Gas-Electric Coordination: At the request of FERC and NERC, NAESB has initiated an effort to address Recommendation 7 of the FERC, NERC and Regional Entity Staff Report: The February 2021 Cold Weather Outages in Texas and the South-Central United States (Report). This recommendation calls for the creation of a forum in which representatives of state legislatures and/or regulators with jurisdiction over natural gas infrastructure, in cooperation with FERC, NERC, and the Regional Entities, and with input from the grid operators and gas infrastructure entities, identify concrete actions, consistent with the forum participants’ jurisdiction, to improve the reliability of the natural gas infrastructure system necessary to support bulk-power system reliability. The NAESB effort is being led by NAESB Advisory Council members Mr. Gee, a former Assistant Secretary at the U.S. Department of Energy (DoE), a former Chairman of the Texas Public Utility Commission, and former Chair of the NARUC Electricity Committee, Ms. Tierney, a former Assistant Secretary at the U.S. DoE and former Commissioner of the Massachusetts Department of Public Utilities, and Mr. Wood, a former Chairman of the FERC and the Public Utilities Commission of Texas.

Over four-hundred attendees participated in the kick-off meeting for the NAESB Gas-Electric Harmonization (GEH) Forum, on August 30, 2022, during which remarks were provided by FERC Chairman Glick as well as the President and CEO of NERC and the Executive Director of NARUC. Additionally, FERC and NERC staff provided a presentation overviewing Recommendation 7. As described by FERC and NERC staff, Recommendation 7 is one of the centerpieces of the Report, and the forum is tasked with identifying not only concrete actions but also plans for implementing those actions, timing considerations, and an identification of the applicable responsible entities. FERC and NERC staff also reviewed the suggested topics for the forum to address, which fell into three categories: (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.

Additional meetings of the NAESB GEH Forum were held on September 23, 2022 and October 21, 2022, with an initial focus of discussions on topics that fall into the third category identified by FERC and NERC staff. Due to the large number of participants NAESB GEH Forum leadership has opted to solicit written comments ahead of every forum meeting in order to better facilitate discussions and help ensure efficient use of meeting time. Additional meetings have been scheduled for November 8, 2022 and December 5, 2022 with further meeting dates to follow for next year. The NAESB GEH Forum page of the NAESB website provides links to a schedule of forum meetings, including the timelines for submitting comments, as well as the forum work plan. Additionally, following each meeting, a video recording and chat log are posted to this page of the NAESB website.

Distributed Energy Resources and Battery Storage: In a significant step towards increasing interoperability and enhancing the utilization of flexible, grid-edge resources such as energy storage and distributed energy resources within the wholesale electric market, the WEQ Business Practices Subcommittee (BPS) is holding an informal comment period on draft standards addressing operational grid services utilized by the wholesale electric industry. The draft standards include proposed defined terms as well as standards that identify technology-neutral performance expectations, such as...
Distributed Energy Resources and Battery Storage (continued): electrical and timing attributes, for six categories of grid services: energy service, reserve service, regulation service, frequency service, voltage management service, and emergency service. Once completed, the final standards will better enable communications between market operators and market participants regarding grid service needs and the capabilities that can be provided by a resource. NAESB initiated this effort in response to a request for standards development jointly submitted by the U.S. DoE, Lawrence Berkeley National Laboratory, and Pacific Northwest National Laboratory to support elements of the U.S. Department of Energy’s Grid Modernization Laboratory Consortium.

The informal comment period began on Monday, October 31, 2022 and will conclude on Wednesday, November 30, 2022. Any interested party is invited to submit informal comments, regardless of membership within NAESB. The WEQ BPS will reconvene on Tuesday, December 6, 2022 to begin review of the informal comments and work towards finalizing the standards. The subcommittee expects to vote out a recommendation during the 1st Quarter, 2023.

The standards request has also been assigned to the RMQ Business Practices Subcommittee, which anticipates beginning its effort following the completion of a recommendation by the WEQ; a similar path to the development of the smart grid, demand response, and energy efficiency related retail market business practices. As described by the requesters, it is anticipated that standards developed for the wholesale electric market regarding grid services could serve as a basis for the development of comparable retail electric standards. The standards request envisions that such standards will provide greater consistency among the emerging retail markets that are working to integrate flexible, grid-edge resources, enabling the market to more efficiently capitalize on the benefits such resources can offer.

Once a recommendation to address the above-described standards request is completed, the WEQ BPS will resume its effort to develop standards to support the industry’s integration of energy storage and distributed energy resources in response to FERC Order Nos. 841 and 2222. Following an evaluation of the standards request, the WEQ BPS made the determination to focus efforts on the development of standards to support grid services as communications regarding the types of market services that an individual resource or a distributed energy resource aggregation can provide is one area the subcommittee intends to address. By first developing standards to support grid services, the subcommittee intends to avoid any duplicative efforts or inconsistencies.

WQG Contract Activities: Over the course of thirty meetings held between February 2021 and October 2022, the WQG Contracts Subcommittee has completed and now voted to approve a recommendation proposing a Renewable Natural Gas Addendum (NAESB RNG Addendum) to the NAESB Base Contract for Sale and Purchase of Natural Gas (NAESB Base Contract). The NAESB RNG Addendum is intended to support sale and purchase transactions of renewable natural gas in both regulated and voluntary markets. The formal comment period for the recommendation will conclude on November 30, 2022, after which the proposed NAESB RNG Addendum will be considered at the next meeting of the WQG Executive Committee.

Additionally, the WQG Contracts Subcommittee has been holding a series of ongoing meetings to continue efforts to develop an addendum to the NAESB Base Contract intended to address the sale and purchase of natural gas that has been certified by a third-party as meeting certain standards defined by the third-party certifier. The subcommittee is relying heavily on input from subject matter experts in order to narrow the scope of the effort and ensure that the proposed terms and conditions will be inclusive of a broad range of use cases and business models. To date, over eighty individuals representing approximately seventy different entities have participated in these meetings of the WQG Contracts Subcommittee. In the upcoming months, the subcommittee expects to finalize a recommendation and will be working towards reaching a consensus on the remaining issues to be addressed, including an official term for the product. As you may recall, the WQG Contracts Subcommittee determined to use “certified gas” as a temporary placeholder as there are several terms currently in use within the industry for this type of product. Upcoming subcommittee meetings are scheduled for November 17, 2022 and December 6, 2022.

Early next year, the WQG Contracts Subcommittee anticipates initiating the development of standards to support the technical implementation for both addenda. These efforts will include digitalization of the addenda and the ability for them to be represented on a digital platform, such as distributed ledger technology. In order to expedite this work, the subcommittee plans to leverage previous implementation efforts to digitalize the NAESB Base Contract.

NERC Coordination: Remaining an important endeavor to support interrelated commercial and reliability aspects of the wholesale electric market, NAESB and NERC staff continue to coordinate on a number of topics. Recent discussions have included activities by NERC and NAESB addressing cybersecurity, energy storage/batteries and distributed energy resources, and natural gas-electric market coordination as well as the NAESB WEQ Modeling Business Practice Standards and the NERC MOD A Reliability Standards.

In furtherance of coordination between the organizations, NAESB and NERC staffs have been engaged in discussions regarding the NAESB 2023 Annual Planning Process and the development of the 2023 – 2025 NERC Reliability Standards Development Plan (RSDP). Within the WEQ, the Standards Review Subcommittee (SRS) helps to assist in coordination by identifying and monitoring NERC reliability standard efforts that are or may be related to the WEQ Business Practice Standards. In August, the WEQ SRS met to review the draft 2023 – 2025 NERC RSDP and identified eight areas of potential coordination between the business practices and reliability standards, including NERC efforts to address cybersecurity, the integration of resources such as batteries and distributed energy, and extreme cold weather grid operations, preparedness, and coordination. The feedback from the subcommittee was forwarded to the NAESB Managing Committee and subsequently submitted to NERC.
**NAESB Board and Committees Update:** This September, NAESB held its annual Meeting of the Members and Strategic Session during which a panel of invited guests and NAESB Advisory Council members provided remarks and recommendations for consideration regarding the strategic direction of the organization. The feedback provided as part of the strategic session will be considered during NAESB’s 2023 Annual Planning process. Additionally, during the meeting, NAESB hosted as a guest speaker NAESB Advisory Council member Mr. Wood, who provided his perspective regarding the request by FERC and NERC that NAESB facilitate the gas and electric industry market forum as contemplated by 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 you may recall, Mr. Wood, along with NAESB Advisory Council members Mr. Gee and Ms. Tierney are leading the activities of the NAESB Gas-Electric Harmonization Forum.

The final meeting of the year for the NAESB Board of Directors is scheduled for December 8, 2022. Regular business for the meeting will include the approval of the NAESB 2023 Annual Plans and the upcoming year’s budget. Additionally, the NAESB Board of Directors will review a report on the results of the NAESB 2022 Standards Development Survey. The NAESB Strategy Committee held a meeting on August 22, 2022 to preliminarily discuss the results and develop a draft report. An additional meeting of the committee is scheduled for November 29, 2022 to finalize the report ahead of the upcoming meeting of the NAESB Board of Directors as well as review the proposed 2023 Annual Plans to ensure consistency with the overall strategic direction of the organization.

The NAESB Managing Committee and NAESB Revenue Committee also met in August 2022, with the NAESB Managing Committee preliminarily reviewing the budget for 2023 and discussing staff performance. The committee also approved submitting comments to NERC provided by the WEQ Standards Review Subcommittee regarding the draft 2023 – 2025 NERC Reliability Standards Development Plan. In its August meeting, the NAESB Revenue Committee conducted a review of its standing agenda items, including external communications, the publication schedule, and the revenue side of the budget. The 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. Any recommendations regarding revisions to the non-member policy developed by the committee will be presented to the NAESB Board of Directors for consideration. The NAESB Revenue Committee will next meet on November 29, 2022.

**Cybersecurity:** Supportive of direction provided by the NAESB Board of Directors and in furtherance of informal recommendations made by the U.S. Department of Energy and Sandia National Laboratories as part of the 2019 Surety Assessment that NAESB, working with FERC, consider methods in which the timeline for implementing cybersecurity standards could be abbreviated, the WEQ, WGQ, and RMQ are in the process of reorganizing their standards to move existing cybersecurity-related business practices into a new suite of NAESB Business Practice Standards for each quadrant. As discussed by the NAESB Board of Directors, quadrant-specific suites of cybersecurity-related business practice standards will serve to help expediate the process by which these standards can be developed, adopted, and implemented by the industry. FERC staff has indicated support for NAESB to move forward with this proposal as part of the next publications of WEQ and WGQ Business Practice Standards, and FERC Commissioners have also been informed of the changes.

During its October 2022 meeting, the WEQ Executive Committee approved a minor correction recommendation to create the new suite of WEQ Business Practice Standards. Developed in coordination between the WEQ Cybersecurity Subcommittee, WEQ Business Practices Subcommittee, WEQ Coordinate Interchange Scheduling Subcommittee, and WEQ OASIS Subcommittee, the recommendation identified thirteen existing standards for inclusion into the suite of cybersecurity-specific standards. These standards address cybersecurity elements related to OASIS, electronic tagging, and the NAESB Electric Industry Registry. The WGQ and RMQ are working jointly to address similar requests for minor correction and anticipate presenting recommendations to the WGQ and RMQ Executive Committees, respectively, during their next meetings in March 2023.

Beyond the reorganization of cybersecurity-related standards, the WEQ, WGQ, and RMQ, as they do every year, have undertaken efforts to review existing standards and determine if any modifications or additions are needed. The WEQ Executive Committee, also during its October 2022 meeting, approved a recommendation from the WEQ Cybersecurity Subcommittee modifying the NAESB Public Key Infrastructure Business Practice Standards to better support how server-side digital certificates are issued by NAESB Authorized Certificate Authorities (ACAs) as well as a new version of the NAESB Accreditation Specification for ACAs that makes related changes. The new version of the accreditation specification went into effect the same day it was approved by the WEQ Executive Committee, October 18, 2022, and the revisions to the standards are currently out for membership ratification. When ratified, they will be incorporated into the next publication of the WEQ Business Practice Standards. The WGQ and RMQ will be meeting jointly to evaluate any changes that may be needed to the WGQ and RMQ Internet Electronic Transport Business Practice Standards.
Green Button/Energy Services Provider Interface (ESPI) Activities: Looking ahead to next year, the RMQ plans to undertake a review the NAESB ESPI Model Business Practices. Stemming from discussions by the RMQ Executive Committee during its October 19, 2022 meeting, the effort will focus on an evaluation of the cybersecurity elements contained within the model business practices to determine if any modifications are needed in order to better align the requirements with new or revised cybersecurity protocols now in use within the industry. As you may recall, the NAESB ESPI Model Business Practices serve as the communication protocol that defines the exchange of retail customer energy usage information and form the foundation of the Green Button, a mechanism for utility customers to obtain easy and secure access to energy usage data via the utility’s website.

For many years now, NAESB has engaged in an active relationship with the Green Button Alliance (GBA) which promotes the expansion and adoption of Green Button, including through implementation certification. Utility utilization of Green Button is widespread throughout the United States and has recently expanded into the Canadian Province of Ontario. On November 17, 2022, GBA is hosting its annual meeting, with the agenda scheduled to include speakers addressing the Green Button rollout in Ontario, Canada as well as the U.S. and how standards-based Green Button implementations are allowing utilities and consumers to easily participate in energy management, streamlining energy reporting and benchmarking, assisting in the deployment of clean energy solutions, and helping to meet decarbonization goals. NAESB is committed to continuing to work with the GBA as it moves forward with its goals to educate the industry and facilitate implementation of Green Button.

Renewable Energy Certificates: When ratified by membership, the upcoming publications of the WEQ and RMQ Business Practice Standards will include standards supporting the technical implementation of the NAESB Base Contract for Sale and Purchase of Voluntary Renewable Energy Certificates (NAESB REC Base Contract). Approved by the WEQ Executive Committee during its October 19, 2022 meeting, these standards include new datasets to facilitate the digitalization of the NAESB REC Base Contract and allow it to be represented on digital technologies, such as distributed ledgers. Developed jointly by the WEQ and RMQ Business Practices Subcommittees, the participants were able to leverage previous work by the WGQ to digitalize the NAESB Base Contract for the Sale and Purchase of Natural Gas. The ratification period for both the WEQ and the RMQ ends on November 18, 2022.

Together, these standards, along with the NAESB REC Base Contract, which was ratified by NAESB membership in November 2021, are anticipated to add new efficiencies to the REC transacting process within the voluntary market by establishing standard terminology and terms and conditions that can serve as a starting point for contract negotiations. The NAESB REC Base Contract also provides an attestation exhibit allowing parties to evidence transfer of REC ownership, including uniform descriptions of the origins and creation of a REC.

WEQ OASIS Subcommittee Activities: Now out for membership ratification are new and revised WEQ OASIS Related Business Practice Standards aimed at improving transparency and consistency regarding the preemption/right-of-first-refusal (ROFR) processes by creating a mechanism to better track and audit modifications made to a transmission service reservation arising from the preemption/ROFR process as well as providing greater details regarding the competition process between a firm transmission service request and a previously queued non-firm request. Additionally, the new and revised standards will help ensure parity between consolidated and non-consolidated requests for transmission service by eliminating the potential for a service increment to be created through consolidation that would otherwise be unavailable under a transmission provider’s tariff. Approved by the WEQ Executive Committee during its October 18, 2022 meeting, when ratified, the new and revised standards will be incorporated into the next publication of the WEQ Business Practice Standards. Currently, the WEQ OASIS Subcommittee is meeting to assess the standards modifications that may be needed to address an industry submitted request for standards development regarding FERC Order No. 881 Managing Transmission Line Ratings. Intended to improve the accuracy and transparency of transmission line ratings and promote a more efficient use of the transmission grid, the Order requires the use of ambient-adjusted ratings by transmission providers in the evaluation of near-term transmission service. While the request as submitted only addressed potential modifications to the WEQ OASIS Suite of Business Practice Standards, the WEQ Annual Planning Subcommittee proposed that this item be addressed by the WEQ OASIS Subcommittee as well as the WEQ Business Practices Subcommittee (BPS) as there may also be impact to the WEQ OASIS Subcommittee. It is anticipated that any developed standards will be supportive of industry implementation of directives from the Order, including modifications that may need to be made to the calculation of values used in determining available transfer capability and OASIS related posting requirements.
**Upcoming NAESB Courses:** This year, NAESB has continued to hold periodic industry webinars in order to provide the industry with valuable information regarding NAESB and the NAESB Business Practice Standards. Twice this year, in June and again in October, NAESB offered its Understanding the NAESB WGQ Contracts Course. Through instruction provided by industry subject matter experts, this webinar provides a thorough overview of the *NAESB Base Contract for Sale and Purchase of Natural Gas* (NAESB Base Contract) as well as the supporting NAESB Base Contract addenda.

Also in October, NAESB offered the NAESB 101 Webinar, which gives those new to NAESB and those needing a refresher 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. Additionally, this year, 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 for this webinar 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.

As the dates for the webinars are scheduled, they will be made available on the NAESB Primers and Training Courses Page.

**Publications:** Currently, the NAESB Revenue Committee is in the process of establishing a recommendation to set a 2023 publication date for each quadrant. Since its last publication of Version 3.2 in August 2020, the WGQ now has new or modified standards resulting from over twenty final actions and minor corrections for inclusion as part of Version 3.3. As you may recall, the Commission took action to incorporate these standards by reference, with few exceptions, as part of FERC Order No. 587-Z, issued on July 15, 2021. Under the Order, industry compliance with the standards was required on and after June 1, 2022.

Last published on March 30, 2020 and incorporated by reference, with certain exceptions, by the Commission as part of FERC Order No. 676-J on May 20, 2021, industry compliance filings regarding the majority of standards included in WEQ Version 003.3 were due twelve months after the implementation of WEQ Version 003.2 or no earlier than October 27, 2022. Currently slated for incorporation as part of WEQ Version 003.4 are new and modified standards stemming from approximately thirty final actions and minor corrections.

As with the WGQ and WEQ, the RMQ also last published in 2020, releasing Version 3.3 that January of that year, after which the RMQ Model Business Practice Standards were made available to interested state commissions through NARUC. Scheduled for inclusion in RMQ Version 3.4 are a number of new and modified standards from several final actions and minor corrections.

**NAESB Quadrant Membership Analysis:**

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<th>NAESB Quadrant Membership Analysis:</th>
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<tbody>
<tr>
<td>Wholesale Gas Quadrant (WGQ)</td>
<td>114</td>
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<tr>
<td>Retail Markets Quadrant (RMQ)</td>
<td>34</td>
</tr>
<tr>
<td>Wholesale Electric Quadrant (WEQ)</td>
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<td>Total Membership</td>
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**NAESB New Members:**

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<th>Omaha Public Power District (WGQ, End User)</th>
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<td>IBM (RMQ, Retail Gas Interests)</td>
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**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.
Copyright/NAESB Standards Access: As is commonplace by most standard development organizations, NAESB copyrights all its work products and, as such, maintains exclusive rights to publish, reproduce, display, and distribute all copyrighted material. As a benefit of membership, NAESB members may obtain access to all copyrighted material at no cost. However, these benefits do not extend to agents, affiliates, or subsidiaries of member companies without prior approval and waivers from the NAESB office. 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. NAESB enforces its copyrights but the organization has put into place a number of policies to facilitate information sharing and regularly grants waivers to regulators and educational institutions, depending on the intended use of the copyrighted material. Additionally, the NAESB waiver process allows anyone to request a three-day waiver to review work products in consideration of purchase, and NAESB will also grant waivers for longer periods of time, such as for the purpose of reviewing the standards as part of government comment periods. The copyrighting of material provides a small revenue stream for the organization, helping to offset costs that would otherwise be solely borne by membership in the creation of standards. Further, copyright protection ensures that entities must come to NAESB to obtain its standards, assuring that entities are accessing the most current version.

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

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.

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.


NAESB Filings: June 21, 2021 - NAESB Informational Status Update on NAESB Standard Development Efforts to Support FERC Order Nos. 841 and 2222 (Docket No. RM05-5-000).