



NORTHEAST POWER COORDINATING COUNCIL, INC.
1040 AVE OF THE AMERICAS. NEW YORK. NY 10018 (212) 840-1070 FAX (212) 302-2782

December 16, 2019

Members, Reliability Coordinating Committee
and
Members, Task Force on Coordination of Operation
Members, Task Force on Coordination of Planning
Members, Task Force on Infrastructure Security and Technology
Members, Task Force on System Protection
Members, Task Force on System Studies

Re: Minutes of the September 4, 2019 RCC Meeting

Sir / Madam:

Attached are the Minutes of the September 4, 2019 meeting of the NPCC Reliability Coordinating Committee, as approved at the December 3, 2019 RCC meeting.

Sincerely,

Phil Fedora

Philip A. Fedora
Assistant Vice President - Reliability Services

cc: NPCC Staff



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Mr. Crissman called the meeting of the Reliability Coordinating Committee (RCC), held at the New York Times Square Residence Inn by the Marriott, New York, New York to order at 10:00 am.

Attendance

Officers of the Reliability Coordinating Committee

Randy Crissman, Chair	New York Power Authority
David Conroy, Co-Vice Chair	Central Maine Power Company
Gabriel Adam, Co-Vice Chair	Ontario IESO

Sector 1 - Transmission Owners

Central Hudson Gas & Electric Corporation	Frank Pace
Central Maine Power Company	David Conroy
Consolidated Edison Company of New York, Inc.	(proxy to Aleksandra Gofman)
Eversource Energy	George Wegh
Hydro-One, Inc.	Ajay Garg - Alternate
Long Island Power Authority	Anie Philip (via phone)
National Grid USA	Brian Hayduk (via phone)
New York Power Authority	(proxy to Randy Crissman)
Nova Scotia Power, Inc.	Joy Brake – Alternate
The United Illuminating Company	David Bradt
	Silvia Valerio - Alternate
Vermont Electric Power Company, Inc.	Hantz Presume (via phone)

Sector 2 – Reliability Coordinators

Hydro-Quebec TransEnergie	Francois Brassard (via phone)
ISO New England, Inc.	Michael Henderson
	Rich Kowalski – Alternate (via phone)
New Brunswick Power Corporation	Alan MacNaughton (via phone)
New York ISO	Zach Smith
Ontario IESO	Gabriel Adam

Sector 3 – Transmission Dependent Utilities, Distribution Companies and Load Serving Entities

Consolidated Edison Company of New York, Inc.	(proxy to Martin Paszek – via phone)
Eversource Energy	Barry Bruun
Hydro-Quebec Distribution	Hakim Sennoun - Alternate (via phone)
Long Island Power Authority	(proxy to Anie Philip – via phone)



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National Grid	Mike Jones (via phone)
New York Power Authority	(proxy to Randy Crissman)
New Brunswick Power Corporation	Randy MacDonald

Sector 4 Generation Owners

Consolidated Edison Company of New York, Inc.	(proxy to Aleksandra Gofman)
Dominion Energy, Inc.	Sean Bodkin (via phone)
Long Island Power Authority	(proxy to Anie Philip – via phone)
New York Power Authority	Randy Crissman
NextEra Energy Resources	Allen Schriver (via phone)
Ontario Power Generation	David Kwan - Alternate
Talen Energy Supply, LLC	(via written proxy)
Vistra Energy Corp.	Ken Stell (via phone)

Sector 5 – Marketers, Brokers, and Aggregators

Consolidated Edison Company of New York, Inc.	Aleksandra Gofman
Long Island Power Authority	(proxy to Anie Philip– via phone)
New York Power Authority	(proxy to Randy Crissman)
Utility Services, Inc.	Brian Evans-Mongeon

Sector 6 – State and Provincial Regulatory and/or Governmental Authorities

Long Island Power Authority	(proxy to Anie Philip– via phone)
New York Power Authority	Shivaz Chopra
New York State Department of Public Service	Humayun Kabir – Alternate (via phone)

Sector 7 – Sub-Regional Reliability Councils, Customers, other Regional Entities and Interested Entities

New York State Reliability Council, LLC	Mayer Sasson - Alternate
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NPCC Staff

Gerard Dunbar	Manager, Reliability Criteria
Phil Fedora	Assistant Vice President, Reliability Services
Brian Hogue	Information Systems & Security Management
Andreas Klaube	Senior Engineer, Operations
Quoc Le (part-time)	Manager, System Planning and Protection
Michael Lombardi	Director, Reliability Assessments
Scott Nied	Acting Assistant Vice President - Compliance
Andrey Oks	Director of Operations Coordination



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Frantz Roc	Manager, Information Technologies
Ralph Rufrano	Manager, Events Analysis
Rafael Sahiholamal	Senior Reliability Assessment & Performance Analysis Engineer
Edward Schwerdt (part-time – via phone)	President & CEO

Guests

Alessia Dawes (via phone)	Chair, CP-11 Working Group
George Fatu	Chair, Task Force on System Studies
Dean Latulipe (part-time – via phone)	SS-38 Working Group Chair
Aaron Markham	Chair, Task Force on Coordination of Operation
Anthony Napikoski	Chair, Task Force on System Protection
Saul Rojas	New York Power Authority
Dan Schwarting (via phone)	Vice Chair, CP-11 Working Group
Dan Taft	Consolidated Edison Company of New York, Inc.
William Vesely	Vice Chair, Task Force on Infrastructure Security & Technology
Ben Wu	Orange & Rockland Utilities

Quorum Statement

Mr. Fedora indicated that a quorum had been achieved, by member attendance, proxy, or alternate designation. He also indicated he received the following written proxy:

Sector 4 – Generator Owners

Scott Etnoyer– Talen Energy Supply, LLC.

Antitrust Guidelines for NPCC Meetings

Mr. Fedora reviewed the NPCC Antitrust Guidelines in the Agenda package, and suggested contacting NPCC Inc.'s Secretary, Ruta Skucas at (202) 530-6428 for further information.

President & CEO Report

NERC's Proposal for Restructuring the Technical Committees

Mr. Schwerdt reported that as a part of the ERO Enterprise-wide effectiveness and efficiency initiative, a working group was formed in late 2018 to review the current avenues for stakeholder engagement and to recommend enhancements. After assessing various approaches and Regional committee experiences, that Stakeholder Engagement Team recommended to the NERC Member Representatives Committee at its August 2019 meeting the creation of a Reliability and Security Council (RSC). This new oversight committee would replace the Planning Committee, Operating Committee and the Critical Infrastructure



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Protection Committee by combining the experience of those existing technical groups into one multi-disciplinary committee. The RSC would direct and oversee the output of the existing subcommittees, working groups, and task forces, while eliminating duplication and identifying gaps in the current subcommittee structure. The RSC would report to the NERC Board of Trustees. Regional staff representatives would continue participation and become non-voting participants at the RSC meetings.

While stakeholder support for the RSC was generally positive, there were several modifications to the proposal that were suggested. Included in those recommendations were: changes in the RSC membership to include more stakeholder sector-elected representatives; revisions to the RSC's governance structure; assurances that geographic diversity would be maintained and include Canadian representation; and assumption of something other than the RSC acronym which would create confusion with the Reliability Issues Steering Committee (RISC). The Stakeholder Engagement Team is scheduled to meet to address all comments received and to make their final recommendations to the NERC Board of Trustees at its November 2019 meeting. A copy of the presentation on the RSC proposal is included in the Agenda package for this RCC meeting.

NPCC Board Strategy Session

While the Board works strategically throughout the year, it will meet today for its focused annual strategy session to identify and assess emerging electricity reliability challenges within the NPCC Region and to inform the corporation's future direction and reliability initiatives. The pace of change within the electric utility industry continues to accelerate, thus strategic planning efforts must remain in the forefront to keep NPCC agile as the corporation appropriately focuses its staff and Member subject matter experts' resources. Such planning activities also contribute significantly to NPCC's policy leadership throughout the ERO Enterprise. The current working draft strategic plan identifies the major emerging challenges to Northeastern North American reliability as: enhancing system resilience and assuring energy sufficiency; reliably integrating distributed energy resources; and addressing cyber and physical threats. Mr. Schwerdt indicated he would summarize the output of the Board's deliberations and recommendations at the December RCC meeting.

Mr. Henderson asked Mr. Schwerdt about opportunities for the NPCC Board to consult with the RCC or other Stakeholders during development of its strategic initiatives. Mr. Schwerdt replied his outreach includes all input from NPCC Members representatives, including aligning the RCC Scope and Task Force Work Plans around the strategic plan. He indicated another draft of the strategic plan would be available in October and that it will be shared in the interest of a more efficient alignment of the NPCC Board's strategic initiatives and the Task Force Work Plans.



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Mr. Henderson noted that the ISO New England Board meets directly with its Stakeholders in December for input/feedback. Mr. Schwerdt responded that unlike the ISO New England Board, the NPCC Board consists of a balanced, hybrid sector representation that provides the opportunity for direct input/feedback.

Chair Report

Agenda

Mr. Crissman reviewed the Agenda provided in the Agenda package

The RCC then approved the Agenda provided in the Agenda package.

August 8, 2019 - NPCC Distributed Energy Resources Forum

Mr. Crissman summarized the material provided in the Agenda package regarding the NPCC Regional Standards Committee on-going efforts to develop a coordinated Regional approach to reliability guidelines for Distributed Energy Resources (DERs) and create a forum for DERs integration challenges and expand coordination on DERs with the NAGF, FERC and NARUC.

Proposal for Restructuring NERC Technical Committees

Mr. Crissman reviewed the proposal provided in the Agenda package and as described by Mr. Schwerdt regarding replacing the NERC Operating Committee, Planning Committee, and Critical Infrastructure Protection Committee with a Reliability and Security Council; a final recommendation will be presented to the NERC Board of Trustees at their 4th quarter 2019 meeting for approval. Assuming approval of the recommendation, the transition would be implemented in early 2020.

November 13-14, 2019 - GridEx V

Mr. Crissman referred the RCC to the background information provided in the Agenda package. GridEx V is scheduled for November 13-14, 2019. The grid security exercise takes place every two years and provides an opportunity for utilities to demonstrate how they would respond to and recover from simulated coordinated cyber and physical security threats and incidents, strengthen their crisis communications relationships, and provide input for lessons learned.

Cybersecurity Risk Information Sharing Program (CRISP) Implementation at NPCC

Mr. Roc reported that NPCC joined the Cyber Risk Information Sharing Program (CRISP) as of August 1, 2019.



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NERC EMP Task Force Update

Mr. Crissman explained that the Electromagnetic Pulse Task Force (EMP Task Force) is an advisory team that collaborates with governmental authorities and applicable industry members to provide front-end, high-level leadership and guidance. He reported that the focus of the Task Force is to write a Strategic Recommendations report that will be posted for industry review and comment in the 3rd quarter of 2019. The Strategic Recommendations report will focus on five key topics:

- Policy;
- Research;
- Vulnerability Assessments;
- Mitigation Guidelines; and,
- Response and Recovery.

Standards Efficiency Review Update

Mr. Crissman summarized activities associated with the NERC Standards Efficiency Review provided in the Agenda package. The Phase 2 Standards Efficiency Review team last met on August 12, 2019. The team is focusing its effort at this time on 1) development of a Standards Authorization Request for modifications standard requirements that were identified in Phase 1; and 2) the development of two of the six efficiency concepts, based on the results of a recent industry survey.

NPCC 2019 General Meeting

Mr. Fedora referred the RCC to the notice included in the Agenda package – the 2019 NPCC General Meeting will be held at the Montréal Marriott Château Champlain, starting at 1:00 pm on Wednesday, December 4, 2019.

Proposed 2020 RCC Meeting Dates & Locations

Mr. Fedora reported that arrangements were being made for the following 2020 RCC meeting dates and locations:

- ✓ Wednesday February 26, 2020 – TBA (NYC)
- ✓ Wednesday May 27, 2020 – TBA (NYC)
- ✓ Wednesday September 2, 2020 - TBA (NYC)
- ✓ Tuesday December 1, 2020 - Albany Marriott, 189 Wolf Rd, Albany NY
(in conjunction with the NPCC 2020 Board/Annual/General Meetings)

Development of 2020-21 Task Force/RCC Work Plans

Mr. Crissman reminded the Task Force Chairs and the RCC that review and approval of their proposed 2020 - 2021 Task Force Work Plans will take place at the December 3, 2019 RCC meeting. The review and approval of the proposed 2020 RCC Work Plan will take place following the RCC's approval of the proposed NPCC Task Force's 2020 – 2021 Work Plans later in that meeting.



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Development of NPCC 2020 Corporate Goals

Mr. Fedora indicated that development of NPCC's 2020 Corporate Goals follows the development of the 2020 RCC Work Plan and RCC approval of the NPCC 2020-2021 Task Force Work Plans in December, based on NPCC Board direction. The NPCC Board approves the RCC Scope and the reviews the NPCC Corporate Goals at its January 2020 meeting.

RCC Scope Update

Mr. Crissman referred to the RCC Scope provided in the Agenda package, which was approved by the NPCC Board at its meeting on January 30, 2019. He asked the RCC to review and provide Mr. Fedora with any comments/changes prior to the December 3, 2019 RCC meeting; the NPCC Board will consider the RCC Scope at its January 2020 meeting.

Consent Agenda

The Reliability Coordinating Committee unanimously approved the following Consent Agenda items (written proxy in favor):

May 29, 2019 Meeting Minutes

Approved as provided in the Agenda package, with editorial changes noted.

RCC Membership Changes

The following changes to Task Force and Working Group memberships were approved:

Sector 1 - Transmission Owners

- ✓ Mike Forte of Con Edison is no longer a member.
- ✓ Brian Conroy of Central Maine Power Company is no longer a member.

Sector 3 - Transmission Dependent Utilities, Distribution Companies and Load-Serving Entities

- ✓ Ben Wu of Orange & Rockland as member.
- ✓ Ronald Clare of Long Island Power Company is no longer a member.

Task Force Roster Changes

The following changes to Task Force and Working Group memberships were approved:

Task Force on Coordination of Operation

- ✓ Akram Sohail as alternate for Hydro One.
- ✓ Charles-Eric Langlois as member for Hydro-Quebec TransÉnergie, replacing Patrick Doyle, who will become the alternate.
- ✓ Ron Arness succeeds Dave Zwergel as a participant for MISO.
- ✓ Josh Netherton succeeds Andy Witmeier as a participant for MISO.
- ✓ Chris Pilog succeeds Dave Souder as a participant for PJM.



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Task Force on Coordination of Planning

- ✓ Shaun Moran of Eversource succeeds Robert Russo as alternate.
- ✓ Maximus Rizk succeeds Ryan Ramcharan as member, both of Consolidated Edison.
- ✓ Ryan B Ramcharan is no longer a member.
- ✓ Mr. Edward Roedel succeeds Mr. David Bradt both of United Illuminating as member.
- ✓ Mr. Roedel also succeeds Mr. Bradt as the Vice-Chair.
- ✓ Mr. Paul Didsayabutra of Rochester Gas and Electric succeeds Mr. Edward Roedel as alternate.

Task Force on System Studies

- ✓ Maximus Rizk succeeds Ryan Ramcharan as member, both of Con Edison.
- ✓ Bob Russo will no longer serve as alternate for Eversource; a replacement has not been named.

Task Force on System Protection

- ✓ Xiankai Wang of NSPI will serve as alternate.
- ✓ David Mahlmann of the New York ISO is no longer a member.
- ✓ Robert Golen of the New York ISO as alternate.
- ✓ Zarin Schildhorn will replace Mr. Jack DiOdoardo of Central Hudson as alternate.

Task Force on Infrastructure Security & Technology

- ✓ Kelsey Settle succeeds Lee McDonald as alternate, both of Nova Scotia Power Inc.
- ✓ Larry Snow of Cogentrix Energy Power Management, LLC as member.
- ✓ Jason Hammerschmidt of the Ontario IESO as alternate.
- ✓ Brenda Driscoll of National Grid as alternate.
- ✓ Steve Brain of Dominion Resource Services no longer an alternate.
- ✓ Glen Dempster of Ontario Power Generation Inc. is no longer an alternate.

CP-11 Working Group on Review of NPCC Basic Criteria

- ✓ Dylan Dreisch of PSEG Long Island as member.
- ✓ Edward Roedel of United Illuminating Company as member.
- ✓ Vincent Fihey of Hydro-Quebec TransEnergie is no longer a member.
- ✓ Steve Blackburn of Hydro-Quebec TransEnergie is no longer a member.
- ✓ Bob Duan. of Ontario Power Generation is no longer a member.
- ✓ Jalpa Patel of LIPA is no longer a member.
- ✓ Daniele D'Aquila of LIPA is no longer a member.
- ✓ Herb Schrayshuen of Power Advisors, LLC is no longer a member.
- ✓ Hai (Quoc) Le of NPCC is no longer a member.
- ✓ Maximus Rizk succeeds Ryan Ramcharan of Consolidated Edison as member.

CO-2 Operator Trainers Working Group

- ✓ Jason Tobin of Newfoundland and Labrador Hydro as member.
- ✓ Eduardo Sanchez of ISO-New England as alternate.
- ✓ Andrey Oks of NPCC as alternate.



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System Operations Managers Working Group (CO-8)

- ✓ Udayan Nair succeeds Kyle Russell as the Ontario IESO alternate.
- ✓ Ron Arness succeeds Andy Witmeier as an alternate representative for MISO.
- ✓ Chris Pilong succeeds Dave Souder as an alternate representative for PJM.

CO-10 System Operational Tools Working Group

- ✓ Pablo Gutierrez succeeds Nick Zourntos of the Ontario IESO as member.

Restoration Working Group (CO-11)

- ✓ Harsh Dinesh of the New York ISO is no longer alternate.
- ✓ Kevin Hatch of PJM is no longer alternate.
- ✓ Joseph Koltz succeeds Slawomir Szymanowski as an alternate for ISO-New England.
- ✓ Gerry Elliott of ISO New England is no longer alternate.
- ✓ Andrey Oks of NPCC as alternate member.
- ✓ Ryan Ramcharan is no longer a member.

SP-7 Working Group on Protection System Misoperation Review

- ✓ Xiankai Wang of NSPI will serve as member.
- ✓ Thomas Burns will replace Jack DiOdoardo of Central Hudson as member.

SS-38 Working Group on Inter-Area Dynamic Analysis

- ✓ Zeqiu Li succeeds Kofi Nimako of the New York ISO as alternate.

SS-38 LMWG Load Modeling Working Group

- ✓ Pramila Nirbhavane of the New York ISO as alternate.

IST-2 Telecommunications Working Group

- ✓ Javier Echevarria of NPCC is no longer an alternate.

IST-4 Working Group on Cyber Security

- ✓ Rafael Sahiholamal succeeds Michael Lombardi of NPCC as member.
- ✓ Robert Thompson of Central Maine Power is no longer a member.
- ✓ Nathan Cote of Eversource Energy is no longer a member.
- ✓ Sharon Paturzo of United Illuminating is no longer an alternate.
- ✓ Frederic St-Hilaire of Hydro-Quebec TransEnergie as member.
- ✓ Albert Marandola of Eversource Energy as member.

IST-4 Working Group White Paper - Information Protection Policy for System Protection

Approved as provided in the Agenda package.



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IST-2 Working Group White Paper - Ring Down (Voice Communications)

Approved as provided in the Agenda package.

2019 NPCC Major Projects List

Approved as provided in the Agenda package.

New England Directory No. 1 Implementation Plan

Approved as provided in the Agenda package.

Items for Approval

NPCC Directory No. 6 - Reserve Sharing Groups

Mr. Dunbar reviewed the changes to the revised Regional Reliability Directory No. 6 *Reserve Sharing Groups* provided in the Agenda package. He explained that the Task Force on Coordination of Operation (TFCO) and its CO-8 Working Group completed a comprehensive review of Directory No. 6, which considered the impact of the evolving Electric Reliability Organization (ERO) Standards on the Criteria, emerging industry technologies and recent recommendations contained in the Phase 2 Report on the A-10 Methodology.

The TFCO recommended revising the definition of the existing NPCC Glossary Term for Reserve Sharing Group to the definition used for this term in the NERC Glossary of Terms.

The RCC agreed to revise the definition of the existing NPCC Glossary Term for Reserve Sharing Group to the definition used for this term in the NERC Glossary of Terms, then unanimously recommended balloting the revised NPCC Regional Reliability Directory No. 6 – Reserve Sharing Groups for Full Member approval (written proxy in favor).

NPCC Directory No. 5 – Reserve

Mr. Dunbar reviewed the changes to the revised NPCC Directory No. 5 *Reserve*. He explained that the Task Force on Coordination of Operation (TFCO) and its CO-1 and CO-8 Working Groups completed a comprehensive review of Directory No. 5 and reformatted the document to produce NPCC Criteria requirements that are clear, measurable and consistent with the NERC Rules of Procedure. The TFCO also made changes to several NPCC Glossary terms contained within Directory No. 5.

Additionally, in accordance with the recommendations contained in the *Strategic Review of the NPCC Criteria*, the TFCO solicited NPCC Member feedback on the contribution to system resilience and the cost effectiveness of the individual criteria attributes within the Directory.



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The RCC then unanimously recommended balloting the revised NPCC Regional Reliability Directory No. 5 - *Reserve* provided in the Agenda package for Full Member approval (written proxy in favor).

2018 NPCC Criteria Compliance Enforcement Program (CCEP) Assessment Report

Mr. Nied summarized the 2018 NPCC CCEP Assessment Report provided in the Agenda package. The CCEP-1 Process Document directs the NPCC Compliance Committee (CC) to present an annual assessment report for approval at the 3rd quarter RCC meeting each year. The CC performed a compliance review of the submitted certification forms. The assessment report provided in the Agenda package summarizes the CC's review and findings associated with the certifications submitted as per the 2018 CCEP Implementation Plan.

The RCC discussed the two recommendations of non-compliance noted in the report:

New Brunswick Power (NBP) – Directory No. 4

In 2018, there was one new transmission element added and two protection systems upgraded. For these changes NBP did not request the Task Force on System Protection (TFSP) to review NBP's compliance as per Requirements 1 and 2 of Directory No. 4. However, NBP reports that redundant trenching was not utilized for the new element. NBP believes that, for the two protection system upgrades, TFSP would typically waive the redundant trenching requirement and permit an exclusion. Apart from the redundant trenching criterion, NBP meets all Directory No. 4 criteria.

NBP's decision not to have redundant trenching for the new BPS element was based on the increased risk that the construction activity presented to an operational substation and NBP's assessment that redundant trenching poses minimal incremental reliability benefit based on the compensating measures outlined in the report.

NBP, working with the TFSP, has initiated proposed revisions to Directory No. 4 allowing for exceptions to the double trenching requirement for the new elements added to operational substations where such exceptions are conditional on TFSP approval. NBP will be seeking a TFSP acceptance letter for those upgrades that were not formerly submitted in accordance with Directory No. 4.

New York Power Authority (NYPA) – Directory No. 4

In 2018, three breaker failure relays were replaced with similar relays (change to manufacturer and model number only, with no impact to functionality or settings) at one BPS station and NYPA did not submit documentation to the Task Force on System Protection (TFSP) in accordance with Appendix B and, thus, did not obtain a letter of acceptance by TFSP within 12 months of placing the relay replacements in service. The relay changes were intended to be placed on the TFSP agenda, but were inadvertently excluded. Therefore, NYPA did not meet the Compliance Requirements with R1 and



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R2. During this time, NYPA was undergoing staffing and administrative changes and it was not noticed that actual TFSP approval had not occurred.

To mitigate the issue, NYPA has submitted the changes to TFSP and the formal presentation to TFSP was made at the July 2019 meeting and the subsequent approval letter was received by NYPA. To prevent recurrence, NYPA developed and implemented a procedural control that ensures the responsible engineer will fill out the TFSP forms, get the changes onto the TFSP agenda, and that approval of TFSP will be acquired within 12 months. This procedural control must be satisfied before NYPA's Protection and Control Engineering group will approve Protection System modifications or transmit new relay settings for field implementation.

The CC recommended that the RCC accept these CC determinations of noncompliance.

The RCC then approved the 2018 NPCC Criteria Compliance Enforcement Program (CCEP) Assessment Report as provided in the Agenda package (NYPA Sectors 1,3,4,5,6 abstaining; written proxy in favor).

Mr. Nied indicated that following RCC approval of the 2018 NPCC Criteria Compliance Enforcement Program Assessment Report, a letter will be sent to the CEO of the non-compliant Full Member that includes a recap of the noncompliance, the status of mitigation activities, and an explanation of the assessment by the CC and subsequent acceptance by the RCC.

Items for Discussion

Status of NPCC A-10 Document Review

Ms. Dawes summarized the status of the Task Force on Coordination of Planning (TFCP) and the CP-11 Working Group on Review of NPCC Basic Criteria review of NPCC Document A-10 - *Classification of Bulk Power System Elements*.

The recommendations contained in the CP-11 Working Group Phase 2 Final Report of the Document A-10 Review were incorporated into a revised version of the A-10 Document and posted to the NPCC Open Process for a comment period which concluded on July 1, 2019. The TFCP and the CP-11 Working Group have considered comments received during the first posting of the A-10 Document and have recommended further changes to the draft. The revised draft will be posted to the Open Process for a second 45-day comment period.

The TFCP and the CP-11 Working Group anticipate presenting a final A-10 Document draft to the RCC in December with a subsequent expected Full Member approval ballot.



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Con Ed July 13, 2019 load loss event

The RCC received a presentation by Messrs. Taft and Sasson of Consolidated Edison regarding the July 13, 2019 New York City West Side Power Outage. They reviewed the events that resulted in isolation of the fault at the West 49th Street transmission substation, and the subsequent loss of several electrical networks.

New York Public Service Commission Review of New York's Resource Adequacy Programs

Mr. Crissman referred the RCC to the New York Public Service Commission Order included in the Agenda package that describes the initiation of a proceeding to examine how to reconcile resource adequacy programs and the State's renewable energy and environmental emission reduction goals. Interested entities are asked to submit comments by November 8, 2019.

2019 NPCC Corporate Goals Deliverables

Goal III-1

Mr. Rufrano reported on the trend analysis of NPCC extreme contingency testing and all ERO- wide Event Analysis program (EAP) events since 2015 and the identified past resilience performance as provided in the Agenda package.

Goal III-3

Mr. Latulipe reported on the development of acceptable DER_A model default data for NPCC and tests through UFLS sensitivity analysis provided in the agenda package. The SS-38 Working Group on Inter-Area Dynamic Analysis completed the development of default parameters of the DER_A model for NPCC in May 2019 and have completed testing of the DER_A model through the UFLS sensitivity analysis in August 2019.

The sensitivity testing results showed that incorporating DER models into UFLS simulations impact system performance during frequency excursions, with the most significant impacts seen for the most conservative DER modeling assumptions. The findings were presented to the Task Force on System Studies at a teleconference on August 19, 2019 and approved for presentation to the RCC.

Goal IV-1

Mr. Lombardi reported on the findings of the pilot program with key Distributed Energy Resource (DER) stakeholders to define data and practices needed to effectively and efficiently integrate DERs into the Bulk Electric System (BES) and identify and prioritize the gaps between the current state and the desired state. His presentation, included in the Agenda package, highlighted the related activities of the IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power



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Systems Interfaces and the NERC System Planning Impacts of DER Impacts Working Group (SPIDERWG) Modeling Subgroup's Reliability Guideline: DER Data Collection for Modeling.

Goal IV-3

Mr. Oks summarized the Tabletop Exercise included in the Agenda package developed involving the NPCC electric system operators, gas producers and pipeline representatives. The Tabletop Exercise leveraged the experience and expertise of Argonne National Lab and input from the natural gas and electric sector operating organizations.

He explained the goals of the exercise are to:

- ✓ Inform and educate participants on interconnected electric-natural gas systems and their impacts on other critical infrastructure systems;
- ✓ Prepare/practice response to an event impacting cross-borders electric and gas systems, across a wide stakeholder group; and,
- ✓ Identify Bulk Power System (BPS) reliability risks and solutions, including opportunities for more resilience through cooperation, communications and decision-making.

NERC Agenda Items

Joint Session: Planning, Operating & Critical Infrastructure Protection Committee

Mr. Oks reviewed the following presentations that are scheduled for the September 10, 2019 Joint Session included in the Agenda package:

- ✓ Cold Weather Bulk Electric System Event of January 17, 2018;
- ✓ Argentina Blackout;
- ✓ Committee Restructuring Proposal Feedback and Next Steps; and,
- ✓ Update on EMP Task Force Strategic Recommendations.

Operating Committee (OC) Meeting

Mr. Rufrano highlighted the following items from the September 10-11, 2019 OC Agenda included in the Agenda package:

Approval Items:

- ✓ Reliability Guideline: *Improvements to Interconnection Requirements for BPS-Connected Inverter-Based Resources.*

Informational Items:

- ✓ Cold Weather Bulk Electric System Event of January 17, 2018;
- ✓ Task Force & Working Group Updates;
 - Real-time Assessments Quality Task Force; and,
 - System Planning Impacts from Distributed Energy Resources Working Group.
- ✓ WECC Reliability Coordinator Updates.



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Planning Committee (PC) Meeting

Mr. Fedora highlighted the following items from the draft September 10-11, 2019 Planning Committee Agenda included in the Agenda package:

Consent Agenda

- ✓ Technical Analysis Report *Reliability Standard PRC-019 Reliability Gaps* – Approved by PC email vote on August 2, 2019; and,
- ✓ Standard Authorization Request - Revisions to Address Dispersed Power Resource (PRC-019-2) – Endorsed by PC email vote on August 2, 2019.

Items for Approval

- ✓ Reliability Guideline: *DER_A Model Parameterization*; and,
- ✓ Reliability Guideline: *Improvements to Interconnection Requirements for BPS-Connected Inverter-Based Resources*.

Critical Infrastructure Protection Committee (CIPC)

Mr. Hogue noted the following items from the September 17-18, 2019 CIPC Agenda included in the Agenda package:

- ✓ Security Metrics Working Group disbanding - work concluded.
- ✓ Physical Security Guidelines Task Force disbanding - work concluded.

No Voting Items.

Informational/discussion Topics:

- ✓ Compliance Input Working Group:
 - Cloud Implementation Guidance
 - Federal Risk and Authorization Management Program (FedRAMP).

Informational Items

NPCC Guidance Document - Approaches to Preserve System Resilience and Reliability for a High DER Penetration Future- Version 1

Mr. Crissman referred to the NPCC Guidance Document provided in the Agenda package. Due to the uncertain nature of a number of Distributed Energy Resource (DER) implementation issues, this document will undergo continual revisions and is provided as a “Version 1.” The document was endorsed by the NPCC Reliability Standards Committee and will be posted on the NPCC website. The guidance document, and future versions, represent an effort and intent to incrementally provide the industry with up-to-date information on implementing DER as it becomes available. He asked that comments be provided to Mr. Zito.



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Cyber & Physical Security Update

Mr. Vesely reviewed the following Cyber & Physical Security information provided in the Agenda package:

- ✓ CIP Modifications Standard Drafting Team;
- ✓ BES Cyber Systems Information Standards Authorization Request;
- ✓ Incident Reporting and Response Planning;
- ✓ Communications between Control Centers;
- ✓ CIP – 003 - Low Impact program must be in place by January 1, 2020;
- ✓ Supply Chain Risk Management;
- ✓ Communications; and,
- ✓ CIP Standards Efficiency Review.

NERC Probabilistic Assessment Forum

Mr. Klaube referred the RCC to the announcement included in the Agenda package for the NERC Probabilistic Analysis Forum scheduled for December 11-13, 2019 at NERC's Atlanta Office.

Mr. Crissman then referred the RCC to the other Informational Items materials provided in the Agenda package.

With no other matters to consider, the RCC meeting was adjourned.

Next RCC Meeting Date

Tuesday, December 3 2019

Location

Montréal Marriott Château Champlain
1050 De, Rue de la Gauchetière O,
Montréal, Quebec

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Ruta Skucas, Esq.

and

Federal Energy Regulatory Commission – Andy Dodge, David Ortiz, David O’Connor,
Juan Villar

La Régie de L’Énergie – Christian Garneau

Ontario Energy Board – Veronica Mendes

United States Department of Energy – David Meyer

New Brunswick Department of Energy and Mines – David Sallows

Nova Scotia Utility & Review Board – S. Bruce Outhouse, Q.C.