standards Review Subcommittee (SRS) met, as it does every year, to review the draft 2024 -2026 NERC RSDP and identified nine projects that are or may be coordinated with NAESB efforts. These projects address topics such as cybersecurity, cold weather protections, and inverter-based resources. The feedback from the WEO SRS was forwarded to the NAESB Managing Committee for consideration and subsequently provided to NERC staff. Related to cold weather protections, the proposed 2024 WEO Annual Plan includes an item to review the reliability standards developed by NERC in response to the FERC, NERC, and Regional Entity Joint Staff Inquiry into the February 2021 Cold Weather Grid Operations and develop supporting business practices as need-

At the request of WEQ and RMQ participants addressing the effort to develop cybersecurity-related standards for DERs, NAESB staff reached out to NERC staff regarding potential white papers that could be useful references for subcommittee discussions. NERC staff provided for review the NERC Privacy and Security Impacts for DERs and DER Aggregators White Paper which explores available security controls, identifies attack mitigation strategies, and provides high-level recommendations for consideration. The document was reviewed as part of the joint WEQ/RMQ subcommittees meeting on October 23, 2023.

Helpful links on the NAESB Home Page:

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

WGO Contracting Activities: On October 26, 2023, the WGO Executive Committee reviewed, considered, and adopted the no action recommendation in response to a standards request that proposed revisions to the NAESB Base Contract for Sale and Purchase of Natural Gas to improve the clarity associated with the force majeure provisions in the contract. The standards request, submitted by Southwest Power Pool, PJM Interconnection, MISO Energy, Texas Competitive Power Association, UGI Utilities, and CenterPoint Energy, was reviewed and discussed in a previous July 25, 2023 WGQ Contracts Subcommittee meeting, where over one hundred people, representing about seventy companies participated. During the meeting, some concerns were stated, such as topics of the standards request are either already addressed in the existing General Terms and Conditions or should otherwise be addressed in special provisions or transactions confirmations. Although this discussion led to a motion to take no action, no vote was taken as the meeting was a planning session. At the request of the chair of the WGO Contracts Subcommittee, an informal comment period was held and concluded on September 5, 2023, and with further discussions, a balanced vote was conducted resulting in approval of the no action recommendation at the September 14, 2023 WGQ Contracts meeting.

WEO Version 004 Publication: Following the release of the WEQ Business Practice Standards Version 004.0 publication in July 2023, NAESB released the WGQ Business Practice Standards Version 4.0 publication on September 29, 2023, along with an informational filing regarding the publication by NAESB to FERC. The new version of the WGQ Standards includes approximately fifty-eight modifications to existing standards resulting from eleven final actions and twenty minor corrections approved by the WGQ between September 2020 and September 2023. The revisions included were made to enhance cybersecurity-related standards, including standards that support the use of multi-factor authentication and new guidance encouraging the practice of whitelisting, as well as modifications intended to improve upon business processes included in the WGQ Additional Standards, Flowing Gas Related Standards, Invoicing Related Standards, and Capacity Release Related Standards. The publication also included two new addendums to the NAESB Base Contract for the Sale and Purchase of Natural Gas which are the Renewable Natural Gas (RNG) Addendum and the Certified Gas (CG) Addendum. The RG Addendum is intended to streamline the sale and purchase of renewable natural gas in both the voluntary and regulated markets, while the CG Addendum supports transactions in the voluntary market for natural gas that has been certified as meeting certain standards set by a third party. NAESB is grateful for all of the members and participants who provided their expertise during the development of these standards.

Distributed Ledger Technologies: In August 2023, the WGQ Executive Committee approved the technical implementation standards that support the use of the NAESB CG Addendum and the NAESB RNG Addendum to the NAESB Base Contract for the Sale and Purchase of Natural Gas on digital technologies, such as blockchain.

After nearly two years of standardization process, the WGQ ratified an initial set of standards, which provide the information necessary to trade and record the contract utilizing a distributed ledger. Tennessee Valley Authority (TVA), with the support of the Department of Energy (DoE), was able to engage in an implementation test utilizing the standards to replicate 228 trades over the course of 11 months on a distributed ledger. Increased cybersecurity and efficiencies in the settlement process, as well as the potential benefits of utilizing the blockchain technology to settle trades over traditional manual accounting and reconciliation processes for those name transactions, were outlined in a report submitted to the DoE by TVA. Concluding the implementation test, a second phase of the test is in the works, that evaluates the impact of trading certified natural gas utilizing the NAESB CG Addendum.

After reviewing the findings of the original test and the information gathered as part of the second phase, it was determined that NAESB could serve a valuable role for those seeking to trade digital versions of the NAESB Base Contract and other NAESB addendums in the future by providing an industry registry/directory and setting related consensus-based cybersecurity and encryption standards for its use.

Upcoming NAESB Courses: This year, NAESB has continued to hold periodic industry webinars in order to provide valuable information regarding NAESB and the NAESB Business Practice Standards. In June and in October, NAESB offered its Understanding the NAESB WGQ Contracts Course. With instruction provided by industry subject matter experts, this webinar provides an in-depth overview of the NAESB Base Contract for Sale and Purchase of Natural Gas

(NAESB Base Contract) and the supporting NAESB Base Contract addenda.

Additionally, NAESB coordinated with NARUC to offer a closed webinar for interested state commissioners and their staff as well as members of the National Council on Electric Policy. Topics are similar to the NAESB 101 Webinar but with an emphasis on activities that may be of particular interest to regulators operating in the retail markets.

In early November, NAESB will offer a NAESB 101 Webinar, which gives new and current members of NAESB, as well as non-members, an opportunity to hear from NAESB staff regarding information about the organization and how NAESB utilizes its American National Standards Institute (ANSI)-accredited standards development process to promote a more competitive and efficient natural gas and electric market and streamline the transactional business processes of the industries.

Dates for the webinars will be published on the NAESB Primers and Training Courses Page as they are made available.

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.

Distributed Energy Resources and Battery Storage: Using WEQ Business Practice Standards as a basis, RMQ has developed similar standards intended to create a technology-neutral framework to promote consistency in market interactions and communication exchanges involving DERs. Like the WEQ standards, the RMQ standards encourage consistency between bulk electric grid services and distribution grid services and create a foundation for potential future standardization that could support greater consistency in the integration of DERs across various retail jurisdictions. Both the WEQ and RMQ standards were developed in response to a request submitted by the U.S. Department of Energy, Lawrence Berkley National Laboratory, and Pacific Northwest National Laboratory intended to support efforts related to DERs as part of the broader electric grid modernization goals of the DoE's Grid Modernization Laboratory Consortium.

After finalizing WEQ efforts related to grid services, the WEQ Business Practices Subcommittee (BPS) reverted focus to the development of three standards efforts intended to support industry implementation of FERC Order Nos. 841 and 2222 which are (1) business practices that define an index/registry for energy storage resources and distributed energy resources (2) business practices for information and reporting requirements for energy storage resources and distributed energy resources; and (3) business practices to establish performance metrics for energy storage resources and distributed energy resources. During consideration of these items, some participants commented that there are related FERC compliance filings still pending before the Commission. As such, the subcommittee developed a no action recommendation which was approved by the WEQ Executive Committee during its October 2023 meeting.

In recognition that DERs impact both wholesale and retail markets and to better promote coordination, the WEQ and RMQ Executive Committees recently added new joint standard development items relating to the DERs for the 2024 Annual Plans. The purpose of the items is to consider and develop business practices to support the integration of distributed energy resource management systems (DERMS) and DER/DER aggregation registries by the industry. A number of existing solutions are proprietary, and standards which support interoperability could be beneficial. The WEQ and RMQ Executive Committees have added related items that are intended to develop additional business practices to address any wholesale and retail market specific considerations to support the integration of DERMS and DER/DER aggregation.

Additionally, the DoE has recently reached out to NAESB regarding the potential creation of a model contract. The contract would establish standardized terms and conditions for the acquisition of distribution services and, as stated in the DoE in its September 2023 report, Pathways to Commercial Liftoff: Virtual Power Plants, would further support the integration and commercial viability of DERs. It would also support DER aggregators to efficiently participate in multiple jurisdictions and could include terms and conditions that align with FERC Order No. 2222. While there is no official request, interest has been expressed in NAESB facilitating the development of the model contract.

Cybersecurity: At the beginning of October, the WEQ and RMQ started work on an annual plan item to review cybersecurity protections, such as Public Key Infrastructure (PKI), that may be necessary to secure electronic communications for DERs, and develop standards as necessary. Participants in the October 2023 joint meetings concluded that NAESB Business Practice Standards could be beneficial to address gaps in existing industry guidance regarding command-and-control functions and the authentication of parties. As such, the subcommittees are now working to define a scope for standards development, with a focus on preventing and mitigating certain attacks, such as denial of service, as well as the DER-related communications and interactions that could be supported by the cybersecurity framework established by the NAESB PKI Business Practice Standards. The NAESB PKI Program is an extensive cybersecurity framework that uses digital certificates issued by a designated certificate authority to securely exchange data and electronically authenticate parties, and will allow certification authorities to become designated NAESB Accredited Certification Authorities (ACA). The efforts will continue through next year and it is a joint effort between WEQ and RMQ.

Also, continuing into next year, will be the WEQ Cybersecurity Subcommittee evaluation of potential changes for the issuance of NAESB PKI digital certificates. The subcommittee has scheduled a meeting for November 9, 2023 to discuss the industry activities regarding proposed modifications to certificate authority best practices for issuing digital certificates. This discussion will be part of the 2024 WEQ Annual Plan assignment to review WEQ-012 PKI Standards and the accreditation requirements for NAESB ACAs to decide if any changes are needed as well as to evaluate standards as needed to support and/or complement the current version of the NERC Critical Infrastructure Protection Standards and general NERC and FERC activities concerning cybersecurity.

Additionally, next year, the WEQ Business Practices Subcommittee and WEQ Cybersecurity Subcommittees are set to jointly develop business practice standards for cybersecurity disclosure best practice policies, such as software supply chain risks, to support industry implementation of any applicable regulations. Also, both WGQ and RMQ Cybersecurity Related Standards Manuals will be reviewed and revised as needed by the WGQ Electronic Delivery Mechanisms Subcommittee (EDM) and the RMQ Information Requirements and Technical Electronic Implementation Subcommittee (IR/TEIS).

Finally, actions have been finalized to reorganize the existing cybersecurity-related requirements into a singular, quadrant-specific suite of standards. This is intended to help expediate the adoption and implementation processes of the requirements, improving the industry's ability to respond to new and emerging cybersecurity threats. The changes are incorporated as the WEQ, WGQ, and RMQ Cybersecurity Business Practice Standards in Version 4 of each publication.

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.

WEQ Activities Supporting OASIS and e-Tag Transactions: Following the release of WEQ Version 003.3, the WEQ Open Access Same-time Information Systems (OASIS) Subcommittee has continued to hold regular meetings addressing the annual plan assignment to review the WEQ OASIS Suite of Business Practice Standards and identify any modifications that may be needed based on operational experiences. During these meetings, unrelated changes were discovered that should be made regarding the response time limits for resales occurring off OASIS. Hence, the proposal of a new 2023 WEQ Annual Plan Item to review the WEQ Business Practice Standards for modification regarding "off OASIS" was suggested by the WEQ Executive Committee.

During a WEQ Coordinate Interchange Scheduling Subcommittee (CISS) meeting, participants found that there may be a need to modify the NAESB WEQ-004 Coordinate Interchange Business Practice Standards for clarity when modifications to an electronic tag (e-Tag) result in changes to the ramp duration as well as the default ramp durations for the Eastern and Western Interconnections. The NAESB WEQ-004 Business Practice Standards are supportive of the NERC Interchange Scheduling and Coordination (INT) Reliability Standards and facilitate the electronic transfer of energy through electronic tagging (e-Tagging), as well as identify the market-supported processes necessary to facilitate interchange transactions. After discussing the subsequent industry submitted request over the course of two meetings, it was voted out and also adopted by the WEQ Executive Committee on October 25, 2023, and will be included in the next WEQ version. Apart from this request, the WEQ CISS also found minor corrections to be made to the NAESB e-Tagging Functional Specification Version to correct typographical and capitalization errors, and improve consistency. The minor correction was then approved by the WEO Executive Committee.

Along with the previously mentioned activities, the WEQ CISS also tackled further tasks, such as their annual review of the NAESB e-Tagging Functional Specification to make revisions as necessary to ensure the specification continues to be supportive of NERC Reliability Standards and NAESB WEQ Business Practices Standards and is reflective of current cybersecurity best practices. After performing a comprehensive examination, a consensus was reached that since there was no substantive modifications needed at the time, a no action recommendation should be developed. As such, the no action recommendation was discussed and approved by the Executive Committee.

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NAESB Board and Board Committees Updates: The final NAESB Board of Directors meeting will be held virtually in December. Willie Phillips, Chairman of the Federal Energy Regulatory Commission (FERC), has agreed to participate and provide initiating remarks. Kevin Book, Managing Director at ClearView Energy Partners, LLC will also be participating by sharing his perspectives on the latest developments impacting the energy markets. Following their remarks, the Board will review standards development progress throughout the year, status of activities by Board committees, proposed 2024 annual plans, and will also approve the 2024 budget for NAESB.

The NAESB Board of Directors last met on September 2023, where former Chairman Norman Bay with FERC provided comments on the future direction of the industry. Along with Chairman Bay, Dr. Mason Fried from the Climate Center at ICF also presented, reviewing findings from a recent report on climate data released in August 2023. Additionally, the Board discussed the previous Advisory Council meeting that discussed NAESB Gas-Electric Harmonization (GEH) activities, contracts and addendums, and Strategic Direction for 2023-2024, as well as committee updates, 2024 annual plans, and financials. Prior to the Board's meeting in September, the NAESB Board Revenue Committee will meet in December to review their standing agenda items and review a proposed budget for 2024. The Strategy Committee will also meet in December to review the quadrant annual plans to ensure their consistency with the 2021-2023 NAESB Strategic Plan, and to approve a new strategic plan for Board consideration through 2025.

NAESB Quadrant Membership Analysis:

Wholesale Gas Quadrant (WGQ) 118
Retail Markets Quadrant (RMQ) 34
Wholesale Electric Quadrant (WEQ) 126
Total Membership 278

NAESB New Members:

Chesapeake Energy Marketing, LLC (WGQ, Producer)
Mitsui & Co. Energy Marketing and Services (WGQ, Services)
Essentia Advisory Partners (WGQ, Services)
EOG Resources (WGQ, Producer)
Glencore Ltd. (WGQ, Services)

Publications: On July 31, 2023, NAESB published the WEQ Business Practice Standards Version 004 and filed an informational report with the FERC. The new version of the standards incorporates over four hundred new and revised standards including those developed in response to FERC Order Nos. 676-I and 676-J, standards that complement the NERC Reliability Standards, and the compilation of existing cybersecurity standards into a new book, WEQ-024. In addition to that new cybersecurity book, this publication boasts the NAESB Base Contract for Sale and Purchase of Voluntary Renewable Energy Certificates and another new book, WEQ-025, which contains standards addressing grid services that support the wholesale electric interactions. Following the WEQ publication, the WGQ Business Practice Standards Version 4.0 were published and filed with FERC on September 29, 2023.

Rounding out the publications for the year, the RMQ standards will be published on December 13, 2023 and will include cybersecurity updates to the NAESB ESPI Model Business Practices, the retail version of the NAESB Base Contract for Sale and Purchase of Voluntary Renewable Energy Certificates that supports transactions in the voluntary REC market, and a new retail book that defines a common list of grid services for retail electric market interactions, developed to support a part of the DoE's Grid Modernization Laboratory Consortium efforts.

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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: FERC-NERC Regional Entity Joint Inquiry Winter Storm Elliott Presentation

NAESB Filings: September 29, 2023 - NAESB Report for Submittal to the Commission on WGQ Standards for Business Practices of Interstate Natural Gas Pipelines, Version 4.0 (Docket No. RM96-1)

NAESB Press Releases, Notices, and Correspondence: October 11, 2023 - NAESB Electric Industry Registry Update Announcement, September 20, 2023 - NAESB Electric Industry Registry Update Announcement, August 15, 2023 - NAESB Electric Industry Registry Update Announcement, August 8, 2023 - NAESB Electric Industry Registry 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.