**Gas-Electric Coordination:** The NAESB Gas-Electric Harmonization (GEH) Forum has made significant progress towards its goal of developing recommendations that could improve upon the reliability of the natural gas infrastructure in support of the bulk electric system, as requested in the joint letter sent by FERC and NERC to NAESB in July 2022. To date, approximately 100 potential recommendations have been identified for consideration, with proposals generally falling into one of ten categories: (1) electric market design; (2) gas market design; (3) information sharing; (4) infrastructure; (5) intrastate gas market; (6) Jones Act waivers; (7) improved planning; (8) service prioritization; (9) resiliency requirements; and (10) weatherization. The GEH Forum efforts are now shifting from fact-finding and the identification of proposals to focus on the crafting of detailed recommendations that will identify, as requested by FERC and NERC staff, concrete actions that can be taken, plans for implementing those actions, timing considerations, and the applicable responsible entities.

To assist in this transition, GEH Forum participants have been asked to provide feedback in the form of an industry survey to indicate support or opposition to each recommendation. For any recommendation in which the respondent indicates support, the survey also asks that the respondent provide a priority ranking as well as details regarding how the recommended action could be implemented. Survey responses were due on February 27, 2023, and the GEH Forum will begin discussions on the results during its meeting scheduled for March 3, 2023.

To date, the GEH Forum has held seven meetings and enjoyed wide industry participation with over 400 individuals representing approximately 230 different organizations. Through submitted comments and forum discussions during these meetings, participants identified over 300 considerations or proposals, which GEH Forum leadership was able to summarize into the approximately 100 recommendations included as part of the survey by condensing similar and eliminating duplicative comments, where possible, while still preserving the unique proposals that were brought forth. The forum meetings have focused around the topics identified for consideration by FERC and NERC staff, categorized into three different areas: (1) measures to improve gas-electric information sharing for improved system performance during extreme cold weather emergencies; (2) measures to improve reliability of natural gas facilities during cold weather with examples such as freeze protection and protection of the electric supply; and (3) measures to improve the ability of generators to obtain fuel during extreme cold weather events when natural gas heating load and natural gas-fired generators are both in high demand for natural gas, at the same time that natural gas production may have decreased.

Further meetings of the GEH Forum have been scheduled through May 2023, with the potential to hold additional meetings as needed to develop a report that can be submitted to FERC and NERC identifying any recommended actions and containing a record of the forum proceedings. Currently, GEH Forum leadership anticipates the report to be completed in early-to-mid-summer.
Cybersecurity: Cybersecurity is a foundational element of the NAESB Business Practice Standards, ensuring that the standards provide protections to help secure electronic communications for the wholesale and retail natural gas and electric markets. While NAESB files its wholesale gas and wholesale electric business practices with the FERC, as you may know, pipeline security, including cybersecurity, falls under the Transportation Safety Administration (TSA), and on November 30, 2023, the TSA issued an Advanced Notice of Proposed Rulemaking (ANPRM) Enhancing Surface Cyber Risk Management in Docket No. TSA-2022-0001. As part of this ANPRM, the TSA sought input regarding ways to strengthen cybersecurity and resiliency in the pipeline and rail sectors, and specifically requested comments on a number of topics, including information on any applicable industry standards. In response, NAESB submitted informational comments on January 30, 2023. Keeping with NAESB policy, the comments did not advocate for the adoption of any NAESB Business Practice Standard or work product but instead provided an overview of the existing cybersecurity-related NAESB Business Practice Standards and future development efforts, with a focus on areas supporting the wholesale natural gas market. Additionally, the comments included information on NAESB as an organization, our American National Standards Institute accredited consensus-based standards development process, and obtaining access to the NAESB Business Practice Standards.

Stemming from comments submitted by industry participants as part of the 2022 NAESB Standards Development Survey, the WGQ, WEQ, and RMQ each have assignments as part of the 2023 Annual Plans to consider if baseline requirements addressing multifactor authentication (MFA) should be integrated into cybersecurity-related standards. The WGQ developed proposed modifications that will clarify the ability to utilize MFA as part of user authentication for accessing pipeline customer activities websites. After careful evaluation of existing standards, the WEQ made the determination that no further standard modifications are needed at this time as the WEQ Business Practice Standards already incorporate MFA requirements through the utilization of the NAESB Public Key Infrastructure framework. The RMQ determined that no actions regarding MFA are needed as the RMQ Model Business Practices do not address human-facing interfaces.

In an effort to better support the energy industry in the development and implementation of cybersecurity-related business practices, NAESB will soon complete an effort to reorganize its standards so that all cybersecurity requirements are contained in a singular, quadrant-specific location, expediting the process by which these standards can be developed, adopted, and implemented. During its scheduled March meetings, the WGQ and RMQ Executive Committees will each consider minor correction recommendations to create new suites of the WGQ and RMQ Business Practice Standards, respectively, to house existing cybersecurity related requirements. As you may recall, the WEQ Executive Committee approved a similar minor correction recommendation during its October 2022 meeting. The development of quadrant-specific suites of cybersecurity-related business practices is supportive of an informal recommendation made by the U.S. Department of Energy and Sandia National Laboratories as part of the 2019 Surety Assessment regarding the consideration, in conjunction with FERC, of methods to shorten the timeline by which the industry implements cybersecurity-related standards. NAESB has kept FERC staff informed throughout this process, with FERC staff indicating support for NAESB to move forward in this manner, and NAESB has informed FERC Commissioners of the forthcoming changes to the wholesale electric and gas business practices as part of the next version of the publications.

Remaining to be addressed this year is an effort by both the WEQ and the RMQ to review cybersecurity protections, such as PKI, that may be necessary to secure electronic communications for distributed energy resources and develop any necessary business practices. Due to the similar nature of the efforts, the WEQ and RMQ anticipate addressing these annual plan items jointly and plan to hold a kick-off meeting early this spring.

WGQ Renewable Natural Gas Addendum and Certified Gas Addendum: NAESB is pleased to announce the adoption of two new addendums to the NAESB Base Contract for the Sale and Purchase of Natural Gas (NAESB Base Contract) intended to help facilitate the sale and purchase of renewable natural gas and certified natural gas, respectively. The NAESB Renewable Natural Gas Addendum (NAESB RNG Addendum) is supportive of renewable natural gas transactions in both regulated and voluntary markets, while the NAESB Certified Gas Addendum (NAESB CG Addendum) addresses transactions in the voluntary market for natural gas that has been certified as meeting certain standards set by a third party. The thorough efforts of the WGQ Contracts Subcommittee participants, coupled with broad input from subject matter experts, have ensured that the terms and conditions of both addendums are inclusive of a wide range of industry practices around renewable natural gas and certified gas and will meet current as well as future needs of the industry in executing the relevant transactions as these markets mature. An industry ratification period for the NAESB RNG Addendum and NAESB CG Addendum ends on March 8, 2023. Once ratified, the addendums will be considered final actions and available for industry use.

Now that the drafting of the new addendums is completed, the WGQ Contracts Subcommittee will take up the development of standards to support technical implementation in a joint effort with the WGQ Business Practices Subcommittee and the WGQ Electronic Delivery Mechanism Subcommittee. A joint kick-off meeting of the subcommittees was held on February 21, 2023, with subcommittee leadership anticipating the completion of recommendations later this year to develop technical implementations that will enable the use of the addendums on digital technologies, such as blockchain. To assist in these efforts, the subcommittees will be leveraging as a template previous work to digitize the NAESB Base Contract.
**NAESB Board and Committees Update:** NAESB’s Board of Directors held its most recent meeting on December 8, 2022. As part of normal business for the year-end meeting, the Board of Directors approved the 2023 budget as well as the 2023 Annual Plans for the WEQ, WGQ, and RMQ. Remarks during the meeting were provided by NAESB Advisory Council Member Mr. Bob Gee who is co-chairing the NAESB Gas-Electric Harmonization Forum efforts. Mr. Gee’s comments focused on his perspective regarding forum activities and other related industry efforts to address gas-electric coordination. The next meeting of the NAESB Board of Directors is scheduled for April 13, 2023. This meeting will be virtual and include discussions on NAESB membership and financials as well as reports from the various Board Committees and updates on standard development activities.

Prior to the December 2022 meeting of the NAESB Board of Directors, the Board Strategy Committee held a meeting on November 29, 2022 to finalize a report regarding the results of the NAESB 2022 Standards Development Survey as well as review the proposed 2023 Annual Plans to ensure consistency with the overall strategic direction of the organization. As a result of discussions during this meeting, the committee proposed to the NAESB Board of Directors the inclusion of additional annual plan items supporting standard development efforts regarding multifactor authentication and distributed energy resource cybersecurity protections, both of which originated from industry feedback provided as part of the NAESB 2022 Standards Development Survey. Looking ahead, the Board Strategy Committee will be reconvening to evaluate the current NAESB Strategic Plan and develop a new plan providing direction for the organization through 2025.

In a continuation of discussions which began last year, the NAESB Revenue Committee is in the process of reviewing NAESB’s existing non-member policies to ensure that they are targeted to meet the goals of the organization and properly incentivize membership. As mentioned elsewhere in this bulletin, the committee also anticipates making recommendations later this year to set publication dates for the next versions of the WEQ, WGQ, and RMQ Business Practice Standards. Any recommendations regarding non-member policies or publication dates will be presented to the NAESB Board of Directors for consideration.

The NAEB Managing Committee last met on November 15, 2022 to review the organization’s financials, the draft 2023 budget, and discuss the NAESB Gas Electric Harmonization Forum efforts as well as the status of the distributed ledger technology project. As part of a closed session, the NAESB Managing Committee also reviewed staff performance.

Please note that the NAESB Advisory Council meeting, originally scheduled to be held in conjunction with Winter NARUC meetings, has been rescheduled to be concurrent with the Summer NARUC meetings in Austin, Texas. NAESB is incredibly appreciative of the efforts NARUC makes to provide NAESB with space to hold this meeting and made the decision to move the Advisory Council meeting to accommodate the limited meeting space at the venue for this year’s Winter NARUC meeting.

**Distributed Energy Resources and Battery Storage:** NAESB is pleased to announce he completion of a recommendation proposing a new suite of WEQ Business Practice Standards to support the utilization and interoperability of flexible, grid-edge resources, like distributed energy resources, by the wholesale electric market. Developed by the WEQ Business Practices Subcommittee (BPS) in response to a standards request submitted by the U.S. Department of Energy, Lawrence Berkeley National Laboratory, and Pacific Northwest National Laboratory, the new suite of standards identifies categories of operationally-based grid services utilized within the wholesale electric market as well as the general attributes that may be used by a system operator to define the unique requirements for services within its market, such as location, timing, and performance determinations. The six categories of grid services addressed by the standards are: energy grid service, reserve grid service, regulation grid service, frequency response grid service, voltage management grid service, and blackstart grid service. The new standards are intended, in part, to assist parties engaging in commercial transactions for grid services by better enabling communications between market participants offering services by a flexible, grid-edge resource and the system operators that are contracting for those services.

The formal comment period regarding the newly proposed standards concludes on March 16, 2023. The WEQ BPS has scheduled a meeting for March 21, 2023 to review any formal comments and, as needed, develop proposed additional revisions in response for consideration by the WEQ Executive Committee. The recommendation and any formal comments submitted to the NAESB office will be presented to the WEQ Executive Committee on March 28, 2023. If adopted, the standards will be submitted for industry ratification. Any ratified standards will be incorporated into the next version of the WEQ Business Practice Standards.

As indicated in the request for standards development, this standards development effort is supportive of elements of the U.S. Department of Energy’s Grid Modernization Laboratory Consortium and encompasses not only standards for the wholesale electric market but also the retail electric market. Using the standards developed by the WEQ BPS as a template, in the coming month, the RMQ BPS is set to begin consideration of similar standards addressing services utilized at the distribution level with the goal of providing a foundation for greater consistency in the integration of flexible, grid-edge resources within the retail markets as well as
Distributed Energy Resources and Battery Storage (continued): helping to ensure retail markets realize the full benefits that can be provided by such resources.

Prior to addressing the grid services effort, the WEQ BPS was in the process of developing standards to support the industry’s implementation of FERC Order Nos. 841 and 2222, regarding the participation of energy storage and distributed energy resource aggregations in the wholesale electric market. Due to a potential in overlap between this work and activities to develop grid service-related standards, the WEQ BPS temporarily shifted its focus to prioritize the request from the U.S. Department of Energy in an attempt to avoid inconsistencies or the development of duplicative standards. Now that a recommendation on grid service standards has been completed, the WEQ BPS will refocus its work on the development of standards to support the wholesale electric market’s integration of energy storage and distributed energy resource aggregations. The subcommittee has scheduled a meeting for March 1, 2023 to resume discussions in this area.

Green Button/Energy Services Provider Interface (ESPI) Activities: This year, the RMQ ESPI Task Force is convening to evaluate the cybersecurity requirements contained within the NAESB ESPI Model Business Practices and make any necessary modifications to better align with current industry cybersecurity protocols. During its first meeting on this topic, the task force focused discussions on the Transport Layer Security (TLS) protocol identified within the model business practices. Additional meetings of the task force will be scheduled for this spring to continue efforts to develop a recommendation supporting this annual plan item.

At the upcoming meeting of the RMQ Executive Committee, scheduled to be held on March 29, 2023, the committee will be considering three minor corrections proposing modifications to the NAESB ESPI Model Business Practices. These revisions are intended to delete outdated references, better reflect the availability of the NAESB ESPI Schema on the NAESB website, as well as clarify data elements, dataflows, and the use of attributes, among other items. The minor corrections were submitted by the Green Button Alliance (GBA), an organization that promotes the expansion and adoption of Green Button. NAESB has worked closely with the GBA over the years, both in the development and maintenance of the NAESB ESPI Model Business Practices as well as regarding the GBA’s Green Button implementation certification process, which requires proof of purchase of the NAESB model business practices. In a display of this working relationship, NAESB staff participated in GBA’s annual meeting, held on November 17, 2022 in Toronto, Canada, providing spoken remarks regarding the partnership between the organizations.

Distributed Ledger Technologies: As you may remember, NAESB finalized its initial Distributed Ledger Technology (DLT) Standards in 2020. These standards support the digitalized representation of the NAESB Base Contract for the Sale and Purchase of Natural Gas (NAESB Base Contract) and enable the natural gas industry to conduct trades under the contract utilizing a distributed ledger. Following the completion of this effort, the U.S. Department of Energy requested that NAESB work with Tennessee Valley Authority (TVA) and its trading partners to develop an implementation test utilizing the NAESB DLT Standards. This initial pilot test was completed in April 2022, with reporting provided back to the U.S. Department of Energy.

As part of the next phase, currently underway, the U.S. Department of Energy has asked NAESB to look at the impact certified natural gas trades, conducted under the NAESB Certified Gas Addendum, may have on the DLT implementations that were addressed in the initial phase. Additionally, as part of Phase Two efforts, the U.S. Department of Energy has requested that NAESB investigate the development of a prototype for a gas industry registry that could be utilized by entities trading the NAESB Base Contract using distributed ledger technologies.

NERC Coordination: In recognition of the importance of the development and maintenance of complementary business practices and reliability standards, NAESB and NERC engage in coordination efforts to ensure the organizations are in lock-step regarding issues that touch upon both commercial and reliability aspects for the wholesale electric market. In support of this, NAESB and NERC staffs engage in frequent communication, including through standing monthly calls, to discuss ongoing efforts within both organizations. Reflective of activities underway at both NAESB and NERC, current discussion topics between staffs have covered areas such as cold weather and natural gas-electric market coordination, distributed energy resources, and cybersecurity.

Specifically related to cold weather and natural gas-electric market coordination, in addition to NAESB and NERC staff discussions, the WEQ Standards Review Subcommittee (SRS) has been monitoring NERC reliability standards development effort in this area as well. As you may know, FERC recently took action to approve two reliability standards developed by NERC, EOP-011-3 Emergency Operations and EOP-012-1 Extreme Cold Weather Preparedness and Operations. Now that the NERC Reliability Standards have been approved, the WEQ SRS has scheduled a meeting for April 5, 2023 to review the reliability standards and discuss if there is a need for complementary, supporting WEQ Business Practice Standards.
WEQ OASIS Subcommittee Activities: For the past several meetings, the WEQ OASIS Subcommittee has been considering the development of potential WEQ OASIS Business Practice Standards to support industry implementation of FERC Order No. 881 Managing Transmission Line Ratings. This Order requires the use of ambient-adjusted ratings in the evaluation of near-term transmission service requests to improve upon the accuracy and transparency of transmission line ratings and promote efficiencies in the utilization of the grid. WEQ OASIS Subcommittee discussions focused on transparency requirements in the Order that specified transmission providers make available certain information regarding transmission line ratings and the methodologies to calculate those ratings, particularly the requirement that “transmission providers post on OASIS or another password protected website any uses of exceptions or temporary alternate ratings.”

The WEQ OASIS Subcommittee participants evaluated the need to develop an OASIS template to support the optional posting of transmission line databases in OASIS. After thorough discussion on the matter, it was determined that there was not consensus to support the development of a new OASIS template as there appears to be a preference among industry participants to pursue individualized posting solutions that best conform to their existing business practices. In response, the subcommittee developed a no action recommendation which was voted out on February 14, 2023. The comment period for the no action recommendation closes on March 16, 2023 and will be considered by the WEQ Executive Committee during its meeting on March 28, 2023. The WEQ Business Practices Subcommittee will be taking up a related standards development later this year to consider if there is a need to develop or modify any additional business practices, including the WEQ Modeling Business Practices, in support of industry implementation of the Order.

Looking ahead, the WEQ OASIS Subcommittee has one open standards development item to address under the 2023 WEQ Annual Plan. As has been done following the implementation of past versions of the WEQ Business Practice Standards, subcommittee participants will evaluate the need for modifications to the WEQ OASIS Business Practice Standards based on industry operational experiences in the implementation of WEQ Version 003.3. The next meeting of the WEQ OASIS Subcommittee is scheduled for April 18, 2023.

Upcoming NAESB Courses: In 2023, NAESB plans to host a number of webinars designed to provide the industry with valuable information regarding NAESB and the NAESB Business Practice Standards. Following last year’s schedule, NAESB anticipates offering the NAESB 101 Webinar in the fall. This webinar, led by NAESB staff, provides an opportunity for those new to the organization, as well as those in need of a refresher, to learn about NAESB, including how NAESB uses its American National Standards Institute (ANSI) accredited standards development process to facilitate the development of business practices that promote a more competitive and efficient natural gas and electric market and streamline the transactional business processes of the industries. NAESB also will be coordinating with NARUC to hold a similar webinar for state commissions and members of the National Council on Electric Policy with a focus on activities that may be of interest to retail market regulators.

NAESB has scheduled two webinars this year to provide an overview the NAESB Base Contract for Sale and Purchase of Natural Gas and the supporting NAESB Base Contract addendums. Taught by subject matter experts, this webinar is always popular among industry participants and will be held on April 11, 2023 and again on September 12, 2023. Individuals may register for the April course through the NAESB website.

NAESB will update the meeting calendar as well as the NAESB Primers and Training Courses page of the website once additional webinar dates are confirmed.
NAESB Bulletin

Publications: As previously discussed by the NAESB Revenue Committee, NAESB anticipates finalizing publication dates later this year for new versions of the WEQ, WGQ, and RMQ Business Practice Standards. At their upcoming March meetings, the WEQ, WGQ, and RMQ Executive Committees will be asked to provide input on appropriate timing for the release of a new version of its standards. The NAESB Revenue Committee will consider this feedback in identifying recommended publication dates for consideration by the NAESB Board of Directors.

The RMQ released its last publication, Version 3.3, in January 2020, and the WEQ followed suit with the release of Version 003.3 in March 2020, with the WGQ publishing Version 3.2 in August 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.

Copyright/NAESB Standards Access: NAESB, similar to other standard development organizations, copyrights its work products. These copyright protections provide NAESB with the exclusive rights to publish, reproduce, display, and distribute all copyrighted material as well as provide the organization with a small revenue stream, helping to offset costs related to the creation of standards that would otherwise be solely borne by membership. Additionally, copyrighting work products ensures that entities seeking to obtain the standards must do so through NAESB, helping to ensure that entities are accessing the most current version of the standards.

NAESB does enforce its copyrights, and infringement of copyright can result in significant damages, including penalties in excess of $100,000, injunctions, impounding of material, seizure of property, and the awarding of punitive damages. However, in recognition that a number of NAESB Business Practice Standards are part of federal and some state regulations, NAESB provides ample opportunities for interested parties to access its standards. NAESB members, as a benefit of membership, may obtain the standards free of charge through the NAESB website. Non-members, including agents, subsidiaries, and affiliates of NAESB members, can opt to purchase the standards, either by an entire publication, by topic, or by final action prior to the publication of a new version.

NAESB also has in place policies to facilitate information sharing, regularly granting waivers to regulators and educational institutes, depending on the intended use of the copyrighted material. NAESB policies also allow anyone to request a three-day waiver to review work products in consideration of purchase, and NAESB grants waivers for longer periods if needed, such as for the purpose of reviewing the standards as part of government comment periods.

For more information, please go to Copyright and NAESB Materials Order Form

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: 
- December 16, 2020 FERC Order No. 841
- September 17, 2020 FERC Order No. 2222
- December 16, 2021 FERC Order No. 881
- TSA Advanced Notice of Public Rulemaking Enhancing Surface Cyber Risk Management

NAESB Filings: 

NAESB Press Releases, Notices, and Correspondence: 

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.

For more information, please go to NAESB Mail.