



NORTHEAST POWER COORDINATING COUNCIL, INC.  
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March 25, 2020

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 December 3, 2019 RCC Meeting

Sir / Madam:

Attached are the Minutes of the December 3, 2019 meeting of the NPCC Reliability Coordinating Committee, as approved at the February 27, 2020 RCC meeting.

Sincerely,

*Phil Fedora*

Philip A. Fedora  
Assistant Vice President - Reliability Services

cc: NPCC Staff



**NORTHEAST POWER COORDINATING COUNCIL**  
**Reliability Coordinating Committee Minutes**  
**December 3, 2019**

Mr. Crissman called the meeting of the Reliability Coordinating Committee (RCC), held at the Montréal Marriott Château Champlain, Montréal, Quebec to order at 9:00 am.

**Attendance**

**Officers of the Reliability Coordinating Committee**

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

**Sector 1 - Transmission Owners**

Central Hudson Gas & Electric Corporation	Michael E. Ridolfino - Alternate
Central Maine Power Company	David Conroy (via phone)
Consolidated Edison Company of New York, Inc.	(proxy to Aleksandra Gofman)
Eversource Energy	George Wegh (via phone)
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)
New York State Electric & Gas Corp.	(proxy to David Bradt – via phone)
Nova Scotia Power, Inc.	Joy Brake – Alternate
Orange & Rockland Utilities, Inc.	(proxy to Aleksandra Gofman)
Rochester Gas & Electric Corporation	(proxy to David Bradt – via phone)
The United Illuminating Company	David Bradt (via phone)
Vermont Electric Power Company, Inc.	Hantz Presume

**Sector 2 – Reliability Coordinators**

Hydro-Quebec TransEnergie	Stephane Desbiens
ISO New England, Inc.	Michael Henderson
New Brunswick Power Corporation	(proxy to Randy MacDonald)
New York ISO	(proxy to Aaron Markham)
Ontario IESO	Gabriel Adam

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

Consolidated Edison Company of New York, Inc.	(proxy to Aleksandra Gofman)
Hydro-Quebec Distribution	Hakim Sennoun - Alternate (via phone)
Long Island Power Authority	Robert Eisenhuth



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National Grid	Mike Jones
New York Power Authority	(proxy to Randy Crissman)
New Brunswick Power Corporation	Randy MacDonald (via phone)
Orange & Rockland Utilities, Inc.	(proxy to Aleksandra Gofman)

**Sector 4 Generation Owners**

Consolidated Edison Company of New York, Inc.	Peter Yost
Dominion Energy, Inc.	Sean Bodkin
Long Island Power Authority	(proxy to Anie Philip – via phone)
New York Power Authority	Randy Crissman
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 Robinson - Alternate

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

Long Island Power Authority	(proxy to Anie Philip– via phone)
New York Power Authority	(proxy to Randy Crissman)

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

New York State Reliability Council, LLC	(proxy to Aleksandra Gofman)
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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
Neeraj Lal	Senior Reliability Engineer
Quoc Le	Manager, System Planning
Michael Lombardi (via phone)	Director, Reliability Assessments
Jennifer Budd Mattiello (via phone)	Senior Vice President and COO
Kristin S. McKeown, Esq.	General Counsel
Scott Nied	Assistant Vice President, Compliance



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Andrey Oks	Director of Operations Coordination
Ralph Rufrano (via phone)	Manager, Events Analysis
Rafael Sahiholamal	Manager, System Protection
Peter Scalici (via phone)	Manager, Security Outreach Programs
Edward Schwerdt	President & CEO
Guy Zito	Assistant Vice President of Standards

**Guests**

Scott Brown	New Brunswick Power Corporation
George Fatu	Chair, Task Force on System Studies
Farzad Farahmand (via phone)	Ontario IESO
Jeff Fenn	SGC Engineering, LLC
Dean Latulipe (via phone)	SS-38 Working Group Chair
Anthony Napikoski (via phone)	Vice Chair, Task Force on System Protection

**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 Assistant Secretary, Ruta Skučas, Esq. at (202) 530-6428 for further information.

**President & CEO Report**

**ERO Enterprise Long-Term Strategy**

Mr. Schwerdt reported that the ERO Enterprise Long-Term Strategy represents a five to seven-year framework in which NERC and the six Regional Entities will pursue their collective missions of assuring the effective and efficient reduction of risks to the reliability and security of the international Bulk Power System (BPS) within North America.

The reliability and security of the ecosystem is being rapidly transformed by significant policy and technical forces that are driving fast paced changes in how electric systems are designed, planned operated and secured.

The ERO Long-Term Strategy explicitly recognizes the different, but important complementary roles, that NERC and the Regional Entities play in developing successful



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enterprise-wide reliability orientated programs. The strategy lays out a number of key areas that can be leveraged by the ERO Enterprise model, and identifies five long term focus areas with a set of desired outcomes. These focus areas include:

- ✓ Expanding the risk-based approach in all standards, compliance monitoring and enforcement programs;
- ✓ Assessing and mitigating known and emerging risks to reliability and security;
- ✓ Building a strong Electricity Information Sharing & Analysis Center (E-ISAC) and expanding its security capacity;
- ✓ Strategy engagement across the reliability and security ecosystem within North America (enhanced regulatory interaction); and,
- ✓ Capturing effectiveness and efficiency with continuous improvement.

The NERC Board of Trustees is scheduled to consider the draft ERO Enterprise Long-Term Strategy document for approval at its December 12, 2019 teleconference meeting. An initial version was sent out to the industry, comments were received, and a revised draft has been crafted and will be distributed in the Agenda package for the Board of Trustees December teleconference meeting.

**NPCC Board's Working Draft Strategic Plan**

To both influence the ERO's direction and facilitate NPCC's implementation alignment with the Enterprise wide Long-Term Strategic Plan, the NPCC Board met in strategic session in early September and developed a working draft strategic plan. The Plan looks ahead three to five years with the objective of successfully positioning NPCC as an international Regional Entity to respond to anticipated structural changes in the electric industry, growing reliability interdependencies, and evolving challenges and opportunities. The working draft strategic plan is intended to insure that NPCC's plans, resources, budget and reliability assurance support and add value to the ERO Enterprise and to NPCC's members.

The NPCC Working Draft Strategic Plan outlines three strategic focus areas that leverage NPCC's current strengths and can expand its future achievements to assure BPS reliability in Northeastern North America. These focus areas include:

- ✓ Enhancing system resilience and assuring energy sufficiency;
- ✓ Reliably integrating Distributed Energy resources; and,
- ✓ Addressing both Cyber and Physical threats.

Future technical initiatives, resource needs and potential resource reallocation in support of these activities will be addressed in the development of NPCC's annual corporate reliability goals and incorporated into future NPCC Business Plans & Budgets.



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**GridEx V**

This year's annual GridEx exercise was conducted on November 13 -14, 2019. The exercise consisted of a number of simulated coordinated cyber and physical attacks that were designed to challenge several critical infrastructures interdependencies including interdependencies between the electric, gas, telecommunications and water systems.

Additionally, the involvement of multiple international governmental agencies allowed for the testing of crisis management and recovery response plans.

This year's Executive Table Top exercise was held on the second day of GridEx V. It included the simulated drafting and potential operational impacts of a Presidential Grid Security Emergency (GSE) Order. This is a new aspect of Section 2015 of the Federal Power Act; the President has the authority to issue a GSE, upon consultation with the Department of Energy and the industry. The overall lessons learned from GridEx V are scheduled to be made available in the January 2020 timeframe.

Mr. Henderson asked about the NPCC Task Force structure within the framework of the NPCC three to five year strategic plan, given the proposed NERC technical committee restructuring. Mr. Schwerdt responded that NPCC would strive to insure that RCC stakeholders are represented on the NERC Reliability and Security Technical Committee (RSTC), and that issues being considered and raised at the NERC level are brought back to the RCC for discussion. The process will be developed through by RCC leadership and NPCC staff.

Mr. Schwerdt encouraged the RCC members to consider applying for membership in the RSTC in their respective Sectors; NPCC needs Northeastern North American voices on the RSTC. He noted NPCC was successful in requiring Canadian representation on the RSTC.

Mr. Fedora noted that the RSTC structure is similar to that of the RCC; one of the first tasks of the RSTC will be to review its reporting Subcommittees, Task Forces and Working Groups to determine whether or not efficiencies can be gained through elimination of duplicative efforts, or if gaps exist that should be addressed. The RSTC activities will be monitored during the transition and the RCC will be informed moving forward.

**Chair Report**

Mr. Crissman thanked the NPC Task Force and Working Group leadership and their respective members for all their efforts in 2019. He also thanked Mr. Adam for agreeing to present the RCC report at tomorrow's NPCC Annual Meeting.



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**Agenda**

Mr. Crissman reviewed the Agenda provided in the Agenda package. He said that consideration of the revised NPCC A-10 Criteria Document has been postponed until the next RCC meeting, in order to allow more time for discussion. The Joint Task Force Chairs discussed this approach, and agreed that a WebEx will be scheduled before the February RCC meeting, in order to provide an additional opportunity for RCC discussion and dialog.

Mr. Henderson asked if any additional work on A-10 would be required of the Task Force on Coordination of Planning (TFCP) or of the CP-11 Working Group. Mr. Crissman clarified that no further work is anticipated, and thanked the TFCP and the CP-11 Working Group for their efforts over the two years it has taken to bring the project to closure.

Mr. Crissman also noted that the Physical and Cyber Security update will be moved from the Informational Items to be covered as the last Discussion Item at today's meeting.

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

**NERC Technical Committee Restructuring**

Mr. Crissman stated the NERC Board of Trustees approved the charter for a new Reliability and Security Technical Committee (RSTC) at its November meeting. The objective of establishing the RSTC is to improve the effectiveness and efficiency of ERO Enterprise operations. A stakeholder engagement team recommended replacing the three existing technical committees with the single RSTC, which will report to the Board. This new committee will focus on managing the work of the subcommittees, working groups and task forces to address specific risks to reliability and security.

**New York PSC Proceeding on Resource Adequacy Matters**

Mr. Crissman referred the RCC to the New York PSC Proceeding Resource Adequacy Matters comments submitted by the New York State Reliability Council provided in the Agenda package. Other submitted comments are available on the New York PSC website under Case number: 19-E-0530.

**Electromagnetic Pulse (EMP) Task Force Update**

Mr. Crissman reported that the NERC Board of Trustees accepted the NERC EMP Task Force's report, at its November 2019 meeting, that included a series of strategic recommendations. Recognizing the broad expanse of the recommendations in the report and NERC's focus on effectiveness and efficiency, the Board asked NERC staff to propose implementation priorities for the recommendations. The Board of Trustees requested stakeholder policy input on the recommendations, and will consider action based on stakeholder feedback at its February 6, 2020 meeting.





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Mr. Crissman reported that he is participating on a working group with the Electricity Subsector Coordinating Council and the DOE to review and discuss actions being taken under the March 26, 2020 Presidential Executive order on EMP. They are in the process of developing unclassified composite E1/E2/E3 waveforms for use by industry that can serve as the basis for threat waveform specifications and assessments of EMP; this is one of the recommendations from the NERC EMP Task Force report.

**FERC and NERC Staff Report - *The South-Central United States Cold Weather Bulk Electric System Event of January 17, 2018***

Mr. Crissman reported that FERC and NERC representatives will be presenting their joint staff report on the January 2018 Extreme Cold Weather Event at the December 4, 2019 NPCC Annual Meeting of the Members.

Mr. Bodkin added that NERC initiated a Cold Weather Standard Authorization Request in response to the report, and that a SAR Drafting Team has been formed.

**NPCC Distributed Energy Resources Forum**

Mr. Crissman said that the NPCC Governmental/Regulatory Affairs Advisory Group meeting that follows the RCC meeting will focus on NPCC Distributed Energy Resources initiatives and activities and that interested RCC members are welcome to attend.

**2020 - 2021 RCC Work Plan**

Mr. Crissman reminded the RCC that the review and approval of the proposed 2020 - 2021 RCC Work Plan will take place following the RCC's approval of the proposed NPCC Task Force 2020 – 2021 Work Plans later in the meeting.

**RCC Scope**

Mr. Crissman noted that consideration of the updated RCC Scope is part of the consent Agenda. The RCC Scope was revised to reflect the resilience activities underway by the Task Forces.

**2020 RCC Roster**

Mr. Fedora referred the RCC to the 2020 RCC Roster provided in the Agenda package; the roster will be acknowledged at the December 4, 2019 NPCC Annual Meeting of the Members.

**2020 NPCC Meeting Locations & Dates**

Mr. Fedora confirmed the following dates and locations for the 2020 RCC meetings:

- ✓ Thursday February 27, 2020 - New York Times Square Residence Inn by the Marriott;
- ✓ Wednesday May 27, 2020 - New York Times Square Residence Inn by the Marriott;





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- ✓ Wednesday September 2, 2020 - New York Times Square Residence Inn by the Marriott; and,
- ✓ Tuesday December 1, 2020 - Albany Marriott, 189 Wolf Rd, Albany NY (in conjunction with the NPCC 2020 Board/Annual/General Meetings)

**Consent Agenda**

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

**September 4, 2019 Meeting Minutes**

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

**RCC Membership Changes**

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

**Sector 1 - Transmission Owners**

- ✓ Martin Huang, P. Eng. of Hydro One Networks, Inc. to serve as the representative.
- ✓ Deidre Altobell of Consolidated Edison Company of New York, Inc. to serve as the representative.

**Sector 4 – Generator Owners**

- ✓ Joel Plessinger of Entergy Nuclear Northeast, Inc. to serve as the alternate.

**Task Force Roster Changes**

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

**Task Force on Coordination of Operation**

- ✓ Tim Aliff will replace Ron Arness as a participant for the MISO.

**Task Force on System Studies**

- ✓ Carl Benker of Eversource succeeds Alex Rost of ISO-NE as Vice Chair
- ✓ Dan Schwarting succeeds Alex Rost as primary member, both of ISO-New England
- ✓ Alex Rost succeeds Brent Oberlin as alternate member, both of ISO-New England
- ✓ Dan Kopin succeeds Tracy MacNicoll as primary member, both of Utility Services, Inc.; Tracy MacNicoll to serve as an alternate member

**Task Force on Infrastructure Security & Technology**

- ✓ Rob Antonishen succeeds David Dunn as member for the Ontario IESO
- ✓ Michael Tetto to serve as an alternate for Eversource Energy
- ✓ Rob Antonishen to serve as member of for the Ontario IESO
- ✓ Zach Taylor to serve as an alternate for the New York ISO
- ✓ Danny Cvijic to serve as alternate for NPCC
- ✓ Kristi Honey to serve as an alternate for Ontario Power Generation Inc.



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- ✓ Kip Winrow will no longer serve as an alternate for Consolidated Edison Company of New York, Inc.
- ✓ Daniel Camp will no longer serve as an alternate for Eversource Energy
- ✓ Rob Antonishen will no longer serve as a member for Ontario Power Generation Inc.
- ✓ Warren Harris will no longer serve as an alternate for Utility Services Inc.

**CO-2 Operator Trainers Working Group**

- ✓ Andrew Salter no longer serves as an alternate member for the Ontario IESO

**System Operations Managers Working Group (CO-8)**

- ✓ Marie-Eve Bergeron to serve as a second alternate representative for Hydro-Quebec TransÉnergie
- ✓ Tim Aliff will replace Ron Arness as an alternate representative for the MISO

**CO-10 System Operational Tools Working Group**

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

**Restoration Working Group (CO-11)**

- ✓ Matt Antonio to serve as primary member for National Grid

**CO-12 Operations Planning Working Group (CO-12)**

- ✓ Courtney Fasca succeeds Scot Rolfe as the primary member for ISO-New England
- ✓ Joseph Cohen to serve as an alternate member for ISO-New England
- ✓ Salahuddin Masjedi succeeds Yannick Roy as alternate member for Hydro-Quebec TransÉnergie

**SS-38 LMWG Load Modeling Working Group**

- ✓ Catherine Bittar to serve as an alternate member for Hydro-Québec TransÉnergie
- ✓ Edward Davidian of the Ontario IESO succeeds Simon Couture-Gagnon of Hydro-Quebec TransÉnergie as Chairman

**IST-2 Telecommunications Working Group**

- ✓ Danny Cvijic to serve as an alternate for NPCC

**IST-4 Working Group on Cyber Security**

- ✓ David Cadregari of Rochester Gas & Electric Corporation succeeds Rob Antonishen of Ontario Power Generation Inc. as Chair
- ✓ Rob Antonishen will no longer serve as a member of Ontario Power Generation Inc.

**2019 Interim Area Transmission Reviews**

- ✓ New York Area  
Approved as provided in the Agenda package.
- ✓ Ontario Area  
Approved as provided in the Agenda package.



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- ✓ Maritimes Area  
Approved as provided in the Agenda package.

**2019 Interim Reviews of Resource Adequacy**

- ✓ New York Area  
Approved as provided in the Agenda package.
- ✓ New England Area  
Approved as provided in the Agenda package.
- ✓ Ontario Area  
Approved as provided in the Agenda package.
- ✓ Quebec Area  
Approved as provided in the Agenda package.

**2020 NPCC Criteria Compliance Enforcement Program Implementation Plan**

Approved as provided in the Agenda package.

**RCC Scope**

Approved as provided in the Agenda package, with a typographical correction noted.

**Items for Approval**

**2019 Maritimes Comprehensive Review of Resource Adequacy**

Mr. Brown presented the 2019 Maritimes Area Comprehensive Review of Resource Adequacy provided in the Agenda package. The Review, covering the period from 2020 through 2024, demonstrated that the Maritimes Area complies with the NPCC resource criterion that requires a loss of load expectation value of not more than 0.1 days/year for all years of the Review.

The Task Force on Coordination of Planning agreed with the Review's conclusion that the Maritimes complies with the NPCC resource adequacy criterion and recommended RCC approval of the 2019 Maritimes Area Comprehensive Review of Resource Adequacy.

**The RCC unanimously approved the 2019 Maritimes Comprehensive Review of Resource Adequacy provided in the Agenda package. (written proxy in favor).**

**NPCC Directory No. 4 – System Protection Criteria**

Mr. Dunbar reviewed the changes to the revised Regional Reliability Directory No. 4 *System Protection Criteria* provided in the Agenda package. He explained that the Task Force on System Protection (TFSP) considered emerging protection technologies, industry lessons learned and the impact of the evolving NERC Standards on the criteria in its review of Directory No. 4.



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In accordance with the recommendations of the Strategic Review of the NPCC Criteria, the TFSP also solicited feedback from the Membership on the cost effectiveness and contribution to system resilience of the individual criteria attributes contained in Directory No. 4. The results of this cost effectiveness evaluation have been documented in the permanent review record of Directory No. 4.

The revised draft of Directory No. 4 was posted to the Open Process for two 45-day comment periods and the TFSP has responded to all comments.

**The RCC unanimously recommended balloting the revised NPCC Regional Reliability Directory No. 4 – *System Protection Criteria* for Full Member approval (written proxy in favor).**

**NPCC 2019-2020 Winter Reliability Assessment**

Messrs. Klaube and Fedora presented the results of the 2019-2020 NPCC Winter Reliability Assessment provided in the Agenda package. It was noted that the Task Force on Coordination of Operation is reviewing the findings and recommendations of the 2019 FERC-NERC Staff Report, *The South-Central United States Cold Weather Bulk Electric System Event of January 17, 2018*, to determine appropriate NPCC follow-up actions.

The *NPCC 2019-2020 Winter Reliability Assessment* was approved by the Task Force on Coordination of Operation on November 15, 2019; the corresponding *NPCC 2019-2020 Winter Multi-Area Probabilistic Reliability Assessment* was approved by the Task Force on Coordination of Planning on November 13, 2019 and is included as Appendix VIII.

**The RCC unanimously approved the NPCC 2019-2020 Winter Reliability Assessment provided in the Agenda package. (written proxy in favor).**

**Modification of the Ontario Saunders Type I Special Protection System (SPS)**

Mr. Farahmand explained that the Ontario IESO requested approval of a change to the Saunders Type I SPS. This SPS protects 230 kV circuits in the St. Lawrence area from overloading as well as the units in the area including the New York Moses plant from potential loss of synchronism if there are certain combinations of outages on critical elements in the New York Control Area and the IESO Control Area. The modified SPS would add the capability to arm the Nation Rise wind farm for rejection in response to the loss the 230 kV circuits in the area. The wind farm has a total capacity of 100 MW.

In accordance with the NPCC Regional Reliability Reference Directory No. 7, *Special Protection Systems*, the Task Force on System Studies reviewed the Ontario IESO modified



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Saunders Generation Rejection and Intertie Cross-Trip SPS No. 237, which is currently classified as a Type I SPS and concurs with the Ontario IESO that the classification of the SPS will remain as Type I after the proposed modifications to the SPS are implemented. The Type I classification for this SPS is due to a possible significant adverse impact outside of the local area when the SPS fails to operate.

The NPCC Task Force on Coordination of Operation, at its meeting on August 14-15, 2019, reviewed the operability of the modified Type I Saunders SPS and concluded that it can be operated in a secure and reliable manner and recommended the approval of this Special Protection System.

At the May 14-16, 2019 and September 17-19, 2019 Task Force on System Protection (TFSP) meetings, EDPR Nation Rise presented the proposed modification to the Ontario IESO Saunders Type I SPS scheme with the addition of the Nation Rise Wind Farm to the Saunders SPS. Based on the information presented, the TFSP accepted the statement made by EDPR Nation Rise that the protections associated with this modification are designed in conformance with the intent of the criteria in NPCC Directory No.7 *Special Protection Systems*.

The Task Force on Coordination of Planning (TFCP) reviewed the Task Force's findings at its November 13-14, 2019 meeting. The TFCP also reviewed this modified SPS and agreed that the SPS remains in conformance with NPCC Reliability Reference Directory No. 1 *Design and Operation of the Bulk Power System*", and recommended RCC approval of this modified Type I SPS.

Mr. Bodkins asked about the status of moving away from SPS in favor of NERC Remedial Action Scheme (RAS) definition. Ms. Brake responded that the TFCP has a work plan to consolidate input on this matter from all the Task Forces. The TFCP is working with the Task Force on System Protection regarding the methodology and process for inclusion in NPCC Directory No. 7, *Special Protection Systems*.

**After discussion, the RCC approved the modification of the Ontario Saunders Type I Special Protection System provided in the Agenda package (written proxy in favor, with Consolidated Edison Company of New York, Inc. opposed (Sectors 1,3,4 and 5)).**

**2020 - 2021 Task Force Work Plans**

The Task Force chairs highlighted their respective 2020 - 2021 Task Force Work Plans provided in the Agenda Package.



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Mr. Fedora described a correction in the Task Force on Coordination of Planning 2020-2021 Work Plan associated with the timing of the NERC Probabilistic Assessment in 2020 and the NPCC Tie Benefits Report in 2021.

Mr. Fedora also noted a clarification to the Task Force on System Studies 2020-2021 Work Plan for 2020 regarding the NPCC Overall Transmission Review.

Mr. Henderson provided a general comment that the Task Forces should be engaged early in the Board's strategic process so that timely NPCC member technical input and review can be considered.

Mr. Garg observed that related NERC and Canadian Electric Association input should also be considered. Mr. Wegh asked Mr. Henderson to clarify his comment.

Mr. Henderson responded that NPCC has a number of Board directives that eventually become part of the Task Force work plans. He encouraged NPCC to make sure those directives are brought to the Task Forces and Working Groups with sufficient time so they would have an opportunity to review and improve/inform the final product and help NPCC through some of the items, as required. He mentioned he has brought up these concerns in previous RCC meetings and that, in terms of the Board items themselves, some wider robust discussions at the RCC would be in order so that what is developed results in useful studies for the NPCC membership.

Mr. Schwerdt thanked Mr. Henderson for his comments, suggesting that the RCC and the RCC leadership plan for more strategic discussions at RCC meetings around the tactical initiatives in the upcoming year, providing further time on RCC Agendas in general regarding the strategic initiatives within NPCC.

Mr. Schwerdt recalled at last year's December RCC meeting there was a comment made during the approval of the Task Forces and RCC work plans regarding how they had the opportunity to align with the Board's strategic discussions in the September time-frame. The Board strategy session is meant to lay out a near-term set of NPCC reliability initiatives and also inform the long-term ERO Enterprise strategies. Taking account of the discussion at last December's RCC meeting, the Board authorized the sharing of an initial draft of the strategic plan with the Task Force Chairs, to help inform the development of their respective Task Force work plans; the extent of that effort can be seen in the Task Force work plans before the RCC today. This is the intent this year, and moving forward, to address the issues previously brought up and brought up today.



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Mr. Henderson thanked Mr. Schwerdt for those first steps taken, and said they should be recognized as but first steps and that additional steps can be taken going forward, and particularly having the ability to utilize the vast expertise of NPCC's membership, that can only benefit all. Mr. Schwerdt agreed, recognizing the collaborative effort; things are changing very rapidly, with reliability threats coming from different directions.

Mr. Crissman noted when the initial draft strategic plan was distributed to the Task Force Chairs, they were asked not to further distribute it, but to review it, and use it to facilitate discussions with their respective Task Forces, regarding how the information would impact their work plans. He suggested this approach could be improved moving forward.

Mr. Bodkin stated that he feels that the RCC should be more of a policy discussion group, rather than a technical group; it would be more appropriate for the RCC to discuss policy issues, such as related to interdependencies between fuel types, increased cyber and physical security risks, and the Align Tool, for example, rather than pushing those discussion down to the Task Forces. He suggested he would like to see more of these type policy discussions at future RCC Agendas, and then reaching out to the Task Forces on associated related technical issues.

Mr. Schwerdt responded that the RCC is the top technical committee in NPCC, and there is no intent, structurally, to push policy issues down to the Task Force level; recognizing that some tactical issues in the strategic plan touch both policy and technical considerations. He agreed that the RCC should be discussing the policy issues, with the Task Forces addressing the technical issues. It's not just the RCC approval process, but the discussion around where the industry is going, and how future resource adequacy would be assessed – these are examples of the types of issues that the RCC would look to discuss, and offer insight into how to continue as an organization that provides for reliability. Mr. Bodkin agreed, and said he looks forward to future RCC Agendas organized along these lines.

**The RCC then unanimously approved (written proxy in favor) the 2020 - 2021 Task Force Work Plans as provided in the Agenda package, with the changes noted.**

**2020 – 2021 RCC Work Plan**

Following the review and approval of the NPCC Task Forces' respective 2019 - 2020 Work Plans, the RCC reviewed its 2020 – 2021 Work Plan.

Mr. Fedora explained that the RCC Work Plan was revised for 2020 - 2021 to be consistent with the NPCC 2020 Business Plan & Budget (accepted by FERC on October 17, 2019); the RCC Scope (to be considered for approval by the NPCC Board of Directors at their January 29, 2020 meeting), the ERO 2019 ERO Reliability Risk Priorities Report (accepted by the





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NERC Board of Trustees on November 5, 2019) and the ERO Enterprise Operating Plan (approved by the NERC Board of Trustees on November 9, 2017).

He noted that currently the ERO Enterprise is transitioning away from the use of the ERO Enterprise Operating Plan by replacing it through updates to the ERO Enterprise Long-Term Strategy and additional information in the NERC and Regional Entity Business Plan and Budgets.

The RCC Work Plan for 2020 – 2021 was updated to reflect the due dates of projects anticipated to be brought for RCC approval, and was informed by the latest draft of the Working Draft NPCC Strategic Plan 2020-2023.

Mr. Bodkin said he did not see specific mention in the RCC Work Plan for 2020 – 2021 regarding consideration on how ERO Enterprise tools may impact the stakeholders (e.g. the Align Tool). Mr. Schwerdt responded that not everything should come to the RCC. Specifically, the NPCC Compliance Committee has actively discussed the Align Tool and the DER Forum is under the auspices of NPCC Regional Standards Committee. However, all Committees report to the NPCC Board.

Mr. Bodkin stated that some RCC discussion and awareness from a higher-level policy point of view of this topic would be beneficial.

Mr. Fedora suggested that the concept could be added under Goal 3, On-going Activities, first bullet. The RCC then discussed the difference between data tools (such as NERC MIDAS, TADS, GADS, etc.) and analytic tools (as used in assessment simulations). Rather than edit the RCC Work Plan for 2020 -2021 ‘by committee’ at the meeting, the RCC agreed to the suggestion that the RCC Work Plan for 2020 – 2021 will be modified to include consideration around tools, once the concept is further clarified.

**The RCC then unanimously recommended (written proxy in favor) that the 2020 - 2021 RCC Work Plan as provided in the Agenda package be submitted for NPCC Board approval.**

**Items for Discussion**

**NERC Agenda Items**

*Joint Session: Planning, Operating & Critical Infrastructure Protection Committee*

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

- ✓ EMP Task Force report;



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- ✓ Reliability & Security Technical Committee Update;
- ✓ DOE North American Energy Resilience Model;
- ✓ 2019-20 NERC Winter Assessment; and,
- ✓ Section 1600 Supply Chain Data request.

Operating Committee (OC) Meeting

Mr. Oks then highlighted the following items from the December 10-11, 2019 OC Agenda included in the Agenda package:

Approval Items:

- ✓ Reliability Reference Documents:
  - Time Error Monitoring;
  - GMD Monitoring;
  - Dynamic Transfer; and,
  - Integrating Reporting ACE with NERC Reliability Standards.
- ✓ Events Analysis Process Document.

Informational Items:

- ✓ July 13, 2019 West Side outage presentation by Con Edison
- ✓ WECC Reliability Coordinator Updates.

Planning Committee (PC) Meeting

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

Items for Approval/Endorsement

- ✓ Posting Reliability Guideline: *BPS Perspectives for Implementing IEEE 1547-2018*;
- ✓ Posting Misoperations Information Data and Analysis System – Data Reporting Instruction;
- ✓ White Paper: *Inverter-Based Resource Disturbance Monitoring*; and,
- ✓ White Paper: *Applicability of Transmission-Connected Reactive Devices*.

Critical Infrastructure Protection Committee (CIPC)

Mr. Hogue noted the following items from the December 10-11, 2019 CIPC Agenda included in the Agenda package.

Voting Items:

- ✓ Supply Chain Working Group – Security Guidelines:
  - Vendor Identified Incident Report Measures; and,
  - Risk Related to Cloud Service providers.

Informational/Discussion Topics:

- ✓ Reliability & Security Technical Committee Update;
- ✓ Supply Chain Compliance;
- ✓ Standards Development:



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- 2016-02 Modification to CIP Standards
- 2019-02 BES Cyber System Information Access Management
- 2019-03 Supply Chain Risks
- ✓ Overview of the Universal Utility Data Exchange Project- (Pacific Northwest National Laboratory).

**2019 NPCC Corporate Goals Deliverables**

The following 2019 NPCC Corporate Goal reports included in the Agenda package were presented and discussed:

**Goal III-1 - Recommendations for System Resilience Metrics**

Mr. Rufrano reported on the development of recommendations for system resilience metrics provided in the Agenda package. He explained how the comparisons between ‘pseudo’ event Severity Risk Index (eSRI) categories based on NPCC Extreme Contingency’s testing with the annual actual documented max event eSRIs can be used as a relative measure of BES impact; the change in trend margin serves as an indicator of resilience level.

**Goal III-2 - Reducing risk of Protection System Misoperations**

Mr. Sahiholamal reported on the effectiveness of the use of the Misoperation Risk Index (MRI) Score (f/n/a the Entity MCM Score) in reducing protection system misoperations provided in the Agenda package. He explained that NPCC has shared this innovative approach to analyzing protection system misoperations with NERC, other Regional Entities and industry groups, including the North American Transmission Forum (NATF). As a result of this outreach, SERC and RF have implemented the NPCC MRI Score for their regions and the results of the MRI assessments have been shared for further analysis. Further collaboration is underway with the ERO Enterprise to identify opportunities to reduce protection system misoperations using the Entity MRI Score methodology.

**Goal III-3 - Dynamic Load Model for NPCC Underfrequency Load Shedding sensitivity analysis**

Mr. Latulipe described the progress toward resolving the issues involving the use of a dynamic load model for the NPCC UFLS sensitivity analysis provided in the Agenda package. The SS-38 Working Group on Inter-Area Dynamic Analysis received technical assistance from Power World Corporation to resolve issues involving the use of the CMLD dynamic load model for the NPCC UFLS sensitivity analysis.



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Goal IV-1 - Facilitate the Integration of Distributed Energy Resources (DER) - Coordination of Data at the T-D Interface

Mr. Lombardi described how the collaboration with transmission and distribution entities resulted in the development of a plan addressing the steps needed to improve the coordination of the identified priority gaps in distribution and transmission planning.

His report, included in the Agenda package, highlighted the related IEEE and Argonne National Laboratory activities related to integrated T & D planning, including the NERC System Planning Impacts from Distributed Energy Resources Working Group (SPIDERWG) Modeling Subgroup's Reliability Guideline: *DER Data Collection for Modeling*.

Goal IV-2 - NPCC Long-Range Energy Security Analysis

Mr. Fedora summarized the findings illustrating the range of LOLE impacts from scenario-based analyses corresponding recommended reliability risk level provided in the Agenda package. He illustrated how the level of reliability risk can be measured by comparing the amount of Area Loss of Load Hours (LOLH) for a defined period associated with the estimated need for emergency operating procedures between Base Case and identified Severe Case assumptions/scenarios.

Goal IV-3 - Gas-Electric Inter-dependency Tabletop Exercise – Lessons Learned

Mr. Oks summarized the 'lessons learned' provided in the Agenda package from the NPCC Table Top Exercise to identify operational issues associated with electric and gas system interdependencies. In collaboration with Argonne National Labs, gas sector representatives, several NPCC RCs and PJM, an electric and gas inter-dependency training table top exercise was held on October 8, 2019 at the New York ISO's office. The exercise involved in-person participation of the operations departments representatives from the interstate pipelines, Local Distribution Companies, Gas-Electric utilities, Reliability Coordinators (from the NPCC Region and PJM), Transmission Owners/Operators organizations, representatives of the Northeast Gas Association and Interstate Natural Gas Association of America and was facilitated by representatives from the Argonne National Lab.

Goal V-1 - Develop Confidential Physical Security Guidance

Mr. Scalici summarized the development of confidential guidance regarding better practices and technologies under a confidentiality agreement to physical security experts at registered entities. He explained that the NPCC Physical Security Work Group developed a confidential "smart practices" guidance document. The document outlines physical security risk mitigation approaches through identification of what the subject matter experts in the group consider smart security practices, leading and emerging technologies.



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In response to a question raised, he indicated that the NPCC Physical Security Working Group is investigating ways to allow for a wider distribution of their findings to other stakeholders while protecting its confidentiality.

The RCC reiterated the need for the close coordination of Task Force activities during the development of future NPCC Corporate Goals, in order to maximize value and avoid duplication of effort.

**Cyber & Physical Security Update**

In the interest of time, Mr. Crissman referred the RCC to the Cyber & Physical Security information provided in the Agenda package, and suggested contacting Mr. Hogue with questions or for additional information.

**Informational Items**

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**

Thursday, February 27, 2020

**Location**

New York Times Square Residence Inn by the  
Marriott, New York, New York

**Distribution of Approved Minutes**

NPCC Full & General Member Representatives and Alternates

Members, NPCC Board of Directors

Members, NPCC Reliability Coordinating Committee

Members, NPCC Public Information Committee

Members, NPCC Compliance Committee

Members, NPCC Regional Standards Committee

Members, NPCC Task Force on Coordination of Operation

Members, NPCC Task Force on Coordination of Planning

Members, NPCC Task Force on Infrastructure Security and Technology

Members, NPCC Task Force on System Protection

Members, NPCC Task Force on System Studies

NPCC Officers

NPCC Staff

Ruta Skučas, Esq.

and

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



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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.