



## NORTH AMERICAN ENERGY STANDARDS BOARD

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January 29, 2013  
Filed Electronically

Ms. Kimberly Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street N.E., Room 1A  
Washington, D.C. 20585

RE: Submittal of Modifications to the NAESB Public Key Infrastructure Standards and Other Standards to support the Public Key Infrastructure (Docket Nos. RM05-5-000 and RM05-5-022)

Dear Ms. Bose:

The North American Energy Standards Board ("NAESB") herewith submits this report to the Federal Energy Regulatory Commission ("FERC" or "Commission") regarding modifications to the NAESB Public Key Infrastructure ("PKI") standards ("WEQ-012") and other related standards to support WEQ-012. These standards modifications are the result of the effort described in the "North American Energy Standards Board Status Report to FERC Regarding Public Key Infrastructure (PKI) Efforts" (Docket Nos. RM05-5-000 and RM05-5-022) filed with the Commission on November 30, 2012.<sup>1</sup> The standards modifications included in this report affect the NAESB WEQ-012 PKI standards, NAESB WEQ-000 Abbreviations, Acronyms, and Definition of Terms, the NAESB WEQ-001 Open Access Same-time Information Systems (OASIS) standards, the NAESB WEQ-002 OASIS Standards and Communication Protocols standards, the NAESB WEQ-003 OASIS Data Dictionary standards, the NAESB WEQ-004 Coordinate Interchange standards and the NAESB WEQ-013 OASIS Implementation Guide. In addition, to support the PKI standards development effort, modifications were made to the NAESB WEQ-013 OASIS Implementation Guide the NAESB Electronic Tagging Functional Specification and the NAESB Accreditation Requirements for Certification Authorities Specification and the NAESB Authorized Certification Authority Process were created. The final standards modifications developed as part of the effort were ratified by the membership on December 27, 2012.<sup>2</sup> We are extremely appreciative of the time, knowledge and industry leadership provided by all participants, both members and non-members that contributed to the development of these standards.

The cover letter, report and enclosures are being filed electronically in Adobe Acrobat® Print Document Format (.pdf). All of the documents are also available on the NAESB web site ([www.naesb.org](http://www.naesb.org)). Please feel free to call me at (713) 356-0060 or refer to the NAESB website ([www.naesb.org](http://www.naesb.org)) should you have any questions or need additional information regarding the NAESB PKI standards or any other NAESB work products.

Respectfully submitted,

*Rae McQuade*

Ms. Rae McQuade  
President & COO, North American Energy Standards Board

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<sup>1</sup> North American Energy Standard Board Status Report to FERC Regarding Public Key Infrastructure (PKI) Efforts (Docket No. RM05-5-022), available at: [http://www.naesb.org/pdf4/ferc113012\\_naesb\\_pki.pdf](http://www.naesb.org/pdf4/ferc113012_naesb_pki.pdf) (submitted November 30, 2012).

<sup>2</sup> The NAESB standards referenced in this report are reasonably available to the public through multiple methods. To access the standards at no cost, NAESB will provide a limited copyright waiver for evaluation purposes using a software product called Lock Lizard (<http://www.locklizard.com>). To request a waiver, please contact the NAESB office or follow the instructions in the following document: <http://www.naesb.org/pdf/ordrform.pdf>.



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cc with enclosures: Chairman Jon Wellinghoff, Federal Energy Regulatory Commission  
Commissioner Tony Clark, Federal Energy Regulatory Commission  
Commissioner Cheryl LaFleur, Federal Energy Regulatory Commission  
Commissioner Philip D. Moeller, Federal Energy Regulatory Commission  
Commissioner John R. Norris, Federal Energy Regulatory Commission

Mr. Joseph McClelland, Director, Office of Energy Infrastructure Security, Federal Energy Regulatory Commission  
Mr. Michael Bardee, Director, Office of Electric Reliability, Federal Energy Regulatory Commission  
Mr. David Morenoff, Acting General Counsel, Federal Energy Regulatory Commission

Mr. Mason Emnett, Associate Director, Office of Energy Policy and Innovation, Federal Energy Regulatory Commission  
Mr. Michael Goldenberg, Senior Attorney, Office of General Counsel, Federal Energy Regulatory Commission  
Ms. Jamie L. Simler, Director, Office of Energy Policy and Innovation, Federal Energy Regulatory Commission

Mr. Michael Desselle, Chairman and CEO, North American Energy Standards Board  
Mr. William P. Boswell, General Counsel, North American Energy Standards Board

Mr. Charles Berardesco, General Counsel, North American Electric Reliability Corporation  
Mr. Mark Lauby, Vice President and Director, Standards, North American Electric Reliability Corporation

Enclosures (all documents noted in the appendices are available publicly on the NAESB web site – [www.naesb.org](http://www.naesb.org)):

Appendix A NAESB WEQ Public Key Infrastructure (PKI) Subcommittee, NAESB WEQ OASIS Subcommittee and NAESB Joint Electric Scheduling Subcommittee Meeting Minutes Links  
Appendix B Executive Committee Meeting Minutes, Comments, Voting Records Links and Availability of Transcripts  
Appendix C Ratification Ballots and Results Links  
Appendix D 2012 Wholesale Electric Quadrant Annual Plan  
Appendix E NAESB Process for Standards Development

**UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION**

<b>Standards for Business Practice and</b>	)	<b>Docket No. RM05-5-000</b>
<b>Communication Protocols for Public Utilities</b>	)	<b>Docket No. RM05-5-022</b>
	)	

**REPORT OF THE NORTH AMERICAN ENERGY STANDARDS BOARD**

The North American Energy Standards Board (“NAESB”) is voluntarily submitting this report to the Federal Energy Regulatory Commission (“FERC” or the “Commission”) in the above referenced docket to inform the Commission of the finalization of the standards development effort described in the “North American Energy Standards Board Status Report to FERC Regarding Public Key Infrastructure (“PKI”) Efforts” (Docket Nos. RM05-5-000 and RM05-5-022) filed with the Commission on November 30, 2012.<sup>1</sup> The report includes a summary of the changes that resulted from this effort to the Version 003 of the NAESB Wholesale Electric Quadrant (“WEQ”) business practice standards that were filed with Commission on September 18, 2012.<sup>2</sup> The standards can be downloaded from the NAESB home page ([www.naesb.org](http://www.naesb.org)).<sup>3</sup>

As noted in the November 30, 2012 status report, the NAESB PKI standards development effort has not only resulted in revisions to the NAESB WEQ-012 PKI standards but additionally includes several modifications to NAESB WEQ-000 (Abbreviations, Acronyms, and Definition of Terms), the NAESB WEQ-001 (Open Access Same-time Information Systems (OASIS)) standards, the NAESB WEQ-002 (OASIS Standard and Communication Protocols) standards, the NAESB WEQ-003 (OASIS Data Dictionary) standards, the NAESB WEQ-004 (Coordinate Interchange) standards and NAESB WEQ-013 (OASIS Implementation Guide). These additional modifications were undertaken as part of the NAESB full staffing process<sup>4</sup> at the request of the Wholesale Electric Quadrant (“WEQ”) Executive Committee and were coordinated between the NAESB PKI Subcommittee and the OASIS Subcommittee and Joint Electric Scheduling Subcommittee (“JESS”) in the last quarter of 2012. The full staffing process was employed to ensure that the applicability of the WEQ-012 PKI standards to specific business transactions had been fully defined and that the modifications necessary to enable a standard and consistent method for secured access to OASIS and e-Tag applications through a PKI security scheme had been established and is present in the NAESB standards.

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<sup>1</sup> North American Energy Standard Board Status Report to FERC Regarding Public Key Infrastructure (PKI) Efforts (Docket No. RM05-5-022), available at: [http://www.naesb.org/pdf4/ferc113012\\_naesb\\_pki.pdf](http://www.naesb.org/pdf4/ferc113012_naesb_pki.pdf) (submitted November 30, 2012).

<sup>2</sup> North American Energy Standards Board – Version 003 of the NAESB Wholesale Electric Quadrant Business Practice Standards (Docket No. RM05-5-022), available at: [http://www.naesb.org/pdf4/ferc\\_091812\\_weq\\_version003\\_report.pdf](http://www.naesb.org/pdf4/ferc_091812_weq_version003_report.pdf) (submitted September 18, 2012).

<sup>3</sup>The NAESB standards referenced in this report are reasonably available to the public through multiple methods. To access the standards at no cost, NAESB will provide a limited copyright waiver for evaluation purposes using a software product called Lock Lizard (<http://www.locklizard.com>). To request a waiver, please contact the NAESB office or follow the instructions in the following document: <http://www.naesb.org/pdf/ordrform.pdf>

<sup>4</sup> NAESB Full Staffing Process, available at: [http://www.naesb.org/misc/full\\_staffing\\_description.docx](http://www.naesb.org/misc/full_staffing_description.docx).

In addition to the modifications to the NAESB standards noted above, actions on supporting specifications, and other documentation had to be taken to implement the WEQ-012 PKI standards and initiate a PKI security scheme. These actions included the creation of the NAESB Authorized Certification Authority Process<sup>5</sup> adopted by the Board of Directors on September 22, 2011, with revisions adopted on September 20, 2012, the creation of the NAESB Accreditation Requirements for Authorized Certification Authorities Specification (“Accreditation Specification”) approved by the WEQ Executive Committee on August 21, 2012,<sup>6</sup> and adoption of modifications to the Electronic Tagging Functional Specification Version 1.8.1.<sup>7</sup> While these actions were necessary to support the WEQ-012 PKI standards and a PKI security scheme for certain business transactions, these documents are not included in this report, as they were not adopted as NAESB standards. A description of these supporting documents and the modifications made to existing documents in support of the NAESB PKI effort has been provided in the November 30, 2012 report to the Commission.

As stated in the report,

“The existing WEQ-012 standards developed in 2006 and adopted by the Commission in 2008,<sup>8</sup> were drafted to provide cybersecurity standards for use in commercial transactions – namely OASIS based transactions, and to support the transition of the North American Electric Reliability Corporation (“NERC”) Transmission System Information Network (“TSIN”) registry from NERC to NAESB. The registry is a tool that serves as a central repository of information required for commercial transactions involving the scheduling of power through electronic tagging in the e-Tag system. Through discussions between NERC and NAESB leadership, it was determined that the registry would be more appropriately maintained by NAESB given the tool’s commercial function. After an extended period of planning, NERC and NAESB, through the JESS subcommittee, drafted a functional specification for the development of the Electric Industry Registry (“EIR”), which would serve as the tool to replace the NERC TSIN, and issued a request for proposal<sup>9</sup> for an EIR registry administrator to facilitate the transition. After evaluating the proposal, the NAESB Managing Committee and NERC leadership selected Open Access Technology International, Inc. (“OATI”) to serve as the registry administrator in the summer of 2010.

A requirement of the functional specification for the EIR was that it employ a PKI security scheme, which necessitates the use of digital certificates issued by certification authorities. To facilitate the transfer, NAESB leadership recognized that action would need to be taken to develop

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<sup>5</sup> NAESB Authorized Certification Authority Process, available at: [http://www.naesb.org/pdf4/certification\\_process.docx](http://www.naesb.org/pdf4/certification_process.docx) (adopted September 20, 2012)

<sup>6</sup> NAESB Accreditation Requirements for Authorized Certification Authorities Specification, available at: [http://www.naesb.org/pdf4/certification\\_specifications.docx](http://www.naesb.org/pdf4/certification_specifications.docx) (adopted August 21, 2012)

<sup>7</sup> NAESB WEQ Electronic Tagging Functional Specification, Version 1.8.1.1, available at: [http://www.naesb.org/member\\_login\\_check.asp?doc=weq\\_etag\\_specification\\_v1811\\_112712.pdf](http://www.naesb.org/member_login_check.asp?doc=weq_etag_specification_v1811_112712.pdf) (adopted November 27, 2012)

<sup>8</sup> The FERC adopted NAESB standards in FERC Order No. 676-C on July 21, 2008 and the order can be access from the FERC web site or through this link: [http://elibrary.ferc.gov/idmws/file\\_list.asp?accession\\_num=20080721-3055](http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20080721-3055)

<sup>9</sup> Request for Proposal, available at: [http://www.naesb.org/pdf4/tsin\\_registry\\_rfp\\_022210.pdf](http://www.naesb.org/pdf4/tsin_registry_rfp_022210.pdf)

a program to approve certificate authorities as NAESB Authorized Certification Authorities (“ACA”) and to modify the WEQ-012 PKI standards to reflect updates to technology and current market conditions related to the secure transfer of information. To accomplish this, the NAESB Board Certification Program Committee was reactivated in April 2011 to develop a program for the authorization of certificate authorities and the WEQ EC [Executive Committee] created the PKI Subcommittee in August 2011 to review and revise the WEQ-012 PKI standards.”

These activities have led to the creation and modification of the supporting documents listed above, as well as, modifications to the NAESB WEQ-000, WEQ-001, WEQ-002, WEQ-003, WEQ-004, WEQ-012 and WEQ-013 standards that are the subject of this report.

### Background Information

NAESB’s efforts to craft cyber-security standards for the WEQ were founded in an initiative of the OASIS Standards Collaborative started in 2001 to bring an open, multi-vendor, interoperable method for authentication of access to industry software applications. Initially, the scope was limited to securing access to the OASIS and electronic tagging applications; however, it was anticipated that other industry applications, such as regional energy markets, might leverage this infrastructure to provide a standardized method for securing cyber-assets. The key to this initiative was the establishment of a standard set of requirements for the issuance of electronic digital certificates used to authenticate a user’s identity. It was intended that a user with an electronic certificate from a given issuing certification authority, be able to use that trusted certificate across all OASIS and electronic tagging implementations and not require transmission customers to acquire and manage multiple credentials from different sources, as may be required by each individual OASIS node or electronic tagging service for secured access. Without the establishment of clear requirements that must be met by any issuer of digital certificates, that trust could not be attained across the industry.

With the advent of open standards for implementation of OASIS and e-Tag services, the need for a single common repository, the EIR (originally the NERC TSIN registry), was recognized to facilitate all market participants’ management and use of the information required to conduct wholesale electric transactions through OASIS.<sup>10</sup> Without the EIR, market participants would have been required to gather and maintain information from multiple sources, possibly in varied electronic or non-electronic formats, in order to conduct business and schedule energy deliveries across the interconnected electric transmission system. The information in the EIR is key to the exchange of data in the electric industry and clearly must be protected from potential fraudulent or malicious entry or modification of data.

Given the importance and inter-play of OASIS, electronic tagging, and the EIR, a common PKI standard used to secure access was deemed a significant benefit over simple user name and password authentication in common use. This PKI program provides assurance that the party initiating a data exchange is positively identified by their electronic certificate, the data exchanged is encrypted and unaltered in transit, and provides the initiating

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<sup>10</sup> Open Access Same-Time Information System and Standards of Conduct, 18 C.F.R. 37.5 (2000); 65 Fed. Reg. 17370, 17377 (March 31, 2000).

party assurance that the counter-party is the intended recipient of the information exchanged, through mutual authentication. This mutual authentication process allows two entities or computers, in this case, the end entity and the service provider operating the system, to authenticate their identities to one another through challenge-response protocols. The standards that follow support a public/private key cryptography security system that has been endorsed by the industry.

#### NAESB WEQ-012 PKI Standards Modifications

The WEQ-012 PKI standards modifications were developed by the PKI Subcommittee over the course of 10 months from September 2011 to July 2012 through sixteen meetings and conference calls. As explained in the November 30, 2012 status report, the previous version of the WEQ-012 PKI standards were revised to redact requirements that are specifically applicable to certificate authorities and to update the content of the standards to incorporate technological advancements that have taken place since the standards' adoption in 2006. The WEQ-012 PKI standards as revised and included in this report are intended to apply to end entities implementing PKI transactions, which can include utilities and independent grid operators/regional transmission organizations ("ISOs/RTOs"). The requirements included in the previous version of the WEQ-012 PKI standards that are applicable to certificate authorities have been removed and incorporated into the NAESB Accreditation Specification. This direction was pursued by the PKI Subcommittee for two purposes; first to clarify responsibilities and obligations between end entities and service providers, in recognition that certificate authorities are not typically utilities or ISOs/RTOs and are normally vendors or service providers; and second, to ensure that modifications to the Accreditation Specification that may be needed in response to a security threat may be expedited by employing the NAESB process for adoption of specifications. The revised WEQ-012 PKI standards describe the minimum authentication requirements that end entities must meet when conducting transactions under the NAESB Business Practice Standards defined in WEQ-001, WEQ-002, WEQ-003, WEQ-004 and WEQ-013. The standards also require that end entities engaged in activities required by the WEQ-012 PKI standards be registered in the NAESB EIR and engage certificates issues by a NAESB approved ACA. These standards modifications were adopted by the WEQ Executive Committee on August 21, 2012 and were ratified by the membership on October 4, 2012.

#### NAESB WEQ-000 and WEQ-002 Standards Modifications

During the August 21, 2012 WEQ Executive Committee meeting, the Executive Committee members directed the JESS and OASIS Subcommittee to work jointly with the PKI Subcommittee to determine what modifications to the OASIS suite of standards and the Coordinate Interchange standards would be necessary to implement the WEQ-012 standard and provide a method for secured access to OASIS and Electronic Tagging (e-Tag) applications. To meet the directives of the Executive Committee, the OASIS Subcommittee met jointly with the PKI Subcommittee over the course of two meetings to adopt a recommendation proposing modifications to WEQ-000 and WEQ-002. The recommendation provided technical standards that support the implementation of WEQ-012 and requires transmission service information providers to verify certain information through the Electric Industry Registry before establishing a valid user account on OASIS and specifies that a subscriber maintain a digital certificate issued by a NAESB ACA. The recommendation also updated the WEQ-002 standards to reflect

the transfer of the NERC TSIN registry to the NAESB EIR and proposed that the two acronyms be added to WEQ-000 to support the standards. The WEQ Executive Committee considered and approved the recommendation, as revised during the meeting in response to the comments, on October 23, 2012 and the recommendation was ratified by the membership on November 28, 2012.

#### NAESB WEQ-001, WEQ-003 and WEQ-004 Standards Modifications

Also in response to the August 21, 2012 directive from the NAESB WEQ Executive Committee, The JESS met jointly with the PKI Subcommittee over the course of three meetings to develop a recommendation which proposed the addition of a single standard to WEQ-004 which requires all e-Tag communications be secured using digital certificates issued by a NAESB ACA in accordance with the WEQ-012 standards. This recommendation was posted for a thirty day formal comment period and received a single set of comments that noted that non-substantive consistency changes would need to be made to a number of other standards to reflect the adoption of the updated 1.8.1.1 version of the Electronic Tagging Functional Specification. In response, the JESS provided a set of late comments proposing consistency modifications to WEQ-000, WEQ-001, WEQ-002, WEQ-003 and a modification to WEQ-013. The WEQ Executive Committee adopted the recommendation as proposed in the late comments of the JESS on November 27, 2012 and the standards modifications were ratified by the membership on December 28, 2012.

#### Supporting Documentation

As previously noted, the WEQ-012 PKI standards apply to utilities and ISOs/RTOs, and may apply to other end entities seeking use of PKI security. There are three sets of documentation that provide context and support for the WEQ-012 PKI standards and related standards modifications (WEQ-000, WEQ-001, WEQ-002, WEQ-003, WEQ-004 and WEQ-013): (1) Electronic Tagging Functional Specification 1.8.1.1, (2) Accreditation Specification, and (3) NAESB ACA Process. These documents are not considered standards by NAESB but were all amended or created in 2012 to support the WEQ-012 PKI standards:

- The Electronic Tagging Functional Specification 1.8.1.1 was modified and adopted by the WEQ Executive Committee on November 27, 2012 to support the WEQ-012 PKI standards and secured data exchange between e-Tag services.
- The Accreditation Specification applies to entities seeking to become a NAESB approved ACA, which to this date, has not been a utility or ISO/RTO – the typical ACA in this context is a service provider to the energy market. However, utilities or ISO/RTO are not precluded from becoming a NAESB approved ACA should they so choose. The Accreditation Specification describes the requirements of certificates that are to be issued by ACAs and includes the object identifiers specifying the assurance level of each certificate provided by the American National Standard Institute.
- The NAESB ACA Process defines how a certificate authority may become a NAESB approved ACA. The process is intended to apply to certificate authorities seeking approval by NAESB and will apply to existing

NAESB ACAs once NAESB begins accepting the required documentation from the certificate authorities that are currently in a pending status.

Conclusion

The purpose of the WEQ-012 PKI and related standards is to provide utilities and ISOs/RTOs with a uniform set of requirements for the use of protection by a PKI scheme for commercial transactions concerning the electronic scheduling of wholesale electricity. The purpose of the Accreditation Specifications and the NAESB ACA Process is to provide the mechanism by which a certificate authority can be accredited and issue certificates in support of the WEQ-012 PKI standards. As can be seen from the description of the standards and supporting documentation, the standards are distinct from the supporting specifications and accreditation program to ensure that the entities to which the standards apply are separate from the service providers who issue certificates.

Following is a table that outlines the standards created or modified to maintain standard communication protocols and cyber security business practices. These NAESB WEQ Business Practice Standards are now final actions and are available on the NAESB website.

Final Actions 2012 WEQ Annual Plan Item 4 – Develop and/or maintain standard communication protocols and cyber-security business practices as needed:		
4(a) – Develop Public Key Infrastructure (PKI) standards for OASIS – Ratified November 28, 2012		
4(b) – Develop Industry Implementation Plan for meeting PKI Standard requirements for e-Tagging (Part 1) – Ratified December 28, 2012.		
4(c) i-iii/R11014/R11015 – Develop modifications for WEQ-012 (PKI) standards as needed to reflect current market conditions (Part 2) – Ratified October 4, 2012.		
STANDARD NUMBER	DESCRIPTION/TOPIC	ACTION
<b>WEQ-000</b>	<b>Abbreviations, Acronyms, and Definition of Terms</b>	
WEQ-000-1	HTTPS – Hypertext Transport Protocol Secure TLS – Transport Layer Security	Add Abbreviation/Acronym Add Abbreviation/Acronym
WEQ-000-2	Accreditation Specification Interchange Authority (IA) Service Entity	Add Definition of Term Modify Definition of Term
<b>WEQ-001</b>	<b>Open Access Same-Time Information Systems (OASIS)</b>	
WEQ-001-10.8	Requirements for Dealing with Redirects on a Non-firm Basis	Modify Standard
<b>WEQ-002</b>	<b>Open Access Same-Time Information Systems (OASIS) Business Practice Standards and Communication Protocols (S&amp;CP)</b>	
WEQ-002-2.3	Communication Standards Required	Modify Standard
WEQ-002-3.1	Registration and Login Requirements	Modify Standard
WEQ-002-4.2.1.1	OASIS Node Names	Modify Standard
WEQ-002-4.2.1.2	OASIS Node and Transmission Provider Home Directory	Modify Standard
WEQ-002-4.2.8.2	Transmission Customer Company Information	Modify Standard
WEQ-002-5.1	Security	Modify Standard
WEQ-002-5.1.1	Secured Access to OASIS Information	Add Standard
WEQ-002-5.1.2	OASIS Template Security	Add Standard
WEQ-002-5.1.3	OASIS Template Browser-based Security	Add Standard



<p>Final Actions 2012 WEQ Annual Plan Item 4 – Develop and/or maintain standard communication protocols and cyber-security business practices as needed:</p> <p>4(a) – Develop Public Key Infrastructure (PKI) standards for OASIS – Ratified November 28, 2012</p> <p>4(b) – Develop Industry Implementation Plan for meeting PKI Standard requirements for e-Tagging (Part 1) – Ratified December 28, 2012.</p> <p>4(c) i-iii/R11014/R11015 – Develop modifications for WEQ-012 (PKI) standards as needed to reflect current market conditions (Part 2) – Ratified October 4, 2012.</p>		
STANDARD NUMBER	DESCRIPTION/TOPIC	ACTION
<b>WEQ-003</b>	<b>Open Access Same-Time Information Systems (OASIS) Data Dictionary Business Practice Standards</b>	
	SCHEDULE_PRIORITY	Modify Element
	TRANSACTION_ID	Modify Element
	TRANSACTION_TYPE	Modify Element
<b>WEQ-004</b>	<b>Coordinate Interchange</b>	
WEQ-004-2		Modify Standard
WEQ-004-2.3		Add Standard
WEQ-004-A	Appendix A - e-Tagging Service Performance Requirements and Failure Procedures	Modify Appendix
<b>WEQ-012</b>	<b>Public Key Infrastructure (PKI) Business Practice Standards</b>	
WEQ-012-1	Introduction	Modify Standard
WEQ-012-1.1	Overview	Modify Standard
WEQ-012-1.2	RESERVED - Identification	Modify Standard
WEQ-012-1.2.1	RESERVED – Certificate Class Identification	Modify Standard
WEQ-012-1.2.2	RESERVED – Certificate Class Hierarchy	Modify Standard
WEQ-012-1.3	RESERVED – Community and Applicability	Modify Standard
WEQ-012-1.3.1	RESERVED – Certificate Authorities	Modify Standard
WEQ-012-1.3.2	RESERVED -RAs	Modify Standard
WEQ-012-1.3.3	End Entities	Modify Standard
WEQ-012-1.3.4	Applicability	Modify Standard
WEQ-012-1.4	RESERVED – Obligations	Modify Standard
WEQ-012-1.4.1	RESERVED – Certificate Authority Obligations	Modify Standard
WEQ-012-1.4.2	RESERVED – RA Obligations	Modify Standard
WEQ-012-1.4.3	End Entity Obligations	Modify Standard
WEQ-012-1.4.4	Relying Party Obligations	Modify Standard
WEQ-012-1.4.5	RESERVED – Repository Obligations	Modify Standard
WEQ-012-1.5	RESERVED	Deleted Standard
WEQ-012-1.7	Confidentiality	Modify Standard
WEQ-012-1.8	Intellectual Property Rights	Modify Standard
WEQ-012-1.9	Initial Registration	Modify Standard
WEQ-012-1.9.1	Types of Names	Modify Standard
WEQ-012-1.9.3	RESERVED – Method to Prove Possession of Private Key	Modify Standard
WEQ-012-1.9.4	RESERVED – Authentication of Organization Identity	Modify Standard
WEQ-012-1.9.5	RESERVED – Authentication of Individual	Modify Standard

Final Actions 2012 WEQ Annual Plan Item 4 – Develop and/or maintain standard communication protocols and cyber-security business practices as needed:

4(a) – Develop Public Key Infrastructure (PKI) standards for OASIS – Ratified November 28, 2012

4(b) – Develop Industry Implementation Plan for meeting PKI Standard requirements for e-Tagging (Part 1) – Ratified December 28, 2012.

4(c) i-iii/R11014/R11015 – Develop modifications for WEQ-012 (PKI) standards as needed to reflect current market conditions (Part 2) – Ratified October 4, 2012.

STANDARD NUMBER	DESCRIPTION/TOPIC	ACTION
	Identity	
WEQ-012-1.10	RESERVED – Routine Rekey	Modify Standard
WEQ-012-1.11	RESERVED – Certificate Application	Modify Standard
WEQ-012-1.12	RESERVED – Certificate Issuance	Modify Standard
WEQ-012-1.13	RESERVED – Certificate Acceptance	Modify Standard
WEQ-012-1.14	RESERVED – Certificate Suspension and Revocation	Modify Standard
WEQ-012-1.15	RESERVED – CRL Issuance Frequency and Validity Period	Modify Standard
WEQ-012-1.16	RESERVED – CRL Checking Requirements	Modify Standard
WEQ-012-1.17	RESERVED – Special Requirements for Key Compromise	Modify Standard
WEQ-012-1.18	RESERVED – Security Audit Procedures	Modify Standard
WEQ-012-1.18.1	RESERVED – Types of Events Recorded	Modify Standard
WEQ-012-1.18.2	RESERVED – Frequency of Log Processing	Modify Standard
WEQ-012-1.18.3	RESERVED – Audit Log Retention	Modify Standard
WEQ-012-1.19	RESERVED – Record Archival	Modify Standard
WEQ-012-1.19.1	RESERVED – Types of Events Recorded	Modify Standard
WEQ-012-1.19.2	RESERVED – Retention Period for Archive	Modify Standard
WEQ-012-1.19.3	RESERVED – Protection of Archive	Modify Standard
WEQ-012-1.19.4	RESERVED – Archive Backup Procedures	Modify Standard
WEQ-012-1.19.5	RESERVED – Requirements for Time-stamping of Records	Modify Standard
WEQ-012-1.19.6	RESERVED – Procedures to Obtain and Verify Archive	Modify Standard
WEQ-012-1.19.7	RESERVED – Key Changeover	Modify Standard
WEQ-012-1.19.8	RESERVED – Certificate Authority Termination	Modify Standard
WEQ-012-1.20	RESERVED – Physical, Procedural, and Personnel Security Controls	Modify Standard
WEQ-012-1.21	RESERVED – Physical Controls	Modify Standard
WEQ-012-1.21.1	RESERVED – Site Location and Construction	Modify Standard
WEQ-012-1.21.2	RESERVED – Physical Access	Modify Standard
WEQ-012-1.21.3	RESERVED – Power and Air Conditioning	Modify Standard
WEQ-012-1.21.4	RESERVED – Cabling and Network Devices	Modify Standard
WEQ-012-1.22	RESERVED – Procedural Controls	Modify Standard
WEQ-012-1.22.1	RESERVED – Trusted Roles	Modify Standard
WEQ-012-1.22.2	RESERVED – Number of Persons Required Per Task	Modify Standard

Final Actions 2012 WEQ Annual Plan Item 4 – Develop and/or maintain standard communication protocols and cyber-security business practices as needed:

4(a) – Develop Public Key Infrastructure (PKI) standards for OASIS – Ratified November 28, 2012

4(b) – Develop Industry Implementation Plan for meeting PKI Standard requirements for e-Tagging (Part 1) – Ratified December 28, 2012.

4(c) i-iii/R11014/R11015 – Develop modifications for WEQ-012 (PKI) standards as needed to reflect current market conditions (Part 2) – Ratified October 4, 2012.

STANDARD NUMBER	DESCRIPTION/TOPIC	ACTION
WEQ-012-1.22.3	RESERVED – Identification and Authentication for Each Role	Modify Standard
WEQ-012-1.23	RESERVED – Key Pair Generation, Installation, and Management	Modify Standard
WEQ-012-1.23.1	RESERVED – Certificate Authority Key Pair Generation	Modify Standard
WEQ-012-1.23.2	RESERVED – Key Delivery to Certificate Issuer	Modify Standard
WEQ-012-1.23.3	RESERVED – Key Sizes	Modify Standard
WEQ-012-1.23.4	RESERVED – Private Key Protection	Modify Standard
WEQ-012-1.23.5	RESERVED – Usage Periods for Public and Private Keys	Modify Standard
WEQ-012-1.24	RESERVED – Computer Security Controls	Modify Standard
WEQ-012-1.25	RESERVED – Network Security Controls	Modify Standard
WEQ-012-1.26	RESERVED – Certificate Profile	Modify Standard
WEQ-012-1.26.1	RESERVED – Version Numbers	Modify Standard
WEQ-012-1.26.2	RESERVED – Certificate Extensions	Modify Standard
WEQ-012-1.26.3	RESERVED – CP Object Identifier	Modify Standard
WEQ-012-1.26.4	Subject Alternate Name	Modify Standard
WEQ-012-1.26.5	RESERVED – CRL Distribution Point	Modify Standard
<b>WEQ-013</b>	<b>Open Access Same-Time Information Systems (OASIS) Implementation Guide</b>	
WEQ-013-3.2	<i>scheduledetail</i>	Modify Standard

Report of the North American Energy Standards Board – Enclosures  
 NAESB Wholesale Electric Quadrant Public Key Infrastructure (PKI) Standards

Appendix A: NAESB WEQ Public Key Infrastructure (PKI) Subcommittee, NAESB WEQ OASIS Subcommittee  
 and NAESB Joint Electric Scheduling Subcommittee (JESS) Meeting Minutes Links  
 January 29, 2013

APPENDIX A – NAESB WEQ PUBLIC KEY INFRASTRUCTURE (PKI) SUBCOMMITTEE, NAESB WEQ OASIS SUBCOMMITTEE AND NAESB JOINT ELECTRIC SCHEDULING SUBCOMMITTEE (JESS) MEETING MINUTES LINKS			
DATE OF MEETING	MEETING LOCATION	MEETING MINUTES	NUMBER OF PARTICIPANTS
September 22, 2011	NAESB WEQ PKI Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_092211dm.doc">http://www.naesb.org/pdf4/weq_pki_092211dm.doc</a>  Attachment to Minutes: <a href="http://www.naesb.org/member_login_check.asp?doc=weq_pki_092211a1.docx">http://www.naesb.org/member_login_check.asp?doc=weq_pki_092211a1.docx</a>	21
October 20, 2011	NAESB WEQ PKI Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_102011dm.doc">http://www.naesb.org/pdf4/weq_pki_102011dm.doc</a>  Attachment to Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_102011a1.docx">http://www.naesb.org/pdf4/weq_pki_102011a1.docx</a>	12
November 10, 2011	NAESB WEQ PKI Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_111011dm.doc">http://www.naesb.org/pdf4/weq_pki_111011dm.doc</a>	16
December 8, 2011	NAESB WEQ PKI Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_120811dm.doc">http://www.naesb.org/pdf4/weq_pki_120811dm.doc</a>  Attachment to Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_120811a1.docx">http://www.naesb.org/pdf4/weq_pki_120811a1.docx</a>	15
January 4, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_010412dm.doc">http://www.naesb.org/pdf4/weq_pki_010412dm.doc</a>  Attachment to Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_010412a1.docx">http://www.naesb.org/pdf4/weq_pki_010412a1.docx</a>	19
January 26, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_012612dm.doc">http://www.naesb.org/pdf4/weq_pki_012612dm.doc</a>	14
February 16, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_021612dm.doc">http://www.naesb.org/pdf4/weq_pki_021612dm.doc</a>	14

Appendix A: NAESB WEQ Public Key Infrastructure (PKI) Subcommittee, NAESB WEQ OASIS Subcommittee  
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APPENDIX A – NAESB WEQ PUBLIC KEY INFRASTRUCTURE (PKI) SUBCOMMITTEE, NAESB WEQ OASIS SUBCOMMITTEE AND NAESB JOINT ELECTRIC SCHEDULING SUBCOMMITTEE (JESS) MEETING MINUTES LINKS			
DATE OF MEETING	MEETING LOCATION	MEETING MINUTES	NUMBER OF PARTICIPANTS
March 8, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_030812dm.doc">http://www.naesb.org/pdf4/weq_pki_030812dm.doc</a> Attachment to Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_030812a1.docx">http://www.naesb.org/pdf4/weq_pki_030812a1.docx</a>	16
April 26, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_042612dm.doc">http://www.naesb.org/pdf4/weq_pki_042612dm.doc</a> Attachment to Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_042612a1.docx">http://www.naesb.org/pdf4/weq_pki_042612a1.docx</a>	14
May 31, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_053112dm.doc">http://www.naesb.org/pdf4/weq_pki_053112dm.doc</a> Attachment to Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_053112a1.docx">http://www.naesb.org/pdf4/weq_pki_053112a1.docx</a>	20
June 14, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_061412dm.doc">http://www.naesb.org/pdf4/weq_pki_061412dm.doc</a> Attachment to Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_061412a1.docx">http://www.naesb.org/pdf4/weq_pki_061412a1.docx</a>	14
July 3, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_070312dm.doc">http://www.naesb.org/pdf4/weq_pki_070312dm.doc</a> Attachment to Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_070312a1.doc">http://www.naesb.org/pdf4/weq_pki_070312a1.doc</a>	9
July 9, 2012	NAESB WEQ PKI Subcommittee	Meeting Minutes <a href="http://www.naesb.org/pdf4/weq_pki_070912dm.doc">http://www.naesb.org/pdf4/weq_pki_070912dm.doc</a> Attachment to Minutes: <a href="http://www.naesb.org/pdf4/weq_pki_070912a1.doc">http://www.naesb.org/pdf4/weq_pki_070912a1.doc</a>	13
August 28, 2012	NAESB Joint WEQ OASIS and WEQ PKI Subcommittees	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_oasis_pki082812fm.doc">http://www.naesb.org/pdf4/weq_oasis_pki082812fm.doc</a>	24

Appendix A: NAESB WEQ Public Key Infrastructure (PKI) Subcommittee, NAESB WEQ OASIS Subcommittee  
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APPENDIX A – NAESB WEQ PUBLIC KEY INFRASTRUCTURE (PKI) SUBCOMMITTEE, NAESB WEQ OASIS SUBCOMMITTEE AND NAESB JOINT ELECTRIC SCHEDULING SUBCOMMITTEE (JESS) MEETING MINUTES LINKS			
DATE OF MEETING	MEETING LOCATION	MEETING MINUTES	NUMBER OF PARTICIPANTS
September 7, 2012	NAESB WEQ OASIS Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_oasis090712fm.doc">http://www.naesb.org/pdf4/weq_oasis090712fm.doc</a> Attachments to Minutes: <a href="http://www.naesb.org/pdf4/weq_oasis090712a1.doc">http://www.naesb.org/pdf4/weq_oasis090712a1.doc</a> <a href="http://www.naesb.org/pdf4/weq_oasis090712a2.doc">http://www.naesb.org/pdf4/weq_oasis090712a2.doc</a> <a href="http://www.naesb.org/member_login_check.asp?doc=weq_oasis090712a3.doc">http://www.naesb.org/member_login_check.asp?doc=weq_oasis090712a3.doc</a>	16
October 2, 2012	NAESB WEQ JESS Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_jess100212fm.doc">http://www.naesb.org/pdf4/weq_jess100212fm.doc</a>	11
October 4, 2012	NAESB WEQ JESS Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_jess100412fm.doc">http://www.naesb.org/pdf4/weq_jess100412fm.doc</a>	9
October 11, 2012	NAESB WEQ OASIS Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_oasis101112fm.doc">http://www.naesb.org/pdf4/weq_oasis101112fm.doc</a> Attachments to Minutes: <a href="http://www.naesb.org/pdf4/weq_oasis101112a1.doc">http://www.naesb.org/pdf4/weq_oasis101112a1.doc</a> <a href="http://www.naesb.org/member_login_check.asp?doc=weq_oasis101112a2.doc">http://www.naesb.org/member_login_check.asp?doc=weq_oasis101112a2.doc</a> <a href="http://www.naesb.org/member_login_check.asp?doc=weq_oasis101112a3.doc">http://www.naesb.org/member_login_check.asp?doc=weq_oasis101112a3.doc</a>	8
November 7, 2012	NAESB WEQ JESS Subcommittee	Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_jess110712fm.doc">http://www.naesb.org/pdf4/weq_jess110712fm.doc</a>	6

Appendix B: Executive Committee Meeting Minutes, Comments, Voting Records Links and Availability of Transcripts  
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APPENDIX B – EXECUTIVE COMMITTEE MEETING MINUTES, COMMENTS, VOTING RECORDS LINKS AND AVAILABILITY OF TRANSCRIPTS			
DATE	LINK TO EXECUTIVE COMMITTEE MINUTES AND VOTING RECORDS	LINK TO COMMENTS	AVAILABILITY OF TRANSCRIPTS <sup>1</sup>
August 21, 2012	NAESB WEQ Executive Committee Meeting - Colorado Springs, CO WEQ EC Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_ec082112fm.docx">http://www.naesb.org/pdf4/weq_ec082112fm.docx</a>  Attachments to Meeting Minutes: <a href="http://www.naesb.org/member_login_check.asp?doc=weq_ec082112a2.docx">http://www.naesb.org/member_login_check.asp?doc=weq_ec082112a2.docx</a> <a href="http://www.naesb.org/member_login_check.asp?doc=weq_ec082112a3.docx">http://www.naesb.org/member_login_check.asp?doc=weq_ec082112a3.docx</a> <a href="http://www.naesb.org/member_login_check.asp?doc=weq_ec082112a4.docx">http://www.naesb.org/member_login_check.asp?doc=weq_ec082112a4.docx</a> <a href="http://www.naesb.org/member_login_check.asp?doc=weq_ec082112a5.docx">http://www.naesb.org/member_login_check.asp?doc=weq_ec082112a5.docx</a>	Request for Comments on Recommendation WEQ 2012 Annual Plan Item 4.c.i-ii / R11014 / R11015 (Part 1): <a href="http://www.naesb.org/pdf4/weq_062512_reqcom.doc">http://www.naesb.org/pdf4/weq_062512_reqcom.doc</a>  Comments Submitted by the WEQ Standards Review Subcommittee: <a href="http://www.naesb.org/pdf4/weq_062512_weq_srs.doc">http://www.naesb.org/pdf4/weq_062512_weq_srs.doc</a>  Comments Submitted by ERCOT and MISO: <a href="http://www.naesb.org/pdf4/weq_062512_ercot_miso.docx">http://www.naesb.org/pdf4/weq_062512_ercot_miso.docx</a>  Comments on Recommendation Submitted by JT Wood, Southern Company: <a href="http://www.naesb.org/pdf4/weq_062512_southern_recommendation.doc">http://www.naesb.org/pdf4/weq_062512_southern_recommendation.doc</a>  Comments on Accreditation Requirements Attachment Submitted by JT Wood, Southern Company: <a href="http://www.naesb.org/pdf4/weq_062512_southern_attachment.docx">http://www.naesb.org/pdf4/weq_062512_southern_attachment.docx</a>  Comments Submitted by T. Ruser, OATI: <a href="http://www.naesb.org/pdf4/weq_062512_oati.pdf">http://www.naesb.org/pdf4/weq_062512_oati.pdf</a>  Late Comments Submitted by the WEQ PKI Subcommittee: <a href="http://www.naesb.org/pdf4/weq_062512_weq_pki_late.docx">http://www.naesb.org/pdf4/weq_062512_weq_pki_late.docx</a>  Request for Comments on Recommendation WEQ 2012 Annual Plan Item 4.c.i-ii / R11014 / R11015 (Part 2): <a href="http://www.naesb.org/pdf4/weq_071012_reqcom.doc">http://www.naesb.org/pdf4/weq_071012_reqcom.doc</a>  Comments Submitted by J. Buccigross, Group 8760 LLC: <a href="http://www.naesb.org/pdf4/weq_071012_group8760llc.doc">http://www.naesb.org/pdf4/weq_071012_group8760llc.doc</a>  Comments Submitted by the WEQ Standards Review Subcommittee: <a href="http://www.naesb.org/pdf4/weq_071012_weq_srs.docx">http://www.naesb.org/pdf4/weq_071012_weq_srs.docx</a>	Jill Vaughan, CSR: 281-853-6807

<sup>1</sup> The Federal Energy Regulatory Commission and other regulatory agencies may contact the NAESB office to obtain electronic copies of the transcripts. All others can contact the transcription service and order the transcripts for a nominal fee.

Appendix B: Executive Committee Meeting Minutes, Comments, Voting Records Links and Availability of Transcripts  
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APPENDIX B – EXECUTIVE COMMITTEE MEETING MINUTES, COMMENTS, VOTING RECORDS LINKS AND AVAILABILITY OF TRANSCRIPTS			
DATE	LINK TO EXECUTIVE COMMITTEE MINUTES AND VOTING RECORDS	LINK TO COMMENTS	AVAILABILITY OF TRANSCRIPTS <sup>1</sup>
		<p>Comments Submitted by JT Wood, Southern Company (to redline recommendation):  <a href="http://www.naesb.org/pdf4/weq_071012_southern_to_redline.doc">http://www.naesb.org/pdf4/weq_071012_southern_to_redline.doc</a></p> <p>Comments Submitted by JT Wood, Southern Company (to clean recommendation):  <a href="http://www.naesb.org/pdf4/weq_071012_southern_to_clean.doc">http://www.naesb.org/pdf4/weq_071012_southern_to_clean.doc</a></p> <p>Comments Submitted by the IRC Standards Review Committee (PJM, NYISO, ISONE, IESO, ERCOT, MISO, SPP):  <a href="http://www.naesb.org/pdf4/weq_071012_irc_standards_review_committee.docx">http://www.naesb.org/pdf4/weq_071012_irc_standards_review_committee.docx</a></p> <p>Comments Submitted by T. Ruser, OATI:  <a href="http://www.naesb.org/pdf4/weq_071012_oati.pdf">http://www.naesb.org/pdf4/weq_071012_oati.pdf</a></p> <p>Late Comments Submitted by the WEQ Joint Electric Scheduling Subcommittee:  <a href="http://www.naesb.org/pdf4/late_weq_071012_weq_jess.doc">http://www.naesb.org/pdf4/late_weq_071012_weq_jess.doc</a></p> <p>Late Comments Submitted by the WEQ PKI Subcommittee:  <a href="http://www.naesb.org/pdf4/weq_071012_weq_pki_late.doc">http://www.naesb.org/pdf4/weq_071012_weq_pki_late.doc</a></p>	



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APPENDIX B – EXECUTIVE COMMITTEE MEETING MINUTES, COMMENTS, VOTING RECORDS LINKS AND AVAILABILITY OF TRANSCRIPTS			
DATE	LINK TO EXECUTIVE COMMITTEE MINUTES AND VOTING RECORDS	LINK TO COMMENTS	AVAILABILITY OF TRANSCRIPTS <sup>1</sup>
October 23, 2012	NAESB WEQ Executive Committee Meeting - Richmond, VA WEQ EC Meeting Minutes: <a href="http://www.naesb.org/pdf4/weq_ec102312dm.docx">http://www.naesb.org/pdf4/weq_ec102312dm.docx</a>  Attachments to Meeting Minutes: <a href="http://www.naesb.org/member_login_check.asp?doc=weq_ec102312a2.doc">http://www.naesb.org/member_login_check.asp?doc=weq_ec102312a2.doc</a> <a href="http://www.naesb.org/member_login_check.asp?doc=weq_ec102312a3.doc">http://www.naesb.org/member_login_check.asp?doc=weq_ec102312a3.doc</a>	Request for Comments on Recommendation WEQ 2012 Annual Plan Item 4.a: <a href="http://www.naesb.org/pdf4/weq_090712_reqcom.doc">http://www.naesb.org/pdf4/weq_090712_reqcom.doc</a>  Comments Submitted by the WEQ Standards Review Subcommittee: <a href="http://www.naesb.org/pdf4/weq_090712_weq_srs.doc">http://www.naesb.org/pdf4/weq_090712_weq_srs.doc</a>  Comments Submitted by Bonneville Power Administration: <a href="http://www.naesb.org/pdf4/weq_090712_bpa.doc">http://www.naesb.org/pdf4/weq_090712_bpa.doc</a>  Comments Submitted by E. Cardone, NYISO: <a href="http://www.naesb.org/pdf4/weq_090712_nyiso.docx">http://www.naesb.org/pdf4/weq_090712_nyiso.docx</a>  Comments Submitted by M. Colby, PJM: <a href="http://www.naesb.org/pdf4/weq_090712_pjm.doc">http://www.naesb.org/pdf4/weq_090712_pjm.doc</a>  Comments Submitted by P. Sorenson, OATI: <a href="http://www.naesb.org/pdf4/weq_090712_oati.doc">http://www.naesb.org/pdf4/weq_090712_oati.doc</a>  Late Comments Submitted by the WEQ OASIS Subcommittee on the Recommendation: <a href="http://www.naesb.org/pdf4/weq_090712_oasis_late.doc">http://www.naesb.org/pdf4/weq_090712_oasis_late.doc</a>  Late Comments Submitted by the WEQ OASIS Subcommittee on the NYISO Comments: <a href="http://www.naesb.org/pdf4/weq_090712_oasis_on_nyiso_late.docx">http://www.naesb.org/pdf4/weq_090712_oasis_on_nyiso_late.docx</a>  Late Comments Submitted by the WEQ OASIS Subcommittee on the OATI Comments: <a href="http://www.naesb.org/pdf4/weq_090712_oasis_on_oati_late.doc">http://www.naesb.org/pdf4/weq_090712_oasis_on_oati_late.doc</a>  Late Comments Submitted by the WEQ OASIS Subcommittee on the PJM Comments: <a href="http://www.naesb.org/pdf4/weq_090712_oasis_on_pjm_late.doc">http://www.naesb.org/pdf4/weq_090712_oasis_on_pjm_late.doc</a>  Late Comments Submitted by the WEQ OASIS Subcommittee on the SRS Comments: <a href="http://www.naesb.org/pdf4/weq_090712_oasis_on_srs_late.doc">http://www.naesb.org/pdf4/weq_090712_oasis_on_srs_late.doc</a>  Late Comments Submitted by the WEQ OASIS Subcommittee on the BPA Comments: <a href="http://www.naesb.org/pdf4/weq_090712_oasis_on_bpa_late.doc">http://www.naesb.org/pdf4/weq_090712_oasis_on_bpa_late.doc</a>	Jill Vaughan, CSR: 281-853-6807

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DATE	LINK TO EXECUTIVE COMMITTEE MINUTES AND VOTING RECORDS	LINK TO COMMENTS	AVAILABILITY OF TRANSCRIPTS <sup>1</sup>
November 27, 2012	NAESB WEQ Executive Committee Notational Ballot: <a href="http://www.naesb.org/pdf4/weq_ec111412ballot.docx">http://www.naesb.org/pdf4/weq_ec111412ballot.docx</a>  Results: <a href="http://www.naesb.org/pdf4/weq_ec111412results.docx">http://www.naesb.org/pdf4/weq_ec111412results.docx</a>	Request for Comments on Recommendation WEQ 2012 Annual Plan Item 4.b (Part 1 and Part 2): <a href="http://www.naesb.org/pdf4/weq_100512_reqcom.doc">http://www.naesb.org/pdf4/weq_100512_reqcom.doc</a>  Part 1 and Part 2 Comments Submitted by the WEQ Standards Review Subcommittee: <a href="http://www.naesb.org/pdf4/weq_100512_weq_srs.doc">http://www.naesb.org/pdf4/weq_100512_weq_srs.doc</a>  Late Part 1 Comments Submitted by the NAESB WEQ Joint Electric Scheduling Subcommittee: <a href="http://www.naesb.org/member_login_check.asp?doc=weq_100512_weq_jess_part1_late.doc">http://www.naesb.org/member_login_check.asp?doc=weq_100512_weq_jess_part1_late.doc</a>  Late Part 2 Recommendation from WEQ JESS - November 13, 2012: <a href="http://www.naesb.org/member_login_check.asp?doc=weq_jess_part2_late_rec_111312.doc">http://www.naesb.org/member_login_check.asp?doc=weq_jess_part2_late_rec_111312.doc</a>  Late Part 2 Attachment Comments Submitted by the NAESB WEQ Joint Electric Scheduling Subcommittee: <a href="http://www.naesb.org/member_login_check.asp?doc=weq_100512_weq_jess_part2_late.doc">http://www.naesb.org/member_login_check.asp?doc=weq_100512_weq_jess_part2_late.doc</a>	No transcripts provided

APPENDIX C – RATIFICATION BALLOT AND RATIFICATION RESULTS

DATE OF RATIFICATION	RATIFICATION BALLOT	RESULTS	FINAL ACTIONS
September 4, 2012	Ratification Ballot due October 4, 2012: <a href="http://www.naesb.org/member_login_check.asp?doc=weq_rat090412b_allot.doc">http://www.naesb.org/member_login_check.asp?doc=weq_rat090412b_allot.doc</a>  Recommendation: 2012 WEQ Annual Plan Item No. 4.c.i-ii/R11014/R11015 (Part 2) - Develop modifications for WEQ-012 as needed to reflect current market conditions (Authorized Certification Authority Standard and Credentialing Practice (R11014). Technology Review and Upgrade for NAESB Public Key Infrastructure Standard WEQ-012 (R11015)) as approved by the WEQ EC on August 21, 2012: <a href="http://www.naesb.org/member_login_form.asp?doc=weq_rat090412_weq_2012ap4ci-ii_r11014_r11015_rec.doc">http://www.naesb.org/member_login_form.asp?doc=weq_rat090412_weq_2012ap4ci-ii_r11014_r11015_rec.doc</a>	Ratification Tally: <a href="http://www.naesb.org/member_login_check.asp?doc=rat_weq100412tally.xls">http://www.naesb.org/member_login_check.asp?doc=rat_weq100412tally.xls</a>  Comments Submitted by Bonneville Power Administration on 2012 WEQ Annual Plan Item No. 4.c.i-ii/R11014/R11015: <a href="http://www.naesb.org/pdf4/weq_rat100412_bpa.doc">http://www.naesb.org/pdf4/weq_rat100412_bpa.doc</a>	2012 WEQ Annual Plan Item No. 4.c.i-ii/R11014/R11015 (Part 2) Final Action - Ratified October 4, 2012: <a href="http://www.naesb.org/member_login_form.asp?doc=fa_weq_2012_ap4ci-ii_r11014_r11015.doc">http://www.naesb.org/member_login_form.asp?doc=fa_weq_2012_ap4ci-ii_r11014_r11015.doc</a>
October 30, 2012	Ratification Ballot due November 28, 2012: <a href="http://www.naesb.org/member_login_check.asp?doc=weq_rat103012b_allot.doc">http://www.naesb.org/member_login_check.asp?doc=weq_rat103012b_allot.doc</a>  Recommendation: 2012 WEQ Annual Plan Item 4.a - Develop Public Key Infrastructure (PKI) Standards for OASIS as revised and approved by the WEQ Executive Committee on October 23, 2012: <a href="http://www.naesb.org/member_login_check.asp?doc=weq_rat103012_weq_2012_ap4a_rec_redline.doc">http://www.naesb.org/member_login_check.asp?doc=weq_rat103012_weq_2012_ap4a_rec_redline.doc</a> (Redline) <a href="http://www.naesb.org/member_login_check.asp?doc=weq_rat103012_weq_2012_ap4a_rec_clean.doc">http://www.naesb.org/member_login_check.asp?doc=weq_rat103012_weq_2012_ap4a_rec_clean.doc</a> (Clean)	Ratification Tally: <a href="http://www.naesb.org/member_login_check.asp?doc=rat_weq112812tally.xls">http://www.naesb.org/member_login_check.asp?doc=rat_weq112812tally.xls</a>	2012 WEQ Annual Plan Item 4.a - Develop Public Key Infrastructure (PKI) Standards for OASIS - Ratified November 28, 2012: <a href="http://www.naesb.org/member_login_form.asp?doc=fa_weq_2012_ap4a.doc">http://www.naesb.org/member_login_form.asp?doc=fa_weq_2012_ap4a.doc</a>
November 28, 2012	Ratification Ballot due December 28, 2012: <a href="http://www.naesb.org/member_login_check.asp?doc=weq_rat112812b_allot.doc">http://www.naesb.org/member_login_check.asp?doc=weq_rat112812b_allot.doc</a>  Recommendation: 2012 WEQ Annual Plan Item 4.b, Part 1 - Develop Public Key Infrastructure (PKI) Standards Requirements for e-Tagging (Part 1) as approved by the WEQ Executive Committee via notational ballot on November 27, 2012: <a href="http://www.naesb.org/member_login_check.asp?doc=weq_rat112812_weq_2012_ap4b_rec_redline.doc">http://www.naesb.org/member_login_check.asp?doc=weq_rat112812_weq_2012_ap4b_rec_redline.doc</a> (Redline) <a href="http://www.naesb.org/member_login_check.asp?doc=weq_rat112812_weq_2012_ap4b_rec_clean.doc">http://www.naesb.org/member_login_check.asp?doc=weq_rat112812_weq_2012_ap4b_rec_clean.doc</a> (Clean)	Ratification Tally: <a href="http://www.naesb.org/member_login_check.asp?doc=rat_weq112812tally.xls">http://www.naesb.org/member_login_check.asp?doc=rat_weq112812tally.xls</a>	2012 WEQ Annual Plan Item 4.b, Part 1 - Develop Public Key Infrastructure (PKI) Standards Requirements for e-Tagging (Part 1) - Ratified December 28, 2012: <a href="http://www.naesb.org/member_login_form.asp?doc=fa_weq_2012_ap4b_part1.doc">http://www.naesb.org/member_login_form.asp?doc=fa_weq_2012_ap4b_part1.doc</a>

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Item Description	Completion <sup>1</sup>	Assignment <sup>2</sup>
<b>1 Develop business practices standards as needed to complement reliability standards</b>		
Develop business practice standards to support and complement NERC reliability standards, NERC policies and NERC standards authorization requests (SARs) using the NERC/NAESB Coordination Joint Standards Development Process as appropriate. Current NAESB activities underway to develop business practice standards that are supportive of this annual plan item are:		
a) Parallel Flow Visualization/Mitigation for Reliability Coordinators in the Eastern Interconnection – Permanent Solution <sup>1</sup>  Note: Consideration should be given to provisional item 4. Work is being coordinated with the NERC IDC Working Group.  Status: Started	1 <sup>st</sup> Q, 2013	BPS
b) Perform consistency review of WEQ-008 Transmission Loading Relief Business Practice Standards and develop recommendation. <sup>2</sup>	2013	BPS
c) Disturbance Control Standard (DCS) (BAL-002) Coordination with NERC <a href="#">Project 2010-14.1 Phase 1 of Balancing Authority Reliability-based Controls: Reserves</a>  Status: Monitor.	2013	BPS/TIMTF
d) Coordinate with NERC on changes to the definition of Bulk Electric System NERC <a href="#">Project 2010-17 Definition of Bulk Electric System</a> .  Status: <a href="#">Completed. Subcommittee approved recommendation to forward to Executive Committee on January 17, 2012.</a>	2 <sup>nd</sup> Q, 2012	SRS
e) Revise TLR level 5 to be treated similarly to TLR Level 3 in terms of treating the next hour allocation separately from that of current hour. ( <a href="#">R11020</a> )  Status: Not Started	2013	BPS
<b>2 Develop business practice standards in support of the FERC RM05-25-000 and RM05-17-000 (OATT Reform)<sup>3</sup></b>		
a) Develop version 2 business practice standards to better coordinate the use of the transmission system among neighboring transmission providers.  Status: Underway  Request R050004 was expanded to include the <a href="#">Order No. 890 (Docket Nos. RM05-17-000 and RM02-25-000)</a> , ( <a href="#">Order No. 890-A (Docket Nos. RM05-17-001, 002 and RM05-25-001, 002)</a> ), and <a href="#">Order No. 890-B (Docket Nos. RM05-17-03 and RM05-25-03)</a> “Preventing Undue Discrimination and Preference in Transmission Services”		
i) Group 3: Network Service On OASIS <sup>4</sup>		

<sup>1</sup> See AP Item 3.iv., Completion dates may be revisited contingent upon NERC-NAESB coordination of implementation related to parallel flow visualization

<sup>2</sup> In some sections of WEQ 008 it appears that the standards are applicable to all of the Interconnections and other it appears that the standards are only applicable to the Eastern Interconnection. The title indicates the standards are applicable to the Eastern Interconnection.

<sup>3</sup> FERC Order No. 890, issued February 16, 2007 can be accessed from the following link - [http://www.naesb.org/doc\\_view4.asp?doc=ferc021607.doc](http://www.naesb.org/doc_view4.asp?doc=ferc021607.doc)

<sup>4</sup> Several group 3 items may be removed from this plan if the 4<sup>th</sup> quarter completion dates are met.

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	<b>Item Description</b>	<b>Completion<sup>1</sup></b>	<b>Assignment<sup>2</sup></b>
	1) Use of OASIS to Make Electronic Requests to Designate and Terminate Network Resource Status: Completed	4 <sup>th</sup> Q, 2011	OASIS
	2) Ability to Query Requests to Designate and Terminate Network Resources and Allow for Queries of All Information Provided with Designation Requests Status: Completed	4 <sup>th</sup> Q, 2011	OASIS
	3) Masking of Designated Network Resource Operating Restrictions and Generating Cost Information Status: Completed	4 <sup>th</sup> Q, 2011	OASIS
	4) Procedural Requirements for Submitting Designations over new OASIS Functionality Status: Completed	4 <sup>th</sup> Q, 2011	OASIS
	5) Specify How Designated Network Service Informational Postings are Posted on OASIS Status: Completed	4 <sup>th</sup> Q, 2011	OASIS
	6) Develop standards for the treatment of OASIS Requests when the Customer Fails to Provide the Necessary Attestation Status: Completed	4 <sup>th</sup> Q, 2011	OASIS
	7) Procedural Requirements for Submitting Both Temporary and Indefinite Terminations of Network Resources Status: Completed	4 <sup>th</sup> Q, 2011	OASIS
	8) Procedures for Submitting and Processing Requests for Concomitant Evaluations of Transmission Requests and Temporary Terminations Status: Completed	4 <sup>th</sup> Q, 2011	OASIS
ii)	Group 4: Pre-Emption; Request No. <a href="#">R05019</a>		
	1. Pre-Emption Status: Started	1 <sup>st</sup> Q, 2013	OASIS
	2. Request No. <a href="#">R05019</a> Status: Started	1 <sup>st</sup> Q, 2013	OASIS

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	<b>Item Description</b>	<b>Completion<sup>1</sup></b>	<b>Assignment<sup>2</sup></b>
iii)	Group 6: Miscellaneous (Paragraph 1627 <sup>5</sup> of FERC Order No. 890)		
	1) Paragraphs 1627 of Order 890 – Posting of additional information on OASIS regarding firm transmission curtailments Status: Not Started	TBD (follows the completion of AP 1(a))	OASIS
	2) Redispatch Cost Posting to allow for posting of third party offers of planning redispatch services. Status: Not Started	TBD (follows the completion of AP 1(a))	OASIS
b)	Develop the needed business practices to support existing Request No. <a href="#">R05004</a> : The processing of transmission service requests, which use TTC/ATC/AFC, in coordination with NERC changes to MOD 001 where the allocation of flowgate capability based on historical Network Native Load impacts the evaluation of transmission service requests, requiring the posting of those allocation values in conjunction with queries of service offerings on OASIS Status: Completed	4 <sup>th</sup> Q, 2011	OASIS
<b>3</b>	<b>Develop business practices standards to improve the current operation of the wholesale electric market and develop and maintain business practice and communication standards for OASIS and Electronic Scheduling</b>		
a)	Develop and/or maintain business practice standards as needed for OASIS and electronic scheduling. Specific items to address include:		
i)	Network Services: Determine and develop needed business practice standards or other support is needed to support use of OASIS for Network Service transactions ( <a href="#">R04006E</a> ). (Related to AP 2(a)(iii) and AP 2(a)(i)) Status: Completed	4 <sup>th</sup> Q, 2011	OASIS
ii)	Registry (TSIN): Determine and develop needed business practice standards to support the registry functions currently supported by NERC ( <a href="#">R04037</a> , <a href="#">R06027</a> ) Status: Underway, probably will not complete by 4 <sup>th</sup> Q and may need to be added back into the 2013 Annual Plan.	4 <sup>th</sup> Q, 2012	JESS

<sup>5</sup> Paragraph 1627 of FERC Order No. 890, issued February 16, 2007: We agree with suggestions for the posting of additional curtailment information on OASIS and, therefore, require transmission providers, working through NAESB, to develop a detailed template for the posting of additional information on OASIS regarding firm transmission curtailments. Transmission providers need not implement this new OASIS functionality and any related business practices until NAESB develops appropriate standards. These postings must include all circumstances and events contributing to the need for a firm service curtailment, specific services and customers curtailed (including the transmission provider’s own retail loads), and the duration of the curtailment. This information is in addition to the Commission’s existing requirements: (1) when any transmission is curtailed or interrupted, the transmission provider must post notice of the curtailment or interruption on OASIS, and the transmission provider must state on OASIS the reason why the transaction could not be continued or completed; (2) information to support any such curtailment or interruption, including the operating status of facilities involved in the constraint or interruption, must be maintained for three years and made available upon request to the curtailed or interrupted customer, the Commission’s Staff, and any other person who requests it; and, (3) any offer to adjust the operation of the transmission provider’s system to restore a curtailed or interrupted transaction must be posted and made available to all curtailed and interrupted transmission customers at the same time.

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	<b>Item Description</b>	<b>Completion<sup>1</sup></b>	<b>Assignment<sup>2</sup></b>
iii)	Registry (TSIN): Transition the TSIN Registry from NERC to NAESB as the enhanced Electric Industry Registry (EIR). Status: Completed.	4 <sup>th</sup> Q, 2012	NAESB/NERC Administration, JESS
iv)	Make remaining incremental enhancements to OASIS as an outgrowth of the NAESB March 29, 2005 conference on the future of OASIS ( <a href="#">R05026</a> ). Scoping <a href="#">statement</a> completed by SRS. There were a number of assignments from the Standards Request. The outstanding items are included below:		
	1) Eliminate Masking of TSR tag source and sink when requested status is denied, withdrawn refused, displaced, invalid, declined, annulled or retracted Status: Not Started	2013	OASIS
	2) Initiate standard that eliminates the disparity of posting “sensitive” information. This standard should also include procedures of user certification that allows access to this class of information. Status: Underway (upon further development of this item by NAESB, a completion date will be determined)	2013	OASIS
	3) Enhance the TSR result postings to allow showing of (i) limiting transmission elements and (ii) available generation dispatch options that would allow acceptance of reservation request. Status: Not Started (upon initiation of this item by NAESB, a completion date will be determined)	2013	OASIS
v)	Review and correct WEQ-004 Coordinate Interchange Business Practice Standard as needed based on activities in NERC <a href="#">Project 2008-12, Coordinate Interchange Standards Revisions</a> and supporting EOP-002-2 R4 and R6. <sup>6</sup> Status: Underway. Completion date dependent upon coordination activities with NERC, and Project 2008-12 is delayed by NERC due to other higher priority development. It is expected that NERC will begin its effort in 2 <sup>nd</sup> Q 2013.	2014	JESS
b)	Review e-Tag specifications and make modifications as needed for:		
	i) Supporting Network Integration Transmission Service standards	TBD	JESS
	ii) Consistency and clarifications	TBD	JESS
	iii) Regional Implementations supporting WECC efforts (probably of most impact to the appendices in the e-Tag specifications)	TBD	JESS
c)	Requirements for OASIS to use data in the Electric Industry Registry ( <a href="#">R12001</a> ) Status: Not started	TBD	OASIS

<sup>6</sup> See AP Item 1.a.iv, Completion dates may be revisited contingent upon NERC-NAESB coordination of implementation related to parallel flow visualization.

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Item Description	Completion <sup>1</sup>	Assignment <sup>2</sup>
4. Develop and/or maintain standard communication protocols and cyber-security business practices as needed.		
a) Develop PKI standards for OASIS. Status: Completed	4 <sup>th</sup> Q, 2012	PKI/OASIS
b) Develop Industry Implementation Plan for meeting PKI Standard requirements for e-tagging. Status: Completed	4 <sup>th</sup> Q, 2012	PKI/JESS
c) Develop modifications for WEQ-012 as needed to reflect current market conditions		
i) Authorized Certification Authority Standard and Credentialing Practice ( <a href="#">R11014</a> ) Status: Completed Part 1 was voted out of subcommittee on June 14, 2012. Part 2 was voted out of subcommittee on July 9, 2012.	3 <sup>rd</sup> Q, 2012	PKI
ii) Technology Review and Upgrade for NAESB Public Key Infrastructure Standard WEQ-012 ( <a href="#">R11015</a> ). Status: Completed Part 1 was voted out of subcommittee on June 14, 2012. Part 2 was voted out of subcommittee on July 9, 2012.	3 <sup>rd</sup> Q, 2012	PKI
iii) Review and develop standards as needed to support adequate session encryption (SSL/TLS issues: <a href="#">US-Cert Vulnerability Note VU#864643</a> ) Status: Not Started	2013	PKI
d) Review WEQ standards for impact of XML vulnerability exploits and make modifications as needed to standards and functional specifications	TBD	PKI/JESS
<b>5 Maintain existing body of Version 3.x standards</b>		
a) Consistent with ¶51 of FERC Order No. 890-A, add AFC and TFC values to the “System_Attribute” data element of the NAESB Standard WEQ-003: OASIS S&CP Data Dictionaries. ( <a href="#">R08011</a> ) Status: Underway, probably will not complete by 4 <sup>th</sup> Q and may need to be added back into the 2013 Annual Plan.	4 <sup>th</sup> Q, 2012	OASIS
b) Correct WEQ 013-2.6.7.2. – Resale off OASIS ( <a href="#">R08027</a> ) Status: Not Started	TBD	OASIS
c) Add language to WEQ-001-4 Online Negotiation and Confirmation process to clarify Table 4-3 ( <a href="#">R09003</a> ) Status: Started	1 <sup>st</sup> Q, 2013	OASIS
d) Create a new OASIS mechanism that allows for the merger of like reservations without the use of the resale mechanism ( <a href="#">R09015</a> ) Status: Not Started	TBD	OASIS
e) Develop standards to support crediting redirect requests with the capacity of the parent reservation ( <a href="#">BPA Comments</a> ) Status: Completed	TBD	OASIS



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Item Description	Completion <sup>1</sup>	Assignment <sup>2</sup>
f) Modify WEQ Business Practice Standard 013-2.6.8.1 FULL_TRANSFER- Transfers of All Capacity and WEQ Business Practice Standard 013-2.6.8.2 – PART_TRANSFER-Transfer of Partial Capacity. ( <a href="#">R11022</a> ) Status: Completed	1 <sup>st</sup> Q, 2012	OASIS
<b>6. Develop Smart Grid Wholesale and Retail Electric Standards</b> - The wholesale and retail demand response work groups and the Smart Grid task force should actively and timely communicate and coordinate work products to ensure consistency between the three work groups. Each work group should take into account the work products developed by the other.		
a) Develop standards to support PAP 10 – Standards Energy Usage Information, Phase 2, Harmonization with CIM and SEP 2.0 Status: Underway, dependent on discussions with CIM and SEP 2.0	4 <sup>th</sup> Q, 2012	Joint WEQ/REQ PAP 10 SGS Subcommittee
<b>7. Develop or modify standards to Support <a href="#">FERC Order No. 676-E</a>, (Docket No. RM 05-5-013)</b>		
a) Develop standards to support the Transmission Provider right to reassess the availability of conditional firm (See ¶ 72 <sup>7</sup> ) Status: Started, probably will not complete by 4 <sup>th</sup> Q and may need to be added back into the 2013 Annual Plan.	4 <sup>th</sup> Q, 2012	OASIS

<sup>7</sup> 72. However, we reiterate here the Commission’s finding in Order No. 890 that a transmission provider is permitted to extend its right to reassess the availability of conditional firm service. Since the Version 002.1 Standards do not specifically address this issue, we would ask the industry, working through NAESB, to continue to look at additional business practice standards facilitating a transmission provider’s extension of its right to perform a reassessment

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**PROVISIONAL ITEMS**

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- 1 **Develop business practices standards as needed to complement NERC reliability standards**
  - a) Develop and or modify business practices related to support of NERC effort on the NERC Resources and Transmission Adequacy (NERC [Project 2009-05 Resource Adequacy Assessments](#)). NERC expects work on this project to start in third quarter 2014.
  - b) Determine any needed NAESB action in support of the Interchange Distribution Calculator (IDC) and develop any necessary standards.
  - c) Develop complementary standards that align with NERC [Project 2008-01 Voltage and Reactive Planning and Control](#). A SAR was finalized in April 2011. NERC project is expected to begin in first quarter 2013.
  - d) Develop, modify or delete business practices to support Time Error, Automatic Generation Control (AGC), and Inadvertent Accounting (BAL-004, BAL-005, and BAL-006) resulting from the NERC field test under NERC project (NERC [Project 2010-14.2 Phase 2 of Balancing Authority Reliability-based Controls: Time Error, AGC, and Inadvertent](#)). NERC expects this project to start in second quarter 2013. The NERC project may impact WEQ-006 Manual Time Error Correction and WEQ-007 Inadvertent Interchange Payback.
  - e) Develop complementary standards that align with NERC Project 2010-4 Demand Data. The NERC project may impact WEQ-015 Business Practices for Measurement and Verification of Wholesale Electricity Demand Response.
  - f) Coordinate with NERC on the functional model glossary revisions NERC [Project 2010-08 Functional Glossary Model Revisions](#). NERC expects this project to start in fourth quarter 2014. The NERC project may impact WEQ-000 Abbreviations, Acronyms, and Definition of Terms.
  - g) Coordinate with NERC on NERC Project 2012-05 ATC Revisions - Order 729. NERC expects this project to start in third quarter 2014. The NERC project may impact the WEQ-001 Open Access Same-Time Information Systems (OASIS) Standards, WEQ-002 OASIS Standards and Communication Protocol (S&CP), WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, and WEQ-013 OASIS Implementation Guide.
  - h) Coordinate with NERC on NERC Project 2012-08 Glossary Updates. NERC has not established a start date for this project. The NERC project may impact WEQ-000 Abbreviations, Acronyms, and Definition of Terms
  - i) Coordinate with NERC on NERC Project 2012-09 IRO Review. NERC has not established a start date for this project. The NERC project may impact WEQ-008 Transmission Loading Relief – Eastern Interconnection Standards.
  - j) Coordinate with NERC on NERC Project 2012-15 Flow Limited Paths. NERC has not established a start date for this project. The NERC project may impact the WEQ-001 Open Access Same-Time Information Systems (OASIS) Standards, WEQ-002 OASIS Standards and Communication Protocol (S&CP), WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, and WEQ-013 OASIS Implementation Guide.
- 2 **Gas/Electric Coordination**
  - a) Review and develop standards as needed and requested based on the National Petroleum Council (NPC) findings as communicated by the NAESB Board of Directors, government agencies or reliability organizations, as applicable. (9-15-11 NPC Report: [Transmittal Letter, Preface, and Executive Summary](#), Ch 1: [Resource and Supply](#), Ch 2: [Operations and Environment](#), Ch 3: [Demand](#), Ch 4: [Carbon and Other End-Use Emissions](#), Ch 5: [Macroeconomics](#), Ap A: [Request Letters, Description of the NPC, and NPC membership roster](#), Ap B: [Study Group Rosters](#), Ap C: [Additional Materials Available Electronically](#))
  - b) Conduct assessment to determine if Electric Industry Requirements documented in WEQ-011 Gas / Electric Coordination should be considered reliability requirements and transition to NERC.
- 3 **Optional work to extend existing standards**
  - a) Prepare recommendations for future path for TLR<sup>8</sup> (Phase 2) in concert with NERC, which may include alternative congestion management procedures<sup>9</sup>. Work on this activity is dependent on completing 2010 WEQ Annual Plan 1.a (Parallel Flow Visualization/Mitigation for Reliability Coordinators in the Eastern Interconnection - Phase 1).

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<sup>8</sup> Phase 2 of the Parallel Flow Visualization looks at developing options for and reporting of the most cost effective alternatives to achieve curtail obligations assigned during Phase 1.”

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- b) Develop needed business practice standards for organization/company codes for NAESB standards – and address current issues on the use of DUNs numbers. Common code usage is linked to the transition of the Registry from NERC to NAESB.
  - c) Develop business practices for allocating capacity among requests received during a submittal window Order 890-A ([Docket Nos. RM05-17-001, 002 and RM05-25-001, 002](#) - Paragraph 805)<sup>10</sup>.
- 4 **Pending Regulatory or Legislative Action**
- a) Determine NAESB action needed to support FERC Action Plan for Smart Grid Technology.
  - b) Develop business practice standards for cap and trade programs for greenhouse gas.
  - c) Develop standards as needed based on FERC Order No. 1000. ([NAESB Analysis of FERC Order No. 1000](#))
  - d) Develop standards as needed in support of Variable Energy Resources (VERs) final order (RM10-11-000). ([NAESB Comments 3-2-11](#), [FERC NOPR RM10-11-000](#), [FERC Final Order No. 764](#), [Docket No. RM10-11-000](#)<sup>11</sup>)

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<sup>9</sup> For additional information, please see comments submitted by PJM and Midwest ISO for this Annual Plan Item:  
[http://www.naesb.org/pdf3/weq\\_aplan102907w1.pdf](http://www.naesb.org/pdf3/weq_aplan102907w1.pdf).

<sup>10</sup> 805. The Commission recognizes that developing methods to allocate capacity among requests received during a submittal window may require detailed procedures, particularly when transmission requests received simultaneously exceed available capacity. As the Commission explained in Order No. 890, however, we believe that each transmission provider is in the best position to develop allocation procedures that are suitable for its system. This does not preclude transmission providers from working through NAESB to develop standardized practices, as suggested by Southern. For example, as we pointed out in Order No. 890, allocation methods such as that used by PJM to allocate monthly firm point-to-point transmission service could provide useful guidance in developing general allocation procedures.

<sup>11</sup> For FERC Final Order No. 764, Docket No. RM10-11-000, specifically paragraph nos. 146 and 182 should be reviewed:

146. The Commission concludes that an independent review of NERC standards and NAESB business practices is not necessary prior to the implementation of intra-hour scheduling. As noted by NERC, several entities currently offer intra-hour scheduling without any apparent conflict with Reliability Standards. NERC comments that it does not believe there are any existing standards that prohibit industry from implementing intra-hour scheduling, and no commenters have pointed to specific NAESB business practices that prevent industry from implementing intra-hour scheduling. The Commission therefore concludes that it is not necessary to delay adoption of the intra-hour scheduling requirements of this Final Rule pending further review of NERC Reliability Standards and NAESB business practices. **To the extent industry believes it is beneficial to refine one or more existing NERC Reliability Standards or NAESB business practices to reflect intra-hour scheduling, stakeholders can use existing processes to pursue such refinements.**

182. Some commenters request that the Commission standardize protocols for reporting meteorological or forced outage data required by this Final Rule. The Proposed Rule did not contain standard protocols for data reporting and, as a result, the merits of such a requirement have not been fully addressed in the record. **Whether standardization of data communications would facilitate or hinder development of power production forecasting may implicate a variety of data and communications issues that would benefit from broad industry input through standards development processes such as those used by NAESB and other organizations.**

**WHOLESALE ELECTRIC QUADRANT EXECUTIVE COMMITTEE AND SUBCOMMITTEE STRUCTURE**

**NAESB WEQ EC and Active Subcommittee Leadership:**

Executive Committee (EC): Kathy York (Chair) and James Castle (Vice Chair)

Standards Review Subcommittee (SRS): Narinder Saini, Ed Skiba

Interpretations Subcommittee: Ed Skiba

Business Practices Subcommittee (BPS) & Time and Inadvertent Management Task Force (TIMTF): Ed Skiba, Narinder Saini

Open Access Same Time Information System (OASIS) Subcommittee: Paul Sorenson, J.T. Wood, Alan Pritchard

Joint Electric Scheduling Subcommittee (JESS): Bob Harshbarger (NAESB), Clint Aymond (NERC)

Demand Side Management-Energy Efficiency (DSM-EE) REQ/WEQ Subcommittee: Ruth Kiselewich (Retail), Roy True and Paul Wattles (WEQ)

Public Key Infrastructure (PKI) Subcommittee: Jim Buccigross

Inactive Subcommittees:

e-Tariff Joint WEQ/WGQ Subcommittee (e-Tariff): Jane Daly (WEQ), Keith Sappenfield (WGQ)

(\*\*) The Smart Grid Standards Subcommittee is a joint group of the retail electric and wholesale electric quadrants with other standards development groups such as OASIS (Organization for the Advancement of Structured Information Standards, not Open Access Same Time Information Systems related to NAESB standards and FERC actions), CalConnect, FIX and UCAIug, among others. Direction may be given from NIST, DoE or FERC and the group reports jointly to the NAESB Board Smart Grid Strategic Steering Committee and the WEQ and REQ ECs. The group is chaired by Joe Zhou, Wayne Longcore and Robert Burke.

(\*\*\*) The PAP 10 Smart Grid Standards Subcommittee is a joint group of the retail electric and wholesale electric quadrants with other standards development groups such as OASIS, UCAIug, OpenADE, ZigBee, ASHRAE, EIS Alliance, NARUC and includes other groups. Direction may be given from NIST, DoE or FERC and the group reports jointly to the NAESB Board Smart Grid Strategic Steering Committee and the WEQ and REQ ECs. The group is chaired by Phil Precht, Cathy Wesley, Sharon Dinges, David Kaufman, Brad Ramsay, Tobin Richardson and Ed Koch.

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**End Notes WEQ 2012 Annual Plan:**

<sup>1</sup> Dates in the completion column are by end of the quarter for completion by the assigned committee, sub-committee or task force. The dates do not necessarily mean that the standards are fully staffed to be implementable by the industry, and/or ratified by membership. If one item is completed earlier than planned, another item can begin earlier and possibly complete earlier than planned. There are no begin dates on the plan.

<sup>2</sup> The assignments are abbreviated. The abbreviations and sub-committee structure can be found at the end of the annual plan document.

## **The NAESB Standards Development Process**

NAESB is focused on proposing, considering, and adopting voluntary standards and model business practices that will have a significant and lasting impact on all aspects of the natural gas and electricity marketplaces. As a result of the standards NAESB adopts, it is expected that the industry will operate more efficiently and effectively, benefiting both the industry and its customers. At the same time, it must be acknowledged that NAESB standards may constitute a change in the way parties do business, with an accompanying effect on the use and allocation of resources.

NAESB's policy is to move at a deliberate pace, consistent with its annual plan(s), thus permitting those affected by its standards, especially those standards adopted as regulations by the Federal Energy Regulatory Commission (FERC) or other regulatory bodies, to assimilate them as part of their business practices. To this end, NAESB will carefully consider whether proposed standards are both timely and necessary. In particular, it will try to avoid adopting and implementing new standards, however beneficial, before the industry is able to reasonably make use of them.

The standards development process is governed by the annual plan, and items can be included in the plan or modified only with Board approval. The plan typically reflects requests from NAESB members, government agencies, and other interested parties. In approving the annual plan, the Board considers the availability of resources, including the NAESB budget and staff and the availability of industry volunteers. New requests received throughout the year are either considered part of the existing annual plan or as new items that require Board approval.

The standards development process begins with an annual plan item or a triaged and approved request. Triage is a process used by each quadrant of the Executive Committee (EC) to determine whether a request is within scope, which quadrant(s) it applies to, which subcommittee(s) it should be referred to, and what priority it should be assigned. Triage is carried out by EC members appointed by the EC chair. Triage recommendations are submitted to the en banc EC and require EC approval, and may also require Board approval if there are scope questions or if a modification of the annual plan is required.

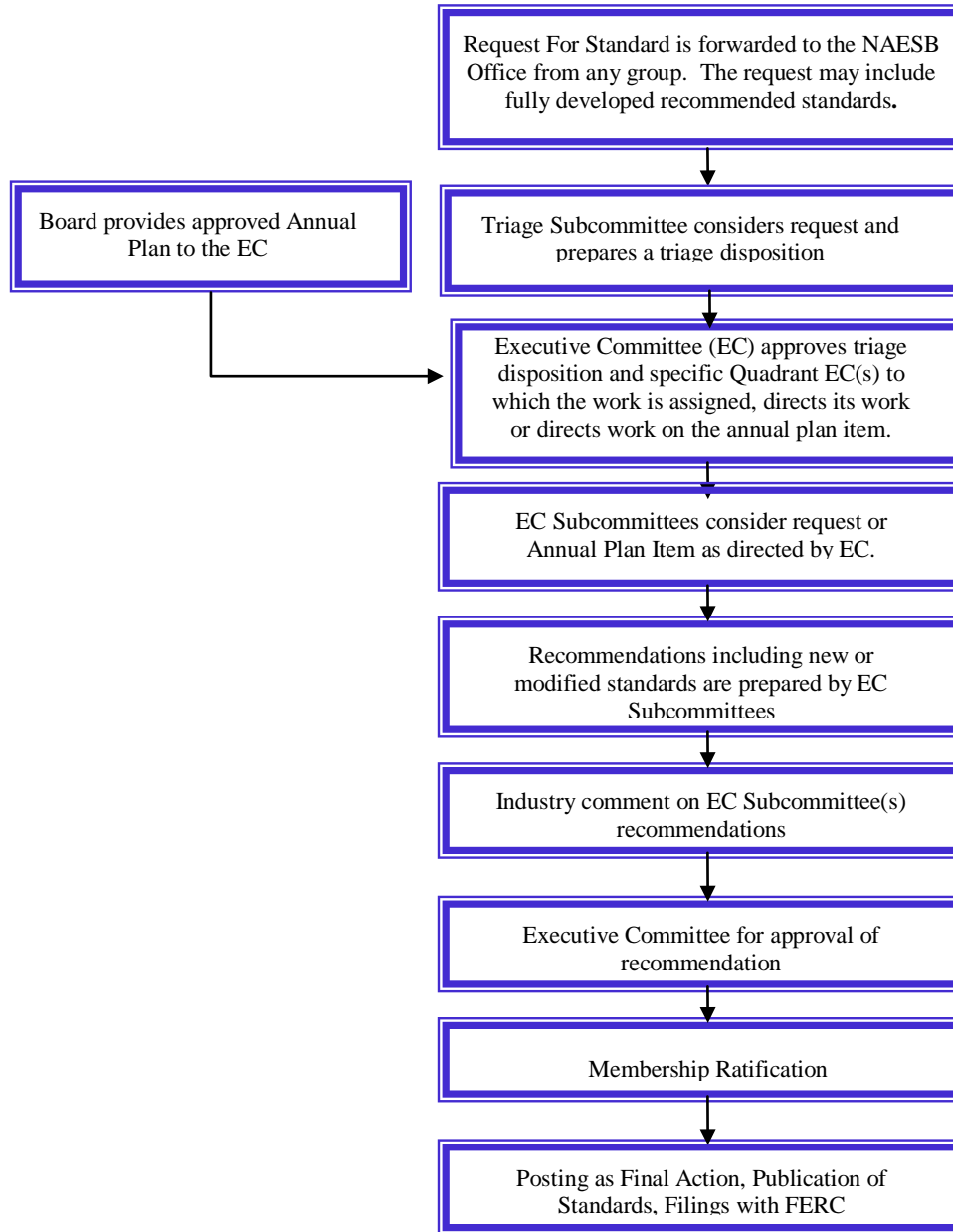
Once the triage process is completed, the subcommittees—more than one are normally involved in standards recommendations—review the request, compare it to existing standards, and prepare recommendations that may take the form of new or modified standards or interpretations. Participation in EC subcommittees is open to any interested party regardless of membership status. All subcommittee participants may vote; voting is balanced by segment and quadrant. All votes are public.

When the recommendation is complete, it is made available for a thirty-day industry comment period. The recommendation and comments are then forwarded to the EC, which considers the recommendation, makes any changes it deems necessary, and takes a vote. A recommendation must receive an affirmative vote of at least 67 percent from each applicable quadrant EC and 40 percent from each of the segments of the applicable quadrant(s).

After passage by the EC, the recommendation must be ratified by the NAESB members. An affirmative vote of 67 percent of the members of the applicable quadrant(s) is required for ratification. After ratification, standards and modifications are considered final actions and will be published in the next version of NAESB standards.

All NAESB quadrants follow the same development process described herein. The process has been followed by the WGQ since 1994 and has been used to develop more than five hundred standards that have been incorporated by reference into federal regulations.

North American Energy Standards Board  
Standards Development Process Flow Chart



### Flexibility

NAESB recognizes that flexibility is necessary as standards are developed to address regional concerns or to incorporate variances to accommodate operational or structural differences. Several WEQ standards incorporate regional or operational differences for both Version 0 and Version 1. There is a high threshold for incorporating such variances in a standard; the subcommittee(s) in drafting the standard, the EC in approving the subcommittee recommendation, and the membership in approving the standard must all agree that such variance is necessary. Nonetheless, NAESB procedures are well suited to take into account operational and regional differences.

### Transparency

All NAESB meetings are open for attendance and participation by any interested party, with the exception of executive sessions of the Board or Managing Committee for purposes of discussing personnel, compensation or legal issues. Meeting announcements and agendas are posted in advance to permit the widest possible participation. Conference-calling capability is available for all meetings and web casting is available for most. Those intending to attend a meeting in person or by telephone are asked to notify NAESB by a specific date to permit adequate meeting planning.

Transcripts are made of all Board of Directors and EC meetings, and may also be made of other meetings that are expected to be controversial. Transcripts are maintained in the NAESB office and are provided to regulatory agencies for their internal use. All other interested parties can purchase transcripts from the relevant transcription service.

### Coordination with NERC

For business practice standards development for the WEQ, if it is determined by NERC and NAESB Executive Management that joint development is needed by NERC and NAESB, the NERC-NAESB Coordination Joint Development Process is implemented.<sup>1</sup> This process requires that the appropriate NAESB Subcommittee and NERC Standards drafting team work together to develop reliability standards and business practices.

The Joint Interface Committee of NAESB, NERC and the ISO-RTO Council (“JIC”) was dissolved as part of the agreement to create the Independent Grid Operator segment of the WEQ. The joint development process between NAESB and NERC is being used to ensure appropriate coordination. The ISOs and RTOs have strong decision-making roles in both NERC and NAESB, and thus with the use of the joint development process, the JIC was no longer necessary.

### Accessibility of Standards and Work Products

The NAESB standards and protected work products are accessible to members at no cost as a benefit of their membership. Non-members can purchase the standards as a full version, or they can purchase individual final actions. Non-members can also access the standards at no cost by requesting an evaluation copy. NAESB standards and protected work products are copyrighted. Non-members can download a NAESB materials order form from the NAESB web site for ordering standards or for instructions on accessing standards for evaluation.

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<sup>1</sup> The NERC-NAESB Coordination Joint Development Process was submitted to the Commission on February 17, 2006 in Attachment C of the Progress Report on NAESB Activities impacting Docket No. RM05-5-000, “Standards for Business Practices and Communication Protocols for Public Utilities”: [http://www.naesb.org/doc\\_view2.asp?doc=ferc021706.pdf](http://www.naesb.org/doc_view2.asp?doc=ferc021706.pdf).