

# NAESB Wholesale Electric Quadrant (WEQ) Update

Interchange Scheduling and Accounting Subcommittee February 22, 2024

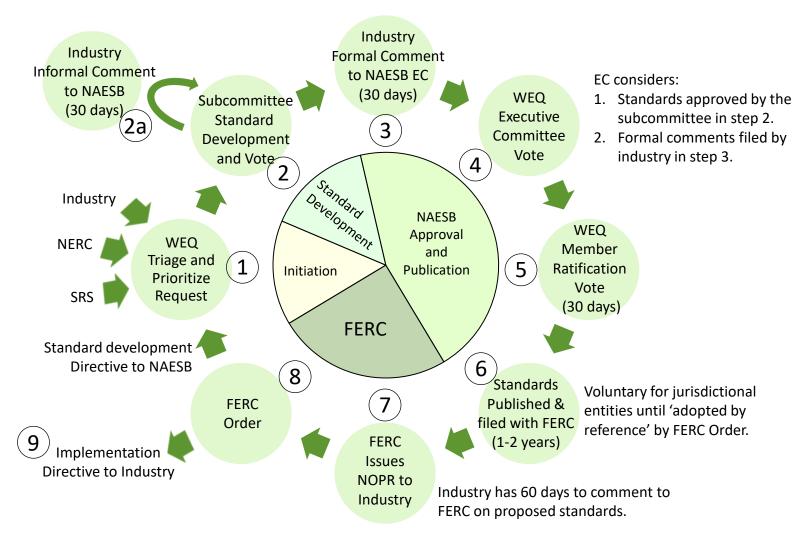
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### Objective

• Provide a broad overview of the activities of the NAESB Wholesale Electric Quadrant across the lifecycle of standards development.

### **NAESB WEQ Standard Development Lifecycle**



# <sup>1</sup>Subcommittee Development Backlog

Not started from 2024 Annual Plan.

Торіс	Sub	Description and Status
DLT	WEQ	Evaluate whether Distributed Ledger Technology (DLT) can be used to streamline Power accounting functions. This will be an exploratory scoping effort, rather than a standards development effort. (API 4a)
ATC	BPS	Placeholder to revise ATC Modeling standards per FERC guidance. (API 1a)
e-Tag	CISS	Annual review of the e-Tag functional spec. (API 1b)
ACA	CSS	Annual review of Authorized Certificate Authority (ACA) document. (API 3a)
NERC CIP	CSS	Annual review of NERC CIP standards. (API 3b)
Cyber Best Practice	CSS	Develop business practice standards for cybersecurity disclosure best practice policies, such as software supply chain risks. (API 3d)
Weather	BPS	Develop standards to support Feb 2021 Cold Weather Outages based on NERC Reliability standards (EOP-011, EOP-012, and TOP-002). (API 1c)
DER	BPS	Develop standards to support integration of DER management systems in general and specific to the wholesale market. (API 5ab)
DER	BPS	Develop standards to support integration of DER aggregation registries in general and specific to the wholesale market. (API 5cd)

### 2 Subcommittee Development In-progress

Торіс	Sub	Description and Status
OS	OS	Review OASIS standards for modifications that may be necessary following implementation of v003.3 standards. (API 2a)
DER	CSS BPS	Evaluate whether cybersecurity protections are needed to secure communication for distributed energy resources. (API 3c)
EIR	CISS	Develop standards to support new organization registration roles for inverter-based resources with NERC Compliance Registry. (API 1d)
eTags	CISS	Require all entities to actively approve e-Tags. (API 2b)
Weather	BPS	Gas-Electric Coordination for extreme weather events per request from NERC, FERC, NAESB Board of Directors (Dec 2022 Winter Storm Elliott). (API 6)
DER	BPS	Develop a standard Distribution Services contract for DER aggregations per request from DOE. (R24001)

#### 2a Pending Informal Comment

Subcommittee still actively working.

Topic	Sub	Description and Status

# <sup>3</sup> Pending Formal Comment

Currently out for Formal Comment.

Topic	Sub	Description and Status

# <sup>4</sup>NO ACTION Last Executive Committee

EC meeting was held on 10/25/23.

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Topic	Sub	Description and Status
Order 881	BPS	<ul> <li>Update ATC Modeling standards (WEQ-023) as needed for ambient-adjusted line ratings required under FERC Order 881. (API 6aii)</li> <li>NO ACTON at the Business Practice Subcommittee on 06/13/23.</li> <li>NOTE: The OASIS Subcommittee had previously also determined NO ACTION for the OASIS standards.</li> </ul>
e-Tag	CSS	<ul> <li>Annual review of e-Tag Functional Spec. (API 1b)</li> <li>NO ACTION vote at the Coordinate Interchange Scheduling Subcommittee on 08/30/23.</li> </ul>
DER	CSS	<ul> <li>Define the following for distributed energy resources (DERs): an industry registry for the wholesale market; standards for information reporting; performance metrics. (API 5abc)</li> <li>NO ACTION vote at the Business Practice Subcommittee on 09/11/23.</li> </ul>

A vote of "NO ACTION" at the Executive Committee means these standard requests are dead.

# <sup>4</sup> Pending Next Executive Committee

Next EC meeting is on 03/20/24.

Topic	Sub	Description and Status
OS	OS	Add a response time to Resales off OASIS. (API 2b)

# <sup>5</sup> Pending Member Ratification Vote

30 day vote by all NAESB members

Topic	Sub	Description and Status

- On 07/31/23, NAESB published the v004 standards.
- All of the following items have been incorporated into the v004 standards.
- These standards are now available for use. They are voluntary for FERC jurisdictional entities until a FERC final action.

Published v004.0 on 07/31/23.

Торіс	Sub	Description and Status
Checkout	CISS	<ul> <li>An Appendix has been added to WEQ-004 related to Coordinate Interchange that will provide some optional "best practice" guidelines for entities that may wish to automate NSI checkout. Will not impact WECC. (API 3.f)</li> <li>Voted out of the CISS subcommittee on 09/22/20.</li> <li>Voted out of the Executive Committee on 10/27/20.</li> <li>Ratified by NAESB Membership on 11/30/20.</li> </ul>
NITS	OS	<ul> <li>Define posting of Rollover Rights for NITS on OASIS (API 3a).</li> <li>Voted out of the OASIS subcommittee on 03/24/20.</li> <li>Formal Comment period closed 04/24/20 with comments from SoC, MISO, SRS.</li> <li>Voted out of the Executive Committee on 10/27/20.</li> <li>Ratified by NAESB Membership on 11/30/20.</li> </ul>
NITS	OS	<ul> <li>Define some new customer query variables for NITS (API 3e).</li> <li>Voted out of the OASIS subcommittee on 03/24/20.</li> <li>Formal Comment period closed 04/24/20 with no industry comments filed.</li> <li>Voted out of the Executive Committee on 10/27/20.</li> <li>Ratified by NAESB Membership on 11/30/20.</li> </ul>

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Published v004.0 on 07/31/23.

Торіс	Sub	Description and Status
Redirects	OS	<ul> <li>Revised standards related to handling of Redirects in preemption/competition.</li> <li>Addresses gaps in standards resulting from FERC Order 676-I. (R20003)</li> <li>Voted out of the OASIS subcommittee on 06/23/20.</li> <li>Formal Comment period closed 07/23/20 with several comments.</li> <li>Revised standards adopted by OASIS subcommittee on 08/18/20.</li> <li>Voted out of the Executive Committee on 10/27/20.</li> <li>Ratified by NAESB Membership on 11/30/20.</li> </ul>
Redirects	OS	<ul> <li>At the request of APS, the Redirect standards were clarified to indicate that requests are to be denied as invalid (not counteroffered) if the Redirect exceeds the parent capacity. Counteroffers are used for valid requests for which there is insufficient ATC to grant a full offer. (R20010)</li> <li>Voted out of the OASIS subcommittee on 08/18/20.</li> <li>Formal Comment period closed 09/18/20 with several comments.</li> <li>Voted out of the Executive Committee on 10/27/20.</li> <li>Ratified by NAESB Membership on 11/30/20.</li> </ul>

Published v004.0 on 07/31/23.

Торіс	Sub	Description and Status
Manual Time Error Correction	BPS	<ul> <li>Revisit proposed retirement of WEQ-006 following FERC Order 676-I. FERC declined to adopted proposed retirement due to insufficient justification. WEQ-006 remains in effect. (API 2a)</li> <li>Approved standard does not apply to Interconnections like WECC in which Automatic Time Error Correction (ATEC) is in place (e.g., WECC-BAL-004).</li> <li>Voted out of the Business Practice Subcommittee on 01/14/21.</li> <li>Voted out of the Executive Committee on 03/09/21.</li> <li>Ratified by NAESB Membership on 04/19/21.</li> </ul>
Tag Backup	CISS	<ul> <li>Replaces faxes as the tag backup system with a general procedure that puts the onus on each Entity to have communication redundancy in place. R20011 from BPA.</li> <li>Voted out of the Coordinate Interchange Scheduling Subcommittee 01/04/20.</li> <li>Voted out of the Executive Committee on 03/09/21.</li> <li>Ratified by NAESB Membership on 04/09/21.</li> </ul>
Definitions	SRS	<ul> <li>Update the Definitions and Acronym standard (WEQ-000) to cross-reference other standards where those terms are used. (API 3a)</li> <li>Voted out of the Standards Review Subcommittee on 01/28/21.</li> <li>Voted out of the Executive Committee on 03/09/21.</li> <li>Ratified by NAESB Membership on 04/09/21.</li> </ul>

Published v004.0 on 07/31/23.

Торіс	Sub	Description and Status
OASIS	OS	<ul> <li>Add the ability to see additional information for child reservations from a given reservation on OASIS. Changes to the <i>reduction</i> OASIS template. (API 3c).</li> <li>Voted out of the OASIS Subcommittee 06/22/21.</li> <li>Voted out of the Executive Committee on 10/05/21.</li> <li>Ratified by NAESB Membership on 11/04/21.</li> </ul>
Consistency	SRS	<ul> <li>Update NAESB glossary with NERC definition of System Operating Limit. (R21002)</li> <li>Voted out of the Standards Review Subcommittee 08/11/21.</li> <li>Voted out of the Executive Committee on 10/05/21.</li> <li>Ratified by NAESB Membership on 11/04/21.</li> </ul>
ACE	BPS	<ul> <li>Clarify language in WEQ-005 in the Area Control Error (ACE) equation in relation to what is in the NERC Dynamic Transfer Reference Document v4. (API 1a)</li> <li>Voted out of the Business Practice Subcommittee 08/20/21.</li> <li>Voted out of the Executive Committee on 10/05/21.</li> <li>Ratified by NAESB Membership on 11/04/21.</li> </ul>
REC	BPS	<ul> <li>Develop a NAESB Base Contract for the Sale and Purchase of <u>Voluntary</u> Renewable Energy Certificates (RECs). Also includes an FAQ document. (API 6.b.i)</li> <li>Voted out of the Business Practice Subcommittee 08/03/21.</li> <li>Voted out of the Executive Committee on 10/05/21.</li> <li>Ratified by NAESB Membership on 11/04/21.</li> </ul>

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Published v004.0 on 07/31/23.

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Торіс	Sub	Description and Status
Hourly Timing	OS	<ul> <li>Increase customer Counteroffer response time for Hourly requests from 5 minutes to 10 minutes. (R21003 from MISO)</li> <li>Voted out of the OASIS subcommittee on 09/24/21.</li> <li>Voted out of the WEQ Executive Committee on 03/29/22.</li> <li>Ratified by NAESB Membership on 04/28/22.</li> </ul>
Rollover	OS	<ul> <li>Change how Rollover Rights work for Redirects to end-of-term. Customer will need to specify on OASIS if Rollover Rights go with the parent or the Redirect. (API 3b.i)</li> <li>Voted out of the OASIS subcommittee on 02/15/22.</li> <li>Voted out of the WEQ Executive Committee on 03/29/22.</li> <li>Ratified by NAESB Membership on 04/28/22.</li> </ul>
Cyber- security	CSS	<ul> <li>Consolidate all cybersecurity requirements from tagging, OASIS, EIR, etc into one NAESB booklet (MC22008).</li> <li>Voted out of the WEQ Executive Committee on 10/18/22.</li> </ul>
ACA	CSS	<ul> <li>Small change to WEQ-12 and the Authorized Certificate Authority (ACA) document for server-side certificates. (API 4a)</li> <li>Voted out of the Cybersecurity Subcommittee 06/30/22.</li> <li>Voted out of the WEQ Executive Committee on 10/18/22.</li> <li>Ratified by NAESB Membership on 11/18/22.</li> </ul>

#### Published v004.0 on 07/31/23.

Торіс	Sub	Description and Status
Definitions	OS	<ul> <li>Add a cross-reference table tor referencing other OASIS standards for select topics. (API 3a)</li> <li>Voted out of the OASIS Subcommittee on 04/19/22.</li> <li>Voted out of the WEQ Executive Committee on 10/18/22.</li> <li>No Member Ratification needed.</li> </ul>
Preemption	OS	<ul> <li>Change made to the Preemption and ROFR standards in WEQ-001 to clarify that not all scenarios in Table 25-3 apply to all Transmission Providers, depending on the ATC methodology. No change to policy. (R21005)</li> <li>Voted out of the OASIS Subcommittee on 07/19/22.</li> <li>Voted out of the WEQ Executive Committee on 10/18/22.</li> <li>Ratified by NAESB Membership on 11/18/22.</li> </ul>
ROFR Visibility	OS	<ul> <li>Identify the profile changes on OASIS when a reservation successfully goes through ROFR as part of short-term Preemption and ROFR. (API 3b.ii)</li> <li>Voted out of the OASIS Subcommittee on 07/19/22.</li> <li>Voted out of the WEQ Executive Committee on 10/18/22.</li> <li>Ratified by NAESB Membership on 11/18/22.</li> </ul>
Consolidate	OS	<ul> <li>Small change to the Consolidation standards to enable a TP to enforce requirements consistent with their tariff. Will not impact most TPs. (API 3.c)</li> <li>Voted out of the OASIS Subcommittee on 03/22/22.</li> <li>Voted out of the WEQ Executive Committee on 10/18/22.</li> <li>Ratified by NAESB Membership on 11/18/22.</li> </ul>

Published v004.0 on 07/31/23.

Торіс	Sub	Description and Status
ATC	BPS	<ul> <li>Small modification to WEQ-023 to accommodate Conditional Firm (standard 1.4) and TP timing enforcement of NSI (standard 1.4.1) in response to FERC Order 676-J. (API 2.a)</li> <li>Voted out of Business Practice Subcommittee 07/06/22.</li> <li>Voted out of the WEQ Executive Committee on 10/18/22.</li> <li>Ratified by NAESB Membership on 11/18/22.</li> </ul>
Grid Service Definitions	BPS	<ul> <li>Define a common list of standardized, technology-neutral definitions for grid services.</li> <li>Effort requested by DOE as part of a larger grid-modernization program. (API 5d)</li> <li>Voted out of Business Practice Subcommittee on 02/15/23.</li> <li>Voted out of the WEQ Executive Committee on 03/28/23.</li> <li>Ratified by NAESB Membership on 04/27/23.</li> </ul>
REC	BPS	<ul> <li>Established suite of standards to automate the management of RECs for the voluntary market. (API 5.b.i)</li> <li>Voted out of the Business Practice Subcommittee on 07/07/22.</li> <li>Voted out of the WEQ Executive Committee on 10/18/22.</li> <li>Ratified by NAESB Membership on 11/18/22.</li> </ul>

Published v004.0 on 07/31/23.

Торіс	Sub	Description and Status
Consistency	CSS	<ul> <li>Update Cybersecurity standards in WEQ-012 for consistency in the use of acronyms and abbreviations. (API 3.a.iv)</li> <li>Voted out of the Cybersecurity Subcommittee 07/13/21.</li> <li>Voted out of the Executive Committee on 10/05/21.</li> <li>Ratified by NAESB Membership on 11/04/21.</li> </ul>
Consistency	OS	<ul> <li>Update OASIS standards (WEQ-001, 002, 003, 013) for consistency in the use of acronyms and abbreviations. (API 3.a.i)</li> <li>Voted out of the OASIS Subcommittee 05/18/21.</li> <li>Voted out of the Executive Committee on 10/05/21.</li> <li>Ratified by NAESB Membership on 11/04/21.</li> </ul>
Consistency	BPS	<ul> <li>Update BPS standards (WEQ-005, 007, 008, 023) for consistency in the use of acronyms and abbreviations. (API 3.a.iii).</li> <li>Voted out of the Business Practice Subcommittee 08/20/21.</li> <li>Voted out of the Executive Committee on 10/05/21.</li> <li>Ratified by NAESB Membership on 11/04/21.</li> </ul>
Consistency	CISS	<ul> <li>Update Tagging WEQ-004 and EIR WEQ-022 standards for consistency in the use of acronyms and abbreviations. (API 3.a.ii)</li> <li>Voted out of the Coordinate Interchange Scheduling Subcommittee 06/23/21.</li> <li>Voted out of the Executive Committee on 10/05/21.</li> <li>Ratified by NAESB Membership on 11/04/21.</li> </ul>

# <sup>6</sup> Pending next NAESB Publication

Publish V004.1 probably in 2025.

Торіс	Sub	Description and Status
Ramp	CISS	Modify WEQ-004 for clarity of ramp duration (R23002 from MISO).

## Pending FERC NOPR

(7)

FERC NOPR is due for v004 standards

- The next step is for FERC to solicit industry comments via a Notice of Proposed Rulemaking (NOPR) for the v004.0 standards that were published on 07/31/23.
- All of the items listed in the previous slides for V004.0 would be included in the next NOPR.

## FERC Final Orders

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- Order 902: On 10/26/23, FERC issued Order 902 which retired the following NERC standards as of 02/01/24:
  - MOD-001-1a, MOD-004 (CBM), MOD-008 (TRM), MOD-028-s, MOD029-2a, and MOD-030-3.
- The ATC Modeling Standards are now fully moved over to NAESB (WEQ-023).
- Order 676-J: FERC had previously adopted the NAESB ATC Modeling Standards issued on 05/20/21.
  - Order 676-J adopted version 003.3 of the NAESB standards.
  - $_{\odot}~$  The compliance deadline for 676-J was 01/27/23.
  - The software changes have implemented by the industry vendor(s).
  - The following slides list all of the changes for Order 676-J.

### 8 Implementation Done: Order 676-J

OASIS-only changes went live 01/19/23.

Торіс	Sub	Description and Status
Curtail Info on OASIS	OS BPS	<ul> <li>Posting of additional curtailment information on OASIS per FERC Order 890 (API 2.a). Only applies to Interconnection-wide congestion management curtailments.</li> <li>Functionality has been made available to post curtailment information to OASIS.</li> <li>Data from IDC in the East is being posted. No data yet from ECC in the West.</li> </ul>
3 <sup>rd</sup> Party Planning Redispatch	OS BPS	<ul> <li>Redispatch Cost Posting to allow for posting on OASIS of 3<sup>rd</sup> party offers of Planning Redispatch services per FERC Order 890 (API 2.a.i.2).</li> <li>The TP is obligated to provide the posting mechanism on OASIS for 3<sup>rd</sup> party offers of Planning Redispatch. This has been met across the industry.</li> <li>There is no obligation for any party to use this functionality.</li> </ul>
LIST Templates	OS	Update OASIS Query/Response templates to allow more flexible and efficient queries for some templates (API 3b).
PTP Rollover Notification	OS	Automatically notify customers when PTP renewal deadline approaches (API 3b).
Dynamic Notification	OS	Updates to the Dynamic Notification (email) on OASIS to provide a more generic notification capability (API 3.f). Developed in conjunction with updates for PTP Rollover Notification above (API 3f).
DOE Surety Assessment	OS	Sandia National Labs conducted a "surety assessment" of NAESB standards regarding cybersecurity protections. OASIS standards have been updated to require providers of OASIS nodes to adopt industry "best practices" for countering cybersecurity threats. OATI completed their changes June 2022. 23

### 8 Implementation Done: Order 676-J

Tagging-related changes.

Торіс	Sub	Description and Status
Tag Timing	CISS	Updated tag timing approval windows in WEQ-004 to align with NERC INT-006 (API 3h). <ul> <li>Implemented with eTag Functional Spec 1.8.4 in Sept 2020.</li> </ul>

### 8 Implementation Done: Order 676-J

webTrans 7.2.03.4 or later.

Торіс	Sub	Description and Status
NITS	OS	<ul> <li>Modifications to the NITS standards. Several corrections; provides additional flexibility for managing Scheduling Rights; handles fractional MW's for generators; improved querying of NITS Application DNR information, etc. (API 3c)</li> <li>The functionality for Modify NITS Scheduling Rights requires webTrans upgrade.</li> <li>OASIS changes are available once the webTrans changes are done.</li> </ul>
Managed Encumbrance	OS	<ul> <li>Update OASIS to ensure that capacity reserved for untagged Pseudo-ties is preserved for that purpose (API 3e).</li> <li>May not be necessary for all Providers since Pseudo-ties are tagged in the west. But the proposed standards define a generic way to encumber a TSR for ad-hoc use (i.e., beyond Resale, Redirect, etc).</li> <li>OASIS functionality is available once the webTrans changes are done.</li> </ul>

## **Implementation N/A: Order 676-J**

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No software changes.

Topic	Sub	Description and Status
INT Retirements	CISS	Migrated standards from NERC to NAESB for RFI in emergency situations and registering pseudo-ties in the EIR. Moved standards to WEQ-004 from the following: INT-004-3.1 and INT-010-2.1, INT-006 (R3.1, R4, R5) and INT-009 (R2).
MOD Retirements	BPS	Adopted NAESB standards for ATC Modeling in booklet WEQ-023 for the eventual retirement of NERC MOD standards (including withdrawal of MOD-001-2). Most content from NERC MOD-001-2 has been moved to NAESB WEQ-023.
NHM	OS	Modify Next Hour Market (NHM) service to be more applicable to the western EIM (API 3.g). Standards now make it clear that the tag priority 0-NX can be used for purposes other than Next-hour Market (NHM) service, such as EIM.
PFV	BPS	Does not apply to the Western Interconnection. Updated standards for Parallel Flow Visualization for the Eastern Interconnection.

## Contact

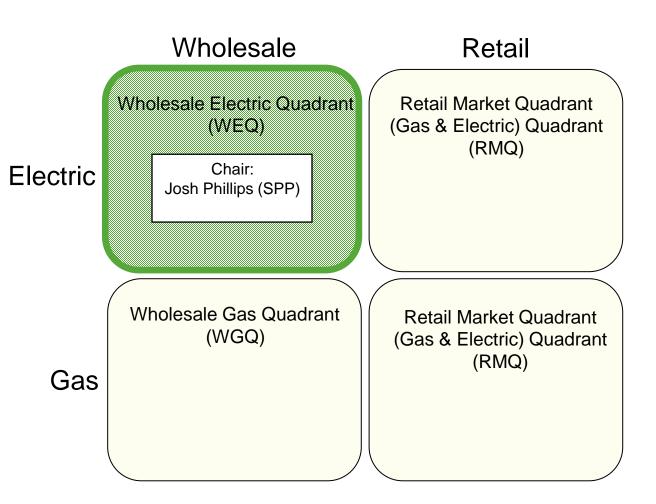
## With questions or feedback

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## Background

## North American Energy Standards Board (NAESB)

- An industry forum for the development and promotion of standards which will lead to a <u>seamless</u> <u>marketplace</u> for wholesale and retail natural gas an electricity.
- 3 quadrants (Retail Gas/Electric combo)
- BPA participates in the Wholesale Electric Quadrant (WEQ).



### **Summary of WEQ Subcommittees**

- **OASIS (OS):** Owns processing of TSR's and posting requirements on OASIS.
  - Standards and communication protocols for OASIS (WEQ-000, 001, 002, 003, 013).
- Coordinate Interchange Scheduling (CISS): Owns tagging.
  - Interchange scheduling (tagging) standards (WEQ-004) and the e-Tag Functional Specification.
  - Standards and enhancements to the Electric Industry Registry (EIR).
- Cybersecurity (CSS): Ensure secure exchange of market data across the internet.
  - Owns the Public Key Infrastructure (PKI) standards (WEQ-012) and the Accreditation Specification that together govern vetting of Authorized Certificate Authorities (ACA).
  - Also performs Annual Reviews of NERC/CIP.
- **Demand-side Management/Energy Efficiency (DSM-EE):** Emerging standards.
  - Standards for Demand Response, SmartGrid, and Energy Efficiency (WEQ-015, 018, 020, 021).
- **Business Practice (BPS):** Owns standard development for areas not covered above.
  - Takes the lead for standards development not clearly owned by another subcommittee.
  - This has become the most active subcommittee recently.
- Standards Review (SRS): Support for other standard development subcommittees.
  - Reviews changes to NERC standards in order to assess impact on NAESB WEQ standards.
  - Reviews proposed WEQ standards for consistency and uniformity.
- Other subcommittees are ad-hoc or process-related: Annual Plan, Parliamentary, Triage, FERC Forms, etc.

### 9 Implementation Done: Order 676-I

OASIS-related changes.

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Topic	Sub	Description and Status
Dynegy	OS	Standards for treatment of Parent reservation when Redirect is lost to Short-term Preemption and Competition.
DUNS	OS	Make the use of DUNS numbers optional.
Source/Sink	OS	Source/Sink will be unmasked once a TSR is in any final state.
AFC/TFC	OS	Updates templates for posting of AFC and TFC information (like ATC/TTC).
Resales	OS	Resales will now be submitted as ACCEPTED rather than CONFIRMED.
CF	OS	TP's may extend the period for Biennial Reassessment of Conditional Firm.
1d Narrative	OS	Clarifies that TP's will have 1 business day to post a narrative for zero ATC.
Secondary Network	OS	Clarifies that a TP may invalidate a request to terminate Secondary Network service that exceeds the capacity available.
SAMTS	OS	Clarifies how reservations included in a Coordinated Request are handled if displaced.
Consolidation	OS	New OASIS request type that will be used to merge multiple "like" reservations into a single reservation for easier tagging. Replaces "Resale-to-self".
Preemption/ Competition	OS	Five year effort to develop comprehensive standards for Short-term Preemption and Competition.

# Implementation Done: Order 676-I

EIR/Taggingrelated changes.

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Торіс	Sub	Description and Status
Tag Timing	CISS	Revised WEQ-004 to clarify tag timing approval windows in align with NERC INT-006 (API 3h). BA/TPs will have 1 minute less to act upon tag requests. Implemented on 09/15/20 with eTag version 1.8.4.
DOE Surety Assessment	CISS	Minor technical changes to the eTag Functional Specification as a result of the Sandia National Labs security review (R19015). No functional/user changes. Implemented on 09/15/20 with eTag version 1.8.4.
NERC	JESS	Modify the WEQ-004 Coordinate Interchange standards for tagging and related definitions in coordination with NERC (2014 API 3.a.ii).
15-min	JESS	Tagging to support 15-minute Scheduling from FERC Order 764 (2013 API 3.a.iii).
Scheduling	JESS	Define default intervals for 15-minute Scheduling (2013 R12010).
Market Operator	CISS	Changes to support the Market Operator role. Implemented in Nov 2017 with eTag version 1.8.3.
EIR	JESS	Establish NAESB standards for the Electric Industry Registry (EIR) to replace the NERC Transmission System Information Network (TSIN). (2013 API 3.d)

### <sup>9</sup> Implementation Done: Order 676-I

Security-related changes.

Торіс	Sub	Description and Status
Security – General	PKI	Adopt changes to the Public Key Infrastructure (PKI) and Authorized Certification Authority (ACA) standards (2012 API 4.c.i and 4.c.ii).
Security – Tagging	PKI JESS	PKI security changes for tagging (2012 API 4.b).
Security – OASIS	PKI OS	OASIS communication security changes (2012 API 4.a).

### 9 Implementation N/A: Order 676-I

Changes in standard only.

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Торіс	Sub	Description and Status
EIR	CISS	Remove all NERC references from WEQ-022 (which govern the EIR).
Dynamic & Pseudo-tie	CISS	Modify WEQ-004 following proposed retirement of NERC INT-004-3.1 (API 1.d.i). NAESB standards to require RFI for Dynamic and Pseudo-ties mimic the previous NERC standards.
Tagging	CISS	Modify WEQ-004 to require tagging of intra-BA transactions (replace INT-011-1).
Definitions	SRS	Add common definitions from the Retail Electric Quadrant (REQ) into the WEQ- 000 booklet used by the Wholesale Electric Quadrant (WEQ).
Consistency Changes	OS	"Consistency" changes to remove NERC references from OASIS standards (WEQ-001, 002, 003, 013) to ensure language alignment between NERC/NAESB.
Consistency Changes	DSM- EE	"Consistency" changes to remove NERC references from Smart Grid standards (WEQ-015, 018, 020) to ensure language alignment between NERC/NAESB.
Smart Grid	DSM EE	Modify the optional WEQ-019 smart grid standards to update the Energy Usage Information Model to align with other industry smart grid standards (2012 API 6.a).
ATC Standards	BPS	NAESB standards to complement NERC ATC MOD A. FERC declined to adopt these NAESB standards pending separate docket on NERC ATC MOD standards.
Manual Time Error Correction	BPS	Retire WEQ-006 (Manual Time Error Correction) due to NERC retirement of BAL- 004. FERC declined to adopt this proposed retirement of the NAESB standards for Time Error Correction. WEQ-006 remains in effect. 34

# <sup>9</sup> Implementation Done: Older

## Implementation of major NAESB items.

Topic	Sub	Description and Status
eTag 1.8.2	CISS	April 2015: Changes to tagging and Curtailment Manager to manage overlapping Reliability Limits from different TP's.
SAMTS	OS	May 2015: Enables customers to coordinate transmission requests across multiple TP's per FERC Order 676-H.
Rollover Rights	OS	May 2015: Grants Rollover Rights to firm Redirects per FERC Order 676-H. Also allows a customer to explicitly waive such rights.
NITS	OS	March 2017: Implementation of wide-ranging standards for Network Integration Transmission Service.
eTag 1.8.3	CISS	Oct 2017: Functional Specification approved to split Market Operator out as a new role, separate from TP and BA. Implemented industry-wide on 10/10/17. eTag 1.8.2 retired on 11/07/17.

### **Executive Committee Rejected**

NAESB is not always successful...

Topic	Sub	Description and Status
Competition for Rollover	OS	NAESB has twice attempted to pass standards on how competition for Long-term Rollover Rights will occur. Both attempts failed. Fundamental disagreement at the EC level on whether a unified standard is necessary or even desired. BPA is working with Southern Company to see if there is a way forward in support of a 3 <sup>rd</sup> attempt at standards.