

NORTH AMERICAN ENERGY STANDARDS BOARD

801 Travis, Suite 1675 • Houston, Texas 77002 • **Phone**: (713) 356-0060 • **Fax**: (713) 356-0067 email: naesb@naesb.org • **Web Site Address**: www.naesb.org

June 21, 2021 Filed Electronically

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street N.E., Room 1A Washington, D.C. 20426

RE: Informational Status Update on NAESB Standard Development Efforts to Support FERC Order Nos. 841

and 2222 (Docket No. RM05-5-000)

Dear Ms. Bose:

The North American Energy Standards Board ("NAESB") voluntarily submits this informational status update to the Federal Energy Regulatory Commission ("FERC") regarding the current standards development efforts within NAESB intended to support the wholesale electric industry as it works to integrate energy storage and distributed energy resources in response to FERC Order Nos. 841 and 2222. The update describes the activities that resulted in the organization's determination to address energy storage, and more broadly, distributed energy resources, as well as the current status of the Wholesale Electric Quadrant's standards development effort. As with all NAESB standards development, participation in the process is open to all interested parties, regardless of membership, and NAESB welcomes broad participation from all interested parties.

The cover letter and report are being electronically filed in Adobe Acrobat® Portable Document Format (".pdf"). The filing is also available on the NAESB website. Please feel free to call the NAESB office (713-356-0060) or refer to the NAESB website should you have any questions or need additional information.

Respectfully submitted,

Ras Mc Bunde

Ms. Rae McQuade

President & COO, North American Energy Standards Board

cc: Chairman, Richard Glick, Federal Energy Regulatory Commission

Commissioner, Neil Chatterjee, Federal Energy Regulatory Commission Commissioner, Allison Clements, Federal Energy Regulatory Commission Commissioner, Mark C. Christie, Federal Energy Regulatory Commission

Commissioner, James Danly, Federal Energy Regulatory Commission

Mr. Andrew Dodge, Office of Electric Reliability, Federal Energy Regulatory Commission

Mr. Matt Christiansen, General Counsel, Federal Energy Regulatory Commission

Mr. David Morenoff, Deputy General Counsel, Federal Energy Regulatory Commission

Mr. Michael Goldenberg, Senior Attorney, Office of General Counsel, Federal Energy Regulatory Commission

Ms. Jette Gebhart, Director, Office of Energy Market Regulation, Federal Energy Regulatory Commission

Ms. Jignasa Gadani, Director, Office of Energy Policy and Innovation, Federal Energy Regulatory Commission

Mr. Michael Desselle, Chairman NAESB Board of Directors, North American Energy Standards Board

Mr. Jonathan Booe, Executive Vice President and CAO, North American Energy Standards Board

Mr. William P. Boswell, General Counsel, North American Energy Standards Board

Enclosures (all documents and links are available publicly on the NAESB website - www.naesb.org)

Appendix A Links to Related Meeting Minutes, Work Papers, and Other Documents

Appendix B NAESB 2021 WEQ Annual Plan

Appendix C Links to Related Board and Board Committee or Task Force Minutes and Work Papers

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Standards for Business Practices and)	Docket No. RM05-5-000
Communication Protocols for Public Utilities)	

INFORMATIONAL STATUS UPDATE OF THE NORTH AMERICAN ENERGY STANDARDS BOARD

The North American Energy Standards Board ("NAESB") voluntarily submits this informational status update in the above referenced docket to provide the Federal Energy Regulatory Commission ("FERC" or "Commission") with information regarding the Wholesale Electric Quadrant ("WEQ") standards development effort related to energy storage, and, more broadly, distributed energy resources intended to support the industry as it implements FERC Order Nos. 841 and 2222. This report highlights the activities of the organization that led to standards development to support these areas as well as describes the efforts currently underway by the WEQ Business Practices Subcommittee ("BPS") to address the individual standards development items assigned to the subcommittee through the NAESB 2021 WEQ Annual Plan.

Discussions within NAESB regarding energy storage have been underway since early 2020, initiated by the NAESB Advisory Council. The NAESB Advisory Council is comprised of leaders within the energy industry such as representatives of government agencies, public interest groups, and other industry organizations, including a number of former FERC and state commissioners as well as Department of Energy officials. The Council meets on an annual basis to discuss the organization's current activities and strategic direction as well as industry issues and trends. During the February 8, 2020 meeting, the NAESB Advisory Council recognized battery storage as a subject of growing market interest and recommended that NAESB explore the potential for the development of business practices in the area.

In support of NAESB's mission to develop standards that add transparency, uniformity, and security to market transactions and promote a more efficient and competitive marketplace for the wholesale and retail natural gas and electricity industries, the organization conducts periodic industry-wide surveys to solicit feedback regarding potential areas of standards development. In recognition of the NAESB Advisory Council's recommendation regarding battery storage, this topic was included as a possible area for future standards development projects in the 2020 NAESB Standards Development Survey, distributed on June 25, 2020. The results of the survey indicated strong industry support for NAESB to consider standards development related to battery storage in the next twelve to eighteen months.

The NAESB Board of Directors discussed the results of the 2020 NAESB Standards Development Survey as part of its annual meeting of the members and strategic session, held on September 3, 2020. In response to the survey results, the Chair of the NAESB Board of Directors created the NAESB Board Task Force on Battery Storage to further explore the potential for standards development in this area. The task force held three meetings between October and December 2020 to develop a recommendation for the NAESB Board of Directors concerning potential activities to support battery storage and developed a recommended scope of work for standards development. During these meetings, task force participants recognized that battery storage may be viewed as an energy storage resource

as well as a distributed energy resource and that directives contained in both Order Nos. 841 and 2222 are supportive of the integration of such resources by the wholesale electric industry. For that reason, it was determined that any standards development should address energy storage, and, more broadly, distributed energy resources, consistent with the relevant FERC Orders.

Over the course of the task force meetings, a consensus emerged around three areas of standards development that could be addressed regarding battery storage/energy storage and, more broadly, distributed energy resources in front and behind the meter:

- 1. The development of business practices that define an index/registry for the qualified energy storage resources and distributed energy resources participating in the wholesale markets.
- 2. The development of business practices for information and reporting requirements for the qualified energy storage resources and distributed energy resources participating in the wholesale markets.
- 3. The development of business practices to establish performance metrics for the qualified energy storage resources and distributed energy resources participating in the wholesale markets.

During its December 17, 2020 meeting, the NAESB Board of Directors considered the recommendation of the NAESB Board Task Force on Battery Storage and endorsed the inclusion of the three standards development items in the 2021 WEQ Annual Plan. These three items are now reflected as 2021 WEQ Annual Plan Items 7.a, 7.b, and 7.c and assigned to the WEQ BPS.

Following the completion of standards development to address Commission directives in FERC Order No. 676-I, the WEQ BPS held a kick-off meeting on February 25, 2021 to begin work on the battery storage/energy storage and distributed energy resources annual plan items. Since that time, the subcommittee has been meeting approximately every two weeks and held, to date, a total of eight meetings on the topic. The subcommittee has enjoyed broad industry participation, with over sixty individual participants representing approximately thirty entities, including staff from two national laboratories. As an American National Standards Institute accredited standards development organization, NAESB meetings are open to any interested party, including non-members, and NAESB makes available on its website all meeting announcements, agendas, work papers, minutes, and work products.

Early work by the WEQ BPS has focused on a proposed index or registry of energy storage and distributed energy resources as well as the development of standards to address information and reporting requirements, including potential data standards. In support of these efforts, work papers have been developed proposing use cases that may be helpful to identify areas of potential standardization that would be most beneficial to the industry. Initial use cases proposed by subcommittee participants focused on information exchange interactions, such as data communicated between energy storage asset owners or distributed energy resource aggregators and the Independent System Operators/Regional Transmission Operators as well as energy storage asset owners and other resources, such as those used for charging. Over the past several meetings, the WEQ BPS participants have also worked to identify common information around heterogeneous and homogenous distributed energy resource aggregations and associated general information requirements that may benefit from standardization, including locational information, operational characteristics of the aggregation, and information around grid services. Additionally, the subcommittee participants

have begun to discuss common terms associated with energy storage resources and distributed energy resources to determine if consensus can be reached regarding standardized names and definitions. In all discussions regarding this effort, a frequent topic of discussion has been the appropriate level of detail and granularity that should be reflected in any resulting standards.

Moving forward, the WEQ BPS plans to continue with its current meeting schedule until standards development is completed. Thank you for the opportunity to provide the Commission with this informational update regarding this standards development effort related to FERC Order Nos. 841 and 2222.

Informational Status Update of the North American Energy Standards Board
June 21, 2021

Appendices:

A...... Links to Related Meeting Minutes, Work Papers and Other Documents

B...... NAESB 2021 WEQ Annual Plan

C...... Links to Related Board and Board Committee or Task Force Minutes and Work Papers

	Appendix A – Links to Related Meeting Minutes, Work Papers, and Other Documents			
Date of Meeting	Link to Related Meeting Minutes	Links to Work Papers		
2-25-2021	WEQ BPS Conference Call with Web Conferencing Final Minutes https://www.naesb.org/pdf4/weq_bps022521fm.docx	Chairs' Kick-off Presentation: https://www.naesb.org/pdf4/weq_bps022521w1.pptx		
3-25-2021	WEQ BPS Conference Call with Web Conferencing Final Minutes: https://www.naesb.org/pdf4/weq_bps032521fm.docx	2021 WEQ Annual Plan Item 7 Initial Subcommittee Work Paper: https://www.naesb.org/pdf4/weq_bps032521w1.docx Work Paper Submitted by D. Brooks, Reliable Energy Analytics: https://www.naesb.org/pdf4/weq_bps032521w2.docx Proposed List of Information Requirements for Storage and DER Aggregations submitted by N. Gladd, Kirkland & Ellis LLP.: https://www.naesb.org/pdf4/weq_bps032521w3.docx 2021 WEQ API 1.a Work Paper Submitted by J. Wood, Southern Company: https://www.naesb.org/pdf4/weq_bps032521w4.docx		
4-8-2021	WEQ BPS Conference Call with Web Conferencing Final Minutes: https://www.naesb.org/pdf4/weq_bps040821fm.docx	NAESB Category ID and Category Element IDs: https://www.naesb.org/member-login-check.asp?doc=weq-bps040821w1.xlsx 2021 WEQ Annual Plan Item 7 Subcommittee Workpaper revised 3.25.21: https://www.naesb.org/pdf4/weq-bps040821w2.docx Proposed List of Information Requirements for Storage and DER Aggregations submitted by N. Gladd, Kirkland & Ellis LLP: https://www.naesb.org/pdf4/weq-bps040821w3.docx		
4-20-2021	WEQ BPS Conference Call with Web Conferencing Final Minutes: https://www.naesb.org/pdf4/weq_bps042021fm.docx	Use Case Data Elements Work Paper: https://www.naesb.org/member-login-check.asp?doc=weq-bps042021w1.xlsx 2021 WEQ Annual Plan Item 7 Subcommittee Work Paper revised 4.8.21: https://www.naesb.org/pdf4/weq-bps042021w2.docx Proposed List of Information Requirements for Storage and DER Aggregations submitted by N. Gladd, Kirkland & Ellis LLP: https://www.naesb.org/pdf4/weq-bps042021w3.docx		
5-6-2021	WEQ BPS Conference Call with Web Conferencing Final Minutes: https://www.naesb.org/pdf4/weq_bps050621fm.docx	Use Case Data Elements Work Paper rev. 4.20.21: https://www.naesb.org/member_login_check.asp?doc=weq_bps050621w1.xlsx 2021 WEQ Annual Plan Item 7 Subcommittee Work Paper revised 4.20.21: https://www.naesb.org/pdf4/weq_bps050621w2.docx		
5-17-2021	WEQ BPS Conference Call with Web Conferencing Final Minutes: https://www.naesb.org/pdf4/weq_bps051721fm.docx	2021 WEQ Annual Plan Item 7 Subcommittee Work Paper revised 5.6.21: https://www.naesb.org/pdf4/weq_bps051721w1.docx DER Aggregation Descriptive Characteristics: https://www.naesb.org/pdf4/weq_bps051721w2.docx		

	Appendix A – Links to Related Meeting Minutes, Work Papers, and Other Documents			
Date of Meeting	Link to Polated Macting Minutes Links to Work Paners			
6-3-2021	WEQ BPS Conference Call with Web Conferencing Draft Minutes: https://www.naesb.org/pdf4/weq_bps060321dm.docx	2021 WEQ Annual Plan Item 7 Subcommittee Work Paper revised 5.17.21: https://www.naesb.org/pdf4/weq_bps060321w1.docx DER Aggregation Descriptive Characteristics rev. 5.17.21: https://www.naesb.org/pdf4/weq_bps060321w2.docx Standard Terms Work Paper Submitted by J. Phillips: https://www.naesb.org/pdf4/weq_bps060321w3.docx		

	Item Description	Completion ¹	Assignment ²		
De	Develop business practices standards as needed to complement reliability standards				
star app	velop business practice standards to support and complement NERC reliability standards authorization requests (SARs) using the NERC/NAESB Coordination Joint repriate. Current NAESB activities underway to develop business practice standard item are:	Standards Develop	oment Process as		
a)	Update WEQ-005 Area Control Error (ACE) Equation Special Cases to account for modifications to NERC Dynamic Transfer Reference Document V4 (<u>Standards Request R20008</u>) Status: Started	2021	BPS		
b)	Revise as needed WEQ-023 Modeling Business Practice Standards to support any FERC directives or Final Orders, including in Docket Nos. RM05-5-029, RM05-5-030, RM19-16-000, RM19-17-000, and AD15-5-000 ¹		BPS		
	Status: Not Started				
	velop and/or modify the NAESB WEQ Business Practice Standards to support 105-5-25, RM05-5-26, and RM05-5-27)	t FERC Order No	o. 676-I (Docket Nos.		
a)	Consistent with FERC Order No. 676-I, reconsider the reservation of WEQ-006 Manual Time Error Correction and determine if the standards should be retained or revised (see $\P46-47$) Status: Completed	1st Q, 2020	BPS		
	velop business practices standards to improve the current operation of the who				
a)	Modify WEQ-000 Abbreviations, Acronyms, and Definition of Terms Business Practice Standards to provide a cross reference column to indicate which NAESE WEQ Business Practice Standards the abbreviations, acronyms, and definition of terms applies to (Standards Request R20013) Status: Completed		SRS		
	 Review WEQ-001, WEQ-002, WEQ-003, and WEQ-013 and make modifications as needed for consistency in the use of the defined terms, acronyms, and abbreviations Status: Not Started 	2021	OASIS		
	ii. Review WEQ-004 and WEQ-022 and make modifications as needed for	2021	CISS		

2.

3.

consistency in the use of defined terms, acronyms, and abbreviations

Status: Not Started

¹ Paragraph 49 of FERC Notice of Proposed Rulemaking issued on July 16, 2020: The Commission stated in Order No. 729 that calculation of ATC is one of the most critical functions under the OATT, because it determines whether transmission customers can access alternative power supplies. It found that the improved transparency and consistency of ATC calculation methodologies would limit transmission service providers' wide discretion in calculating ATC and ensure that customers are treated fairly in seeking alternative power supplies. Because of the importance of the ATC calculation and as a result of the proposed retirement of NERC's MOD A Reliability Standards, the Commission is proposing to revise its regulations to establish the general criteria transmission owners must use in calculating ATC. The Commission also is proposing to adopt the NAESB standards as they appear generally consistent with those criteria. The Commission, however, seeks comment herein on whether the NAESB standards could be improved by providing additional detail to further protect transmission customers. We seek comment on whether the proposed regulator text included below will provide a clear basis for establishing that transmission provider ATC calculations must be transparent, consistent, and not unduly discriminatory or preferential. We also seek comment on whether we should develop additional new regulations to maintain the current level of detail related to ATC calculations; if so, what level of detail those regulations should have.

		Item Description	Completion ¹	Assignment
	iii.	P : WHO AAF WHO AAF WHO AAA 1 1	2021	BPS
	iv.	Review WEQ-012 and make modifications as needed for consistency in the use of defined terms, acronyms, and abbreviations Status: Not Started	2021	Cybersecurity Subcommittee
b)	the an	evelop industry business practice standards to provide a cross-reference table for e NAESB WEQ OASIS Business Practice Standards (WEQ-000, 001, 002, 003, d 013) to provide specificity in determining which standards are linked together atus: Started	2021	OASIS
c)	of wi	evelop of industry business practice standards, as applicable, for identification all modifications of service made to an original reservation in one location thin OASIS atus: Started	2021	OASIS
d)	an on for	eview the NAESB WEQ OASIS Business Practice Standards addressing redirects d revise the standards as needed to support direction provided in the <u>FERC Order Clarification</u> re: Standards for Business Practices and Communication Protocols r Public Utilities in Docket No. RM05-5-028 atus: Completed	1 st Q, 2021	OASIS
De	evelo	p and/or maintain standard communication protocols and - cybersecurity be	usiness practice	es as needed.
a)	Au me	eview annually at a minimum, WEQ-012 and the accreditation requirements for athorized Certification Authorities to determine if any changes are needed to eet market conditions. ² atus: Not Started	2021	Cybersecurity Subcommittee
b)	cu otl	valuate and modify standards as needed to support and/or complement the rrent version of the NERC Critical Infrastructure Protection Standards ³ and any her activities of NERC and the FERC ⁴ related to cybersecurity. atus: Not Started	2021	Cybersecurity Subcommittee

5. Develop and/or modify standards to support FERC Order Instituting Proceeding to Develop Electronic Filing Protocols for Commission Forms (Docket No. AD15-11-000)⁵

a)	Develop business practices as needed to support electronic filing protocols for	2021	Joint WEQ/WGQ
	submittal of FERC Forms		FERC Forms
	Status: Started		Subcommittee

Distributed Ledger Technology

a) Distributed Ledger Technology for Power Trade Events

² The "NAESB Accreditation Requirements for Authorized Certification Authorities" can be found at: $\underline{http://www.naesb.org/member_login_check.asp?doc=certification_specifications.docx}.$

http://www.nerc.com/pa/Stand/Pages/CIPStandards.aspx
 Including proceedings in FERC Docket No. RM20-19-000 (FERC Notice of Inquiry Equipment and Services Produced or Provided by Certain Entities Identified as Risks to National Security)

⁵ The FERC Order Instituting Proceeding to Develop Electronic Filing Protocols for Commission Forms, issued on April 16, 2015, can be found through the following hyperlink: https://www.naesb.org/pdf4/ferc041615_electronic_filing_protocols_forms.pdf

		Item Description	Completion ¹	Assignment ²
	i.	Review power trade events to streamline the power accounting close cycle to determine if WEQ Business Practice Standards should be developed utilizing Distributed Ledger Technology (DLT). Status: Not Started	2021	WEQ Executive Committee
	ii.	Develop Distributed Ledger Technology (DLT) WEQ Business Practice Standards and/or protocols for power trade events to streamline the power accounting close cycle, if needed based upon review. Status: Not Started	2021	WEQ Executive Committee
b)	Dis	stributed Ledger Technology for the Renewable Energy Certificate (REC) Proce	ess	
	i.	Develop a Master Agreement for Sale and Purchase of Renewable Energy Certificates (RECs) to support the voluntary markets Status: Started	2021	Joint RMQ/WEQ BPS
	ii.	Develop technical implementation business practice standards to support automation of the current REC creation, accounting and retirement processes for voluntary markets consistent with the Master Agreement for Sale and Purchase of RECs Status: Not Started	2021	Joint RMQ/WEQ BPS
and	l, m	o and/or modify standards for information and reporting requirements to su ore broadly, distributed energy resources in front and behind the meter. ale participants, e.g. FERC Order No. 841, should take precedence.		
a)	sto ma	velop business practices that define an index/registry for qualified energy rage resources and distributed energy resources participating in the wholesale rkets	2021	BPS
	Sta	itus: Not Started		
b)	qua in t	velop business practices for information and reporting requirements for the alified energy storage resources and distributed energy resources participating the wholesale markets started	2021	BPS
c)	De	velop business practices to establish performance metrics for the qualified	2021	BPS

PROVISIONAL ITEMS

wholesale markets Status: Not Started

1. Optional Work to Extend Existing Standards

 a) Consider modifications to the TLR Procedure in coordination with NERC and EIDSN, Inc, which may include alternative congestion management procedures.⁶

2. Pending Regulatory or Legislative Action

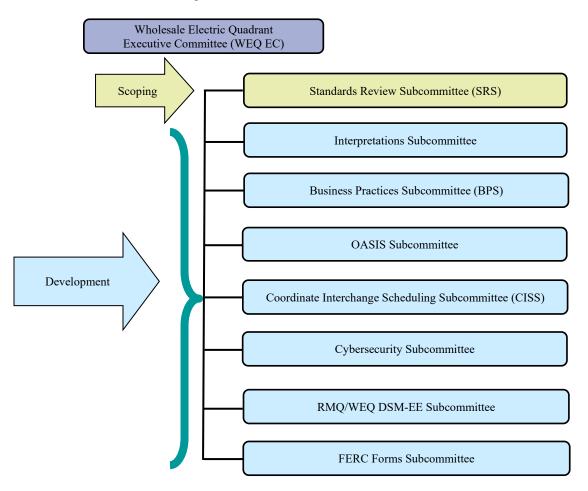
- a) Should the FERC determine to act in response to NAESB's report of Version 003.3 of the WEQ Business Practice Standards and should the FERC recommend specific action, develop and/or revise Business Practice Standards as needed
- Determine potential NAESB action if needed to support FERC Notice of Proposed Policy Statement Carbon Pricing in Organized Wholesale Electricity Markets in Docket No. AD20-14-000

energy storage resources and distributed energy resources participating in the

⁶ 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.

	Item Description	Completion ¹	Assignment ²
c)	Determine potential NAESB action if needed to support FERC Order No. 2222 Participation of Distributed Energy		
	Resource Aggregations in Markets Operated by Regional Transmission Organizations and Independent System		
	Operators in Docket No. RM18-9-000		

WHOLESALE ELECTRIC QUADRANT EXECUTIVE COMMITTEE AND SUBCOMMITTEE STRUCTURE



NAESB WEQ EC and Active Subcommittee Leadership:

Executive Committee (EC): Joshua Phillips (Chair) and Dick Brooks (Vice Chair)

Standards Review Subcommittee (SRS): Ron Robinson

Business Practices Subcommittee (BPS): Dick Brooks and Jason Davis

Open Access Same Time Information System (OASIS) Subcommittee: Rob Arbitelle, Ken Quimby, Matt Schingle, J.T. Wood and Mike Steigerwald

Coordinate Interchange Scheduling Subcommittee (CISS): Joshua Phillips and Zack Buus

Cybersecurity Subcommittee: Jim Buccigross

FERC Forms Subcommittee (WEQ/WGQ): Leigh Spangler (WGQ), Dick Brooks (WEQ)

Inactive Subcommittees:

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

Interpretations Subcommittee: Vacant

Demand Side Management-Energy Efficiency (DSM-EE) RMQ/WEQ Subcommittee: Paul Wattles (WEQ)

End Notes WEQ 2021 Annual Plan:

¹ 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.

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

	Appendix C – Links to Related Board and Board Committee or Task Force Minutes and Work Papers				
Date of Meeting	Link to Related Board and Board Committee Task Force Minutes	Work Papers			
9-3-2020	NAESB Board of Directors Meeting including Meeting of the Members and Strategic Session Virtual Meeting Minutes: https://www.naesb.org/pdf4/bd090320dm.docx	Board Strategy Committee Summary Report of the 2020 NAESB Standards Development Survey: https://www.naesb.org/pdf4/bd090320w7.docx NAESB Digital Committee Inaugural Report presented to the NAESB Board of Directors on 9/3/20: https://www.naesb.org/pdf4/bd090320w8.docx			
10-30-2020	NAESB Board Task Force on Battery Storage Conference Call with Web Conferencing Meeting Notes: https://www.naesb.org/pdf4/bd_batterystorage103020notes.docx	No Work Papers			
11-13-2020	NAESB Board Task Force on Battery Storage Conference Call with Web Conferencing Meeting Notes: https://www.naesb.org/pdf4/bd_batterystorage111320notes.docx	Work Paper Submitted by G. Lander, Skipping Stone: https://www.naesb.org/pdf4/bd_batterystorage111320w1.docx Work Paper Submitted by D. Brooks, Reliable Energy Analytics: https://www.naesb.org/pdf4/bd_batterystorage111320w2.docx Work Paper Submitted by R. Baxter, Mustang Prairie Energy: https://www.naesb.org/pdf4/bd_batterystorage111320w3.pdf			
12-11-2020	NAESB Board Task Force on Battery Storage Conference Call with Web Conferencing Meeting Notes: https://www.naesb.org/pdf4/bd batterystorage121120note s.docx	No Work Papers			
12-17-2020	NAESB Board of Directors Conference Call with Web Conferencing Final Minutes: https://www.naesb.org/pdf4/bd121720fm.docx	No Work Papers			