Advisory Council: On February 11, 2022, the NAESB Advisory Council held a virtual meeting to discuss several topics affecting NAESB in 2022 and beyond. The agenda began with a review of the standards development efforts already underway within NAESB, including renewable natural gas and renewable energy certificate contracting; gas-electric market coordination; energy storage; and cybersecurity.

Several comments and recommendations were offered concerning renewable natural gas, including suggestions to: consider guidance that differentiates low emissions from high emissions, review the recent FERC ruling in RP21-144, provide reporting standards similar to those created for gas quality, consider monitoring efforts underway to measure methane leaks. The Advisory Council members also suggested that NAESB monitor the Department of Energy activities related to hydrogen expansion and the activities of the European Union regarding hydrogen use, renewable natural gas and climate change. Further, the Advisory Council members also shared their expertise on advancements in cybersecurity, distributed ledger technology, and grid infrastructure. Chaired by Bruce Ellsworth, the NAESB Advisory Council has served as the origin of many of our standards development activities to date. The members of the Advisory Council provide guidance to the Board officers, Board members and Executive Committees regarding the organization’s plans and strategies, standards development activities, and accomplishments.

Gas-Electric Harmonization: On the heels of the February kick-off call to address Standards Request R21006, the joint Wholesale Gas Quadrant (WGQ), WEQ, and RMQ Business Practice Sub-committees have scheduled another meeting to be held on March 1, 2022. Submitted by Southwest Power Pool, Standards Request R21006 is intended to support improved communications and information sharing between the natural gas pipelines, balancing authorities, and electric generating facilities in the event of extreme weather-related conditions. During the March 1st meeting, participants will focus primarily on industry education and hear presentations from members of the pipeline segment, Southwest Power Pool, and Duke Energy.

As this annual plan item has been jointly assigned to the WEQ BPS, WGQ BPS, and RMQ BPS, the groups will work together to potentially draft standards for the declaration of an impending extreme weather-related emergency operating condition, including defining what might constitute such an event. Subsequent to that effort, the subcommittees will discuss the creation of standard designations of critical electric and natural gas infrastructures during impending extreme weather-related emergency operating conditions and, next, move on to potentially developing standards that support information sharing between parties during such events. Following March 1st, the next meeting of the joint subcommittees will be held on Wednesday, March 16th from 9:00 to 12:00 PM Central.

In April of last year, Michael Desselle, the Chair of the NAESB Board of Directors, reactivated the NAESB Gas-Electric Harmonization Committee to investigate any changes to the NAESB Business Practice Standards that could improve gas-electric coordination as well as to help ensure the organization would be prepared to respond to any action resulting from the FERC, NERC, and Regional Entity Joint Staff Inquiry – February 2021 Cold Weather Grid Operations. In a series of four meetings, the committee reviewed previous gas-electric coordination standard development efforts, including the jointly developed WEQ and WGQ standards that establish communication protocols utilized by transportation service providers and natural gas-fired power plants. Additionally, the committee called for proposals identifying areas of standards development for future consideration by NAESB. As a result of these efforts, the committee submitted two work papers to the FERC, NERC, and Regional Entity Joint Staff. The first work paper overviewed the existing NAESB gas-electric coordination standards, and the second outlined previous efforts to identify policy issues and other considerations by NAESB.

In November, the NAESB Gas-Electric Harmonization Committee met to review the final report on the FERC, NERC, and Regional Entity Joint Staff Inquiry – February 2021 Cold Weather Grid Operations and reviewed a draft version of Standards Request R21006. After reviewing the activities of the NAESB Gas-Electric Harmonization Committee and Standards Request R21006, the NAESB Board of Directors added this effort to the 2022 WEQ, WGQ, and RMQ Annual Plans, reflected as 2022 WEQ Annual Plan Item 7, 2022 WGQ Annual Plan Item 5, and 2022 RMQ Annual Plan Item 3.
FERC Order No. 2222 and FERC Order No. 841: In support of the industry’s implementation of FERC Order Nos. 841 and 2222, the Wholesale Electric Quadrant (WEQ) Business Practices Subcommittee (BPS) has continued meeting on a monthly basis to develop information and reporting standards related to battery storage, energy storage, and other distributed energy resources (DER). During its March 2nd meeting, the WEQ BPS will continue to focus its efforts on drafting standards to support the communication of data necessary for the registration of distributed energy resources and DER aggregations. Specifically, the subcommittee participants will consider holding an informal comment period on a use case that identifies potentially relevant data elements related to locational information and operational characteristics.

Following the completion of the draft standards in this area, the participants will also examine other use cases that should be addressed as part of the standards development effort. In order to stay on track for completion within the third quarter of 2022, the WEQ BPS has developed a work plan to guide development under this annual plan item. Following the March 2nd meeting, the subcommittee has scheduled its next call for April 6th from 10:00 AM to 4:00 PM Central.

Green Button/Energy Services Provider Interface (ESPI) Activities: During the upcoming March 30th Retail Markets Quadrant (RMQ) Executive Committee meeting, the committee will consider three Minor Corrections (MC21007, MC21009, and MC21011), all submitted by the Green Button Alliance, Inc.

Two of the minor corrections are related to the OAuth 2.0 Authorization Framework, a protocol that allows for online authorization. Submitted in October, Minor Correction MC21007 asks NAESB to revise Figure 41 in the ESPI Model Business Practices in order to clarify that, although the diagram currently provides an example, the OAuth 2.0 Authorization Framework does not specifically define how an implementation of OAuth 2.0 obtains a customer’s authorization. Minor Correction MC21011 revises Section REQ.21.6.1.2 User Authorization to clarify that the current version of the NAESB ESPI Model Business Practices only support the OAuth 2.0 “opaque” token. The Green Button Alliance states in the request that the proposed modification will eliminate confusion during industry implementation of Version 3.3 of the NAESB RMQ Model Business Practices.

A third minor correction, Minor Correction MC21009, seeks to include the enumeration values for the Retail Customer defined resource values in the ESPI Model Business Practices. The proposed revisions also update the title for Energy Usage Function blocks in order to minimize confusion. Further, the Function Block enumerations type entries have been changed from “String32” to “String4”, where appropriate.

The NAESB ESPI Model Business Practices define a communication protocol for the exchange of retail customer energy usage information. NAESB published the most recent version of ESPI on January of 2020 as part of Version 3.3 of the NAESB RMQ Model Business Practices. Since the first ratification of ESPI in September of 2011, the standard has enabled retail consumers to better understand their usage information and make informed decisions regarding energy consumption.

WGQ Contracts Renewable Natural Gas Effort: During its ongoing biweekly meetings, the WGQ Contracts Subcommittee has continued its effort to draft an addendum to the NAESB Base Contract for Sale and Purchase of Natural Gas that will support sale and purchase transactions of renewable natural gas in both regulated and voluntary markets. This standards development effort began in February of 2021 with the identification and development of standardized terms and definitions applicable to renewable natural gas transactions, and has progressed to the development of the general terms and conditions of the addendum. Once the addendum terms are complete, the participants will leverage the previous WGQ work effort to digitize the NAESB Base Contract for the Sale and Purchase of Natural Gas in order to enable the renewable natural gas addendum to be utilized electronically, including on distributed ledger technology. On track to complete the effort within 2022, the WGQ Contracts Subcommittee has scheduled its next meeting for March 10th.

Helpful links on the NAESB Home Page:
- NAESB Bulletin
- What’s Hot
- NAESB Standards and Implementation

NAESB Quadrant Membership Analysis:

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NAESB New Members:
- Eversource Energy (WGQ, Distributor)
- Independent Electricity Systems Operator (WEQ, IGO/Planners)
- Southwest Power Pool (WGQ, End User)
- Nebraska Public Service Commission (RMQ, End User/Public Agencies)
- Citizens Energy Group (WGQ, Local Distribution Company)
WEQ OASIS Subcommittee Activities: The Open Access Same-Time Information Systems (OASIS) manage the electronic scheduling of wholesale electricity by displaying information about Available Transfer Capability for point-to-point and network transmission service and providing a process for requesting Transmission Service on a non-discriminatory basis.

During its February meeting, in response to Standards Request R21003, the WEQ OASIS Subcommittee approved a recommendation that modifies the ROLLOVER_WAIVED flag in OASIS from “Optional” to “Required” in order to require the customer to explicitly opt-in or opt-out of the conveyance of rollover rights in WEQ-001, WEQ-002, and WEQ-013. The recommendation has been posted for a thirty-day formal comment period which will conclude on March 16, 2022. The subcommittee has announced a meeting on March 22nd that will solely focus on any formal comments received and, if necessary, the drafting of late comments in response. The WEQ Executive Committee will review the recommendation and any formal comments during its March 29th meeting.

As part of the 2021 WEQ Annual Plan, work to address Standards Request R21003 was segmented into four standards development efforts. The first recommendation, approved by the subcommittee last year, revises timing tables to take human performance into account where systems are not fully automated. That recommendation will also be reviewed by the WEQ Executive Committee during its March 29, 2022 meeting. The OASIS Subcommittee participants will continue to address the remaining two efforts. Those include a review of the OASIS Standards addressing concomitant requests which will be continued during the March 30-31 WEQ OASIS meeting and the consideration of the accessibility of profile changes that occur as a result of the Preemption and Right of First Refusal process, an effort that will begin later this year.

During the upcoming March 30-31, 2022 OASIS Subcommittee meeting, the participants anticipate voting on a draft recommendation that provides a cross-reference table for the WEQ Business Practice Standards and a recommendation addressing R21004. The cross-reference table will provide clear guidance for users researching related standards. That draft recommendation provides enhancements to the NAESB WEQ-000 Abbreviations, Acronyms, and Definition of Terms Standard in the form of a cross reference column to the WEQ-000-1 Abbreviations and Acronyms Standard, WEQ-000-1.1 Abbreviations and Acronyms Do Not Use Standard, and WEQ-000-2 Definition of Terms Standard. Additionally, as part of Standards Request R21004, the subcommittee participants will discuss and possibly vote on a draft recommendation that seeks to provide clarity to Consolidations, a request type that was introduced into the WEQ Business Practice Standards in Version 3.2, that allows the OASIS user to combine like transmission service reservations into one reservation to simplify scheduling activities.

Cybersecurity: Once again, the WEQ Cybersecurity Subcommittee will undertake its annual review of the WEQ-012 Public Key Infrastructure Business Practice Standards and the NAESB Accreditation Requirements for Authorized Certification Authorities to determine whether any modifications are necessary to meet market conditions and to support the NERC CIP Reliability Standards or other NERC/FERC related cybersecurity activities. Last year, the WEQ Cybersecurity Subcommittee participants earmarked several NERC CIP related standard projects and two FERC Notice of Inquiry proceedings to monitor in 2022, including: NERC Project 2016-02 Modifications to CIP Standards; NERC Project 2020-03 Supply Chain Low Impact Revisions; Project 2020-04 Modifications to CIP-012; the June 18, 2020 FERC Potential Enhancements to the CIP Reliability Standards Notice of Inquiry; and the September 17, 2020 FERC Equipment and Services Produced or Provided by Certain Entities Identified as Risks to National Security Notice of Inquiry. The WEQ CSS is checking its calendar to schedule its next meeting which will be announced by the NAESB office.

In 2022, the WGQ Electronic Delivery Mechanism Subcommittee and the RMQ Information Requirements and Technical Electronic Implementation Subcommittee anticipate scheduling joint meetings to review the data used in the NAESB WGQ/RMQ Internet Electronic Transport specification for data fields that may no longer be utilized and to determine if the data fields can be removed. This item was added to the quadrants’ annual plan as a result of the 2019 Sandia National Laboratories surety assessment.

Further, NAESB will continue to address the informal recommendation made by Sandia National Laboratories to evaluate potential paths for how the industry can accelerate the process by which it develops, adopts, and implements cybersecurity related standards. In 2021, the Board Strategy Committee survey identified several proposals to address the informal recommendation and sought feedback from members of the NAESB Advisory Council and the Board of Directors. The results of the survey were subsequently reviewed by the Board Strategy Committee and the Board of Directors. As discussed during the December Board of Directors meeting, NAESB will consider the creation of quadrant-specific books of standards that integrate cybersecurity-related business practice standards.
NERC Coordination: NERC and NAESB continue to coordinate on numerous topics to ensure the organizations remain in lock-step regarding areas of overlap between the commercial considerations and the reliability aspects within the wholesale electric industry. Recent topics of discussion have included cybersecurity, standards development concerning area control error (ACE), natural gas-electric market coordination activities, and the distributed energy resources standards development efforts.

As an update from the last bulletin, the WEQ recently ratified modifications to the WEQ-005 ACE Equation Special Cases Business Practice Standards to ensure consistency in the use of defined terms, abbreviations and acronyms as well as align terminology used within the standards with that used in the updated version of the NERC Dynamic Transfer Reference. The WEQ-005 Business Practice Standards address how joint operating units modeled as pseudo-ties or dynamic schedules are accounted for in the ACE equation, which is maintained by NERC. As stated above, the modifications have been ratified and will be included in the next version of the WEQ publication.

Currently, as part of NERC Project 2022-01, NERC is considering potential revisions to the definitions for the terms ACE and Reporting ACE. As this effort may result in impacts to the WEQ Business Practice Standards, NAESB and NERC staff continue to communicate regarding any developments.

Also, the WEQ Cybersecurity Subcommittee is looking at its calendar to schedule a meeting that will address two recurring annual plan items. First, the subcommittee will review the NERC Critical Infrastructure Protection (CIP) Standards and any other activities of NERC and FERC related to cybersecurity. Next, the participants will undertake a review of the WEQ-012 Public Key Infrastructure Standards and the accreditation requirements for Authorized Certification Authorities to determine if any changes are need.

NERC and NAESB staff members frequently discuss the commercial and reliability-related aspects of activities to support FERC Order Nos. 2222 and 841. NERC staff recently provided a work paper to the WEQ BPS participants containing common terms and definitions related to distributed energy resources. The document may assist the subcommittee in its development of any NAESB defined terms that may be drafted to support the business practices.

Upcoming NAESB Courses: 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. NAESB will continue to hold its popular industry webinars for interested parties. As the dates for webinars are scheduled, they are made available on the NAESB Primers and Training Courses Page. Understanding the NAESB WGQ Contracts Course provides a review of the NAESB Base Contract and its addendums taught by subject matter experts. The NAESB 101 Webinar provides a great introduction to the NAESB standards development process and the organization of NAESB. Also, every year, NAESB offers a version of the NAESB 101 class specifically for NARUC. Additional courses may assist those submitting comments in response to Notices of Proposed Rulemaking or considering the implementation of new standards.

Publications: In April, the NAESB Board of Directors will meet to continue discussion on the publication dates within each of the quadrants. Last year, on July 15th and May 20th, FERC issued two final orders that incorporated by reference Version 003.3 of the NAESB WEQ Business Practice Standards and Version 3.2 of the NAESB WGQ Business Practice Standards. Outside of the United States, the Government of Ontario revised its regulations to incorporate by reference REQ. 21 Energy Services Provider Interface from Version 3.3 of the RMQ Model Business Practices.
NAESB Board Committees Update: On April 14, 2022, the NAESB Board of Directors will hold its next virtual meeting to discuss and consider several items, including the quadrant annual plans, financial and membership statements, and other standing agenda items. The Board Digital Committee met in November and again in January to review and update the 2020 Digital Committee Report that was adopted by the Board of Director on September 3, 2020. The updates to the report include an addendum that provides the results of Board Strategy Cybersecurity Survey, an update on the pending gas-electric coordination standards development activities, and details are provided on the energy storage and distributed energy resource aggregation activities to support FERC Order Nos. 841 and 2222.

As in past years, NAESB is conducting a survey of industry participants to gauge potential interest in areas of standards development or activities that NAESB should consider undertaking within the next twelve to eighteen months. The Board Strategy Committee will finalize the survey during its upcoming meetings and distribution is expected in the Summer of 2022. Any conclusions taken from the survey responses will be forwarded to the Board of Directors and may feed into the quadrant annual plan development which will begin in October. The Board Strategy Committee will also discuss take aways from the February Advisory Council meeting and address standing agenda items.

Renewable Energy Certificates: On March 15, 2022 and April 5, 2022, the RMQ and WEQ Business Practice Subcommittees will hold its next meetings to discuss the Invoice and Invoice Response technical standards to support the **NAESB Base Contract for Sale and Purchase of Voluntary Renewable Energy Certificates** (NAESB REC Base Contract). The NAESB REC Base Contract was ratified by the WEQ and RMQ membership in November and, since that time, the WEQ and RMQ BPS participants have made substantial progress in the development of related technical standards, including standards that allow for the digitization of the agreement. To date, the participants have completed the data dictionary for the Invoice data set and are now focused on the Transaction Confirmation data sets and code values. By leveraging the standards created during the WGQ efforts to digitalize the **NAESB Base Contract for Sale and Purchase of Natural Gas**, the subcommittees have expedited the standards development process and are on track to complete this joint effort later this year.

As stated above, the RMQ and WEQ membership ratified the NAESB REC Base Contract on November 4, 2022. That contract, and its accompanying FAQ document, was jointly developed by the WEQ and RMQ BPS and subsequently approved by the WEQ and RMQ Executive Committees in October. The NAESB REC Base Contract is intended to improve efficiencies in the voluntary REC transaction processes by providing uniform terminology and model terms and conditions that can serve as a starting point for contract negotiations. Also, included as part of the model contract, is an attestation exhibit that allows parties to evidence transfer of REC ownership, including uniform description of a REC’s origins and creation.

**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](#).*

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 you are aware, NAESB copyrights its work products – a practice used by most standards organizations. The copyrights are considered a subset of intellectual property law, and NAESB retains the rights to the publication, reproduction, display, and distribution of all copyrighted material. NAESB members may obtain materials free of charge as part of their benefits, but these 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 penalties of $100,000+, injunction, impounding of materials, seizure of property, and award of punitive damages. While NAESB does enforce its copyrights, the organization has developed policies intended to facilitate sharing information and has granted waivers to regulators and educational institutions depending on the intended use. NAESB also has 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, such as for a government comment period. 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.

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), March 19, 2021 NAESB Comments Submitted to FERC on NOPR issued February 18, 2021 for (WGQ Version 3.2).