



Rapport annuel 2023 sur l'application du Code de conduite du Coordonnateur de la fiabilité

Déposé à la Régie de l'énergie

17 juin 2024

Rapport annuel de 2023 sur l'application du *Code de conduite du Coordonnateur de la fiabilité au Québec*

Le 17 juin 2024

La direction principale – Contrôle des mouvements d'énergie et exploitation du réseau a été désignée en tant que Coordonnateur de la fiabilité au Québec (le « Coordonnateur ») par la Régie de l'énergie (la « Régie ») dans sa décision D-2021-064. Le *Code de conduite du Coordonnateur de la fiabilité du Québec* (le « Code de conduite ») adopté par la Régie prévoit à son article 5.4 qu'un rapport annuel sur l'application du Code de conduite soit présenté auprès de la vice-présidente exécutive et cheffe de l'exploitation et des infrastructures ainsi qu'au vice-président conception intégrée et exploitation du système énergétique. Ce rapport doit être déposé auprès de la Régie et publié sur le site Internet du Coordonnateur. Conformément à la décision D-2011-132 rendue par la Régie le 31 août 2011, ce rapport annuel est signé par le directeur principal — Contrôle des mouvements d'énergie et exploitation du réseau (la « DPCMEER »). L'attestation de conformité accompagnant ce rapport fait suite à une vérification interne de l'application du *Code de conduite* au sein des directions visées d'Hydro-Québec.

Application du Code de conduite en 2023

La DPCMEER, en sa qualité de responsable de l'application du Code de conduite a également la responsabilité du suivi de la réalisation des pistes d'amélioration relevées dans le cadre de la vérification du Contrôleur.

La gestion a soutenu tout au cours de l'année les employés de la DPCMEER ainsi que les autres unités visées d'Hydro-Québec relativement à l'interprétation et à l'application du Code de conduite.

Au cours de l'année 2023, la DPCMEER n'a apporté aucune modification au site du Coordonnateur concernant le Code de conduite. La DPCMEER rapporte également n'avoir reçu aucun signalement d'allégation de dérogation ou plainte au Code de conduite.

Depuis sa décision D-2021-064 du 18 mai 2021, la Régie demande au Coordonnateur d'assujettir à l'application du Code de conduite tout le personnel sous l'autorité du Coordonnateur, qu'ils exercent des tâches reliées au rôle du Coordonnateur ou non, ainsi que le personnel des autres directions d'Hydro-Québec effectuant des tâches reliées au rôle du Coordonnateur.

Il est à noter que dans le cadre de sa décision D-2023-036 émise le 28 mars 2023, la Régie a approuvé l'application des Normes de conduite de transport et fixait leurs entrées en vigueur au premier janvier 2024, et ce, en remplacement du Code de conduite du transporteur et du Code de conduite du Coordonnateur. À cet effet, le Coordonnateur émet pour la dernière année le rapport annuel du Code de conduite dans sa forme actuelle. Dès 2025, le Coordonnateur et le Transporteur déposeront annuellement à la Régie un rapport de la conformité concernant l'application des Normes de conduite de transport.

Les annexes suivantes font partie du rapport annuel sur l'application du Code de conduite :

- Annexe A : illustration des organigrammes d'Hydro-Québec et du groupe Technologies Numériques d'Hydro-Québec identifiant les unités dont le personnel est assujéti au Code de conduite.
- Annexe B : présentation de la liste des unités sous l'autorité du Coordonnateur et celles réalisant des tâches reliées au rôle de Coordonnateur.
- Annexe C : sommaire des représentations d'Hydro-Québec aux réunions du NPCC pour l'année 2023.
- Annexe D : présentation de la liste des unités sous l'autorité du Coordonnateur et celles réalisant des tâches reliées au rôle de Coordonnateur décrivant leurs rôles et responsabilités.

L'attestation de conformité ci-jointe certifie que les règles du Code de conduite ont été appliquées telles que décrites à l'article 5.4.

Le contrôleur n'a relevé aucune piste d'amélioration pour l'année 2023.

Conclusion

À titre de directeur principal de la DPCMEER, je suis responsable de produire le présent rapport et d'en assurer le suivi. En 2023, le Code de conduite a été appliqué de façon conforme et aucune dérogation ou plainte n'ont été portées à l'attention du directeur principal.



Maxime Nadeau

Directeur principal Contrôle des mouvements
d'énergie et exploitation du réseau



**Attestation de conformité
Code de conduite du Coordonnateur de la fiabilité
Année 2023**

Le Code de conduite du Coordonnateur de la fiabilité (le « Code ») a pour but de régir les actions ou les décisions du personnel afin qu'en toute circonstance la fiabilité du réseau de transport d'électricité sous la responsabilité du Coordonnateur de la fiabilité demeure la priorité. Il a aussi pour but de prévenir toute forme de traitement préférentiel par le personnel au profit des autres directions du Transporteur, des entités affiliées du Transporteur et des autres utilisateurs du réseau.

Pour 2023, l'attestation de conformité au Code est signée par le chef p.i. – Conformité d'entreprise.

Le travail de la DCE a été effectué de façon à fournir l'assurance raisonnable que les règles du Code sont appliquées par l'ensemble du personnel visé par son application. Les procédures mises en œuvre ont permis de recueillir des éléments probants appropriés afin de signer la présente attestation et de fournir une assurance raisonnable du respect de l'ensemble des règles du Code.

Sur la base du travail effectué, la DCE atteste que le Code a été appliqué de façon satisfaisante tout au long de l'année 2023.

A handwritten signature in black ink, appearing to read 'Serge Larose'.

Serge Larose
Chef par intérim – Conformité d'entreprise
Groupe - Affaires corporatives, juridiques et réglementaires, et gouvernance

Le 24 mai 2024

N° Code de conduite du Coordonnateur
de la fiabilité

(Code de classement)

Date Le 17 juin 2024

Destinataires **Mme Claudine Bouchard**
Vice-présidente exécutive, Cheffe de
l'exploitation et des infrastructures
Édifice Jean-Lesage, 20^e étage
Montréal, QC
H2Z 1A4

Expéditeur **Maxime Nadeau**
Directeur principal Contrôle des
mouvements d'énergie et
exploitation du réseau
Complexe Desjardins, 13^e étage
Montréal, QC
H5B 1H7

M. François Brassard
Vice-président,
Conception intégrée et exploitation du
système énergétique
Complexe Desjardins, 13^e étage
Montréal, QC
H5B 1H7

Objet **Rapport annuel 2023 sur l'application du Code de conduite du
Coordonnateur de la fiabilité au Québec (le « Code de
conduite »)**

Conformément à l'article 5.4 du Code de conduite, vous trouverez ci-joint le rapport annuel 2023 sur l'application du Code de conduite ainsi que l'attestation de conformité signée.

Ce rapport sera déposé à la Régie de l'énergie et affiché sur le site internet du Coordonnateur de la fiabilité au cours des prochains jours.

Sincères salutations,



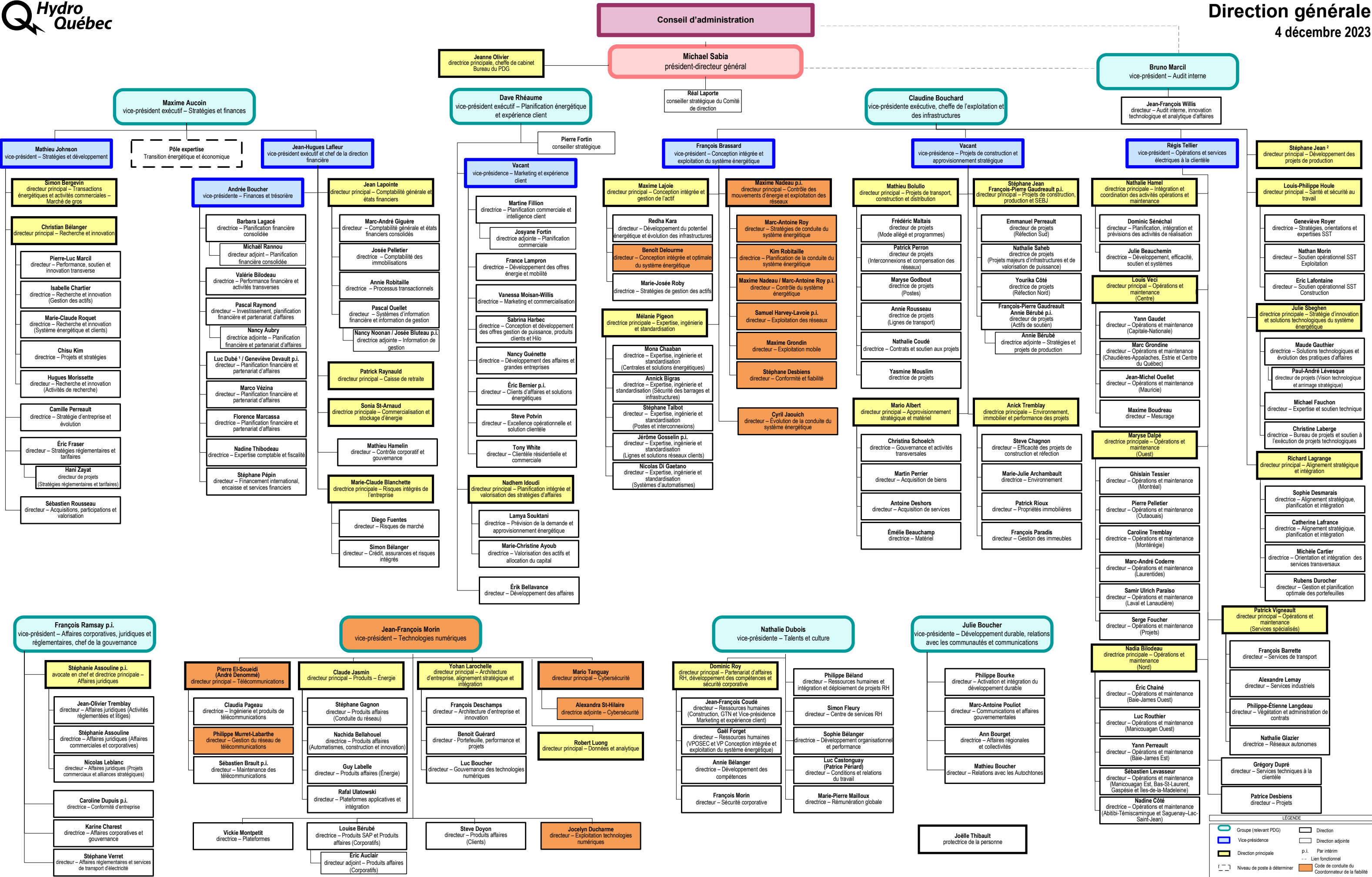
Maxime Nadeau

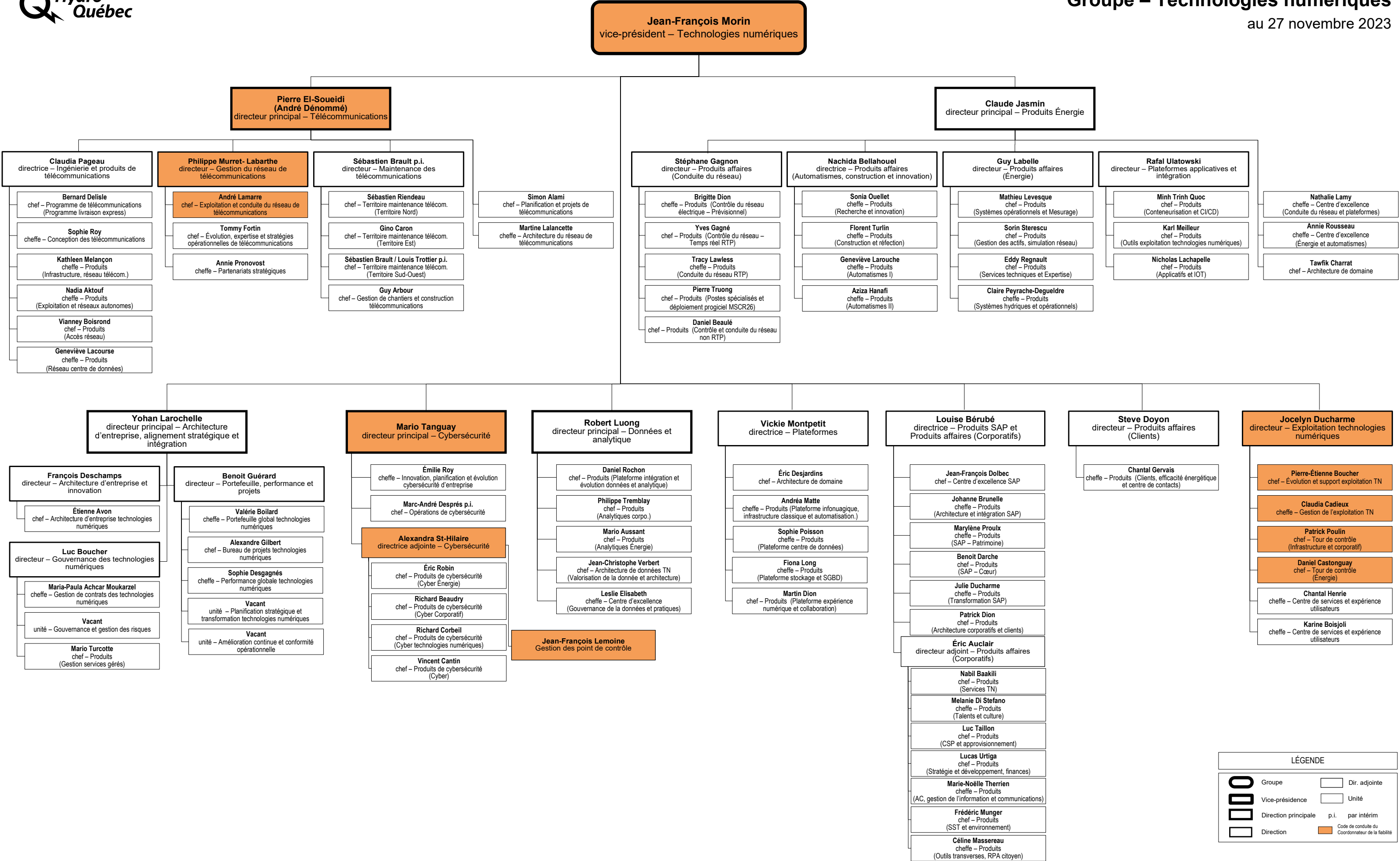
CC. Stéphane Desbiens, directeur – Conformité et fiabilité

P.j. Rapport annuel 2023 sur l'application du *Code de conduite du Coordonnateur de la fiabilité*

Annexe A

**Organigrammes identifiant les unités
dont le personnel est assujetti au Code
de conduite**





Annexe B

**Liste des unités sous l'autorité
du Coordonnateur de la fiabilité
et celles réalisant des tâches
reliées au rôle du
Coordonnateur de la fiabilité**

Liste des unités sous l'autorité du Coordonnateur de la fiabilité et celles réalisant des tâches liées au rôle du Coordonnateur de la fiabilité

Le tableau 1 suivant fournit la liste des unités sous l'autorité du Coordonnateur de la fiabilité et celles réalisant des tâches liées au rôle du Coordonnateur de la fiabilité et leur direction d'appartenance, suivant les organigrammes d'Hydro-Québec de l'annexe B du présent rapport annuel. La fréquence à laquelle des tâches liées au rôle du coordonnateur sont exécutées, le cas échéant, est indiquée au tableau.

Tableau 1

Unités sous l'autorité du Coordonnateur de la fiabilité et celles réalisant des tâches liées au rôle du Coordonnateur de la fiabilité

VP Conception intégrée et exploitation du système énergétique Direction principale – Contrôle des mouvements d'énergie et exploitation du réseau						
Unités	Unités intermédiaires	Direction	Continue	Ponctuelle	Exceptionnelle	Cas d'urgence
• Soutien Opérations – Intégr. act. exploitation • Soutien Opérations – Stratégie BDD • Soutien Opérations – Stratégies Est • Soutien Opérations – Stratégies Nord • Soutien Opérations – Stratégies Sud	Stratégies d'exploitation & d'intégration des réseaux	Stratégie de conduite du système énergétique	X			
• Expertise de contrôle du réseau • Soutien technique – Conduite • Stratégies & encadrements provinciaux • Stratégies & encadrements régionaux	Stratégies système énergétique					

• Optimisation et modélisation mathématique • Projets d'évolution du système énergétique	Stratégies des projets d'évolution du système énergétique						
• Affaires réglementaires du Coordonnateur de la fiabilité, analyse et encadrements • Mise en conformité	Affaires réglementaires du Coordonnateur de la fiabilité et conformité	Conformité et fiabilité	X				
• Bureau de conformité normes de fiabilité • Gouvernance et relations d'affaires	Expertise et conformité des normes de fiabilité						
• Bas St-Maurice / Joliette • Exploitation Haut St-Maurice / Trois-Rivières • Exploitation Matapédia • Exploitation Richelieu / Bécancour • Exploitation Rive-Nord de Québec • Exploitation Rive-Sud de Québec	Exploitation des réseaux -Centre Est	Exploitation mobile					X
• Exploitation Beauharnois A • Exploitation Beauharnois B • Exploitation Carillon / RDP • Exploitation Gatineau • Exploitation Laval / Laurentides • Exploitation Les Cèdres • Exploitation Outaouais	Exploitation des réseaux Sud-Ouest						

• Exploitation Abitibi • Exploitation Estmain / Sarcelle / LG1 • Exploitation LG2 • Exploitation Montréal Est / Montérégie • Exploitation Montréal Ouest / Suroît • Exploitation Némiscau / Radisson	Exploitation des réseaux Montréal / Nord-Ouest					
• Exploitation Bas du Complexe • Exploitation Haut du Complexe • Exploitation LA1 – Brisay – LG4 • Exploitation LG3 – Péribonka • Exploitation Manicouagan • Exploitation Milieu du Complexe • Exploitation Romaine • Exploitation Saguenay • Gestion de la relève Nord	Exploitation des réseaux Nord-Est					X
• Prévision des apports et de la demande • Qualité données, météo & trans. énerg.	Prévision & optimisation de la conduite du système énergétique	Planification de la conduite du système énergétique	X			
• Plan des retraits et stratégies opérationnelles • Planification de la production	Planification du système énergétique					

• Planification des retraits CED Est • Planification des retraits CED Ouest • Planification des retraits CT Nord-Est • Planification des retraits CT Sud-Ouest • Planification des retraits RTP	Gestion intégrée des retraits		X				
• CED – Richelieu • CT – Chicoutimi (Opé) • CT – Chicoutimi (Rép) • CT – Trois-Rivières (Opé) • CT – Trois-Rivières (Rép)	Exploitation des réseaux Centre	Exploitation des réseaux					
• CED Québec • CED Rimouski • CT Baie-Comeau (Opé) • CT Baie-Comeau (Rép) • CT Québec (Opé) • CT Québec (Rép)	Exploitation des réseaux Est			X	X	X	
• CED Laurentides • CT Rouyn (Opé) • CT Rouyn (Rép) • CT St-Jérôme (Opé) • CT St-Jérôme (Rép)	Exploitation des réseaux Nord-Ouest						
• CED Montréal • CT Montréal (Opé) • CT Montréal (Rép)	Exploitation des réseaux Sud-Ouest						

• Centre de contrôle du réseau	Programmation et contrôle du réseau	Contrôle du système énergétique					
• Centre de coordination du réseau	Coordination du réseau		X				
• Coordination des mesures d'urgence	Coordination opérationnelle des mesures d'urgence						
• Stratégies, performance et projets d'affaires	Stratégies d'affaires	Contrôle des mouvements d'énergie et exploitation des réseaux	X				

Unités	Unités intermédiaires	Direction	Continue	Ponctuelle	Exceptionnelle	Cas d'urgence	Non applicable
- Expertise SRC – Fonctions de base 1 - Expertise SRC – Fonctions de base 2 - Expertise SRC – Fonctions de base 3	Évolution des systèmes conduite du réseau (Fonctions conduite)	Évolution de la conduite du système énergétique		X			
- Expertise système conduite de réseau - Expertise système conduite de réseau	Évolution des systèmes conduite réseau (Fonction fiabilité et contrôle)			X			

• Expertise SRC – Fonctions avancées 1 • Expertise SRC – Fonctions avancées 2	Évolution des systèmes conduite réseau (Orientation technique et fonction)			X			
• Org. & processus conduite	Évolution projets technologiques du système énergétique			X			

Direction principale – Conception intégrée et gestion de l'actif						
Unités	Unités intermédiaires	Direction	Continue	Ponctuelle	Exceptionnelle	Cas d'urgence
• Stratégie capacité et optimisation du système énergétique	Stratégie capacité et optimisation du système énergétique	Conception intégrée et optimale du système énergétique	X			

Vice-présidence - Technologies numériques							
Unités	Unités intermédiaires	Direction	Continue	Ponctuelle	Exceptionnelle	Cas d'urgence	Non applicable
• Évolution de l'exploitation, observ. & perf. TN • MEP, concil & modél. Des services TN	Évolution & support exploitation des opérations TN	Exploitation technologiques numériques	X				
• Gestion des probl. & contin. Des serv. TN • Gestion Incidents & rel. Partenaires TN	Gestion de l'exploitation TN						
• Centre d'exploitation du réseau Técom. • Centre d'exploitation énergie TN	Tour de contrôle Énergie						
• Centre d'exploitation du réseau Télécom. • Centre d'exploitation énergie TN	Tour de contrôle infra. & corpo.						
DP- Télécommunication							
• Exploitation et conduite du réseau de télécommunication	Exploitation des télécommunications	Gestion du réseau des télécommunication ns	X				

DP- Cybersécurité						
• Gestion des points de contrôle de cybersécurité • Centre de surveillance cybersécurité d'entreprise	Opérations de cybersécurité	Cybersécurité	X			



Annexe C

Représentation d'Hydro-Québec dans le cadre des rencontres 2023 au RCC du NPCC

Représentations d'Hydro-Québec au RCC du NPCC

En date du 23 août 2019, dans le cadre de la décision D-2019-101 en lien au dossier R-3996-2016 phase 2, la Régie ordonnait au Coordonnateur de la fiabilité de faire rapport une fois l'an de la teneur de ses demandes et de ses représentations au RCC du NPCC.

Le paragraphe 366 de la décision stipulait :

La Régie ordonne au Coordonnateur de lui faire rapport une fois l'an de la teneur de ses demandes et de ses présentations au RCC du NPCC, en lien avec des éléments normatifs à caractère technique pour application spécifique au Québec ainsi que des réponses du NPCC à leur égard, dans le cadre de la demande d'approbation du Registre.

Le 20 mars 2020, en suivi de la décision D-2019-101, le Coordonnateur déposait à la Régie le document HQCF-11, document 1 indiquant qu'il déposera, lors du dépôt du rapport annuel, une nouvelle section contenant les dates des rencontres du RCC, ainsi que la documentation du comité RCC du NPCC diffusée à ses membres de même qu'à la Régie, telle que les ordres du jour des rencontres et le compte rendu de ces rencontres.

Dans le cadre du suivi de la décision D-2019-101 et D-2019-147 en date du 3 juin 2020, la Régie est satisfaite de la proposition du Coordonnateur en réponse à l'ordonnance du paragraphe 366 de la décision. Elle est d'avis que l'inclusion de ces informations au rapport annuel du Coordonnateur sera utile à ses activités régulières en 2020 et les années subséquentes. **En conséquence, elle accueille cette proposition.**

L'annexe C du rapport annuel du Code de conduite du Coordonnateur de la fiabilité ci-jointe inclut les informations telles qu'exigées dans le suivi des décisions D-2019-101 et D-2019-147 de la Régie.

Rencontres d'Hydro-Québec au RCC du NPCC

Date	Dossiers à l'ordre du jour approuvés par le RCC	Commentaires
1^{er} mars 2023		Aucune approbation de dossier ayant un impact au Québec.
7 juin 2023		Aucune approbation de dossier ayant un impact au Québec.
12 septembre 2023	• Directory No. 1 Implementation Plan • PRC-006-NPCC-03	Le RCC approuve la recommandation.
5 décembre 2023	• 2023 Québec Comprehensive Area Review of Resource Adequacy	Le RCC approuve la recommandation.



Comptes-rendus des réunions dans le cadre des rencontres 2023 du RCC du NPCC



June 8, 2023

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 March 1, 2023 RCC Meeting

Sir / Madam:

Attached are the Minutes of the March 1, 2023 meeting of the NPCC Reliability Coordinating Committee, as approved at the June 7, 2023 RCC meeting.

Sincerely,

Michael R. Lombardi

Michael R. Lombardi
Director, Reliability Assessments

cc: NPCC Staff



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
March 1, 2023

Ms. Philip called the meeting of the Reliability Coordinating Committee (RCC), held by WebEx to order at 10:00 am.

Attendance

Officers of the Reliability Coordinating Committee

Anie Philip, Chair

Michael Jones, Co-Vice Chair

Maxime Nadeau, Co-Vice Chair

Long Island Power Authority

National Grid USA

Hydro-Québec TransÉnergie

Sector 1 - Transmission Owners

Central Hudson Gas & Electric Corporation

Central Maine Power Company

Consolidated Edison Company of New York, Inc.

Eversource Energy

Hydro-One, Inc.

Long Island Power Authority

National Grid USA

New Brunswick Power Corporation

New York Power Authority

New York State Electric & Gas Corporation

Nova Scotia Power, Inc.

Michael E. Ridolfino

Damian Interrante - Alternate

(proxy to David Bradt)

Martin Paszek - Alternate

(proxy to John Babu)

Ajay Garg - Alternate

Anie Philip

Abhinav Rawat

Randy MacDonald

(proxy to Frank Ronci)

(proxy to David Bradt)

Chris Milligan

Jill Searle

(proxy to Martin Paszek)

(proxy to David Bradt)

David Bradt

Edward Roedel

Hantz Presume

Orange & Rockland Utilities, Inc.

Rochester Gas & Electric Corporation

The United Illuminating Company

Vermont Electric Power Company, Inc.

Sector 2 – Reliability Coordinators

Hydro-Québec TransÉnergie

ISO New England, Inc.

New Brunswick Power Corporation

(proxy to Nicolas Turcotte)

James Helton

Scott Brown

Gaetan Benoit - Alternate

Kevin DePugh - Alternate

Gabriel Adam

New York ISO

Ontario IESO

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

Consolidated Edison Company of New York, Inc.

Eversource Energy

Hydro-Québec Distribution

Long Island Power Authority

National Grid USA

New York Power Authority

Lincoln Burton - Alternate

(proxy to Timothy Nurse)

Hakim Sennoun - Alternate

Robert Eisenhuth

Mike Jones

(proxy to Frank Ronci)



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
March 1, 2023

Sector 4 Generation Owners

Consolidated Edison Company of New York, Inc.	Helen Wang
Dominion Energy, Inc.	Sean Bodkin
Long Island Power Authority	(proxy to Anie Philip)
New York Power Authority	Frank Ronci
	Salvatore Spagnolo - Alternate
NextEra Energy Resources	Rigoberto Milla
Ontario Power Generation	David Kwan - Alternate
Talen Energy Marketing	(proxy to Michael Lombardi)
Vistra Energy Corporation	Dan Roethemeyer

Sector 5 – Marketers, Brokers, and Aggregators

Long Island Power Authority	(proxy to Anie Philip)
Utility Services of Vermont, LLC	Brian Evans-Mongeon

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

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

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

New York State Reliability Council, LLC	Roger Clayton
RLC Engineering	David Conroy

NPCC Staff

Gerry Dunbar	Director, Reliability Standards and Criteria
Jeremiah Durotola	Internal Cybersecurity GRC Analyst
Francesco Elmi	Senior Compliance Engineer
Ben Eng	Manager, Entity Risk Assessment
Jenifer Farrell	Vice President, IT & Enterprise Risk Management
Jessica Hala	Vice President, Finance and Treasurer
Brian Hogue	Information Systems & Security Management
Andreas Klaube	Manager, Probabilistic Assessment
Neeraj Lal	Manager, System Studies
Hai (Quoc) Le	Manager, System Planning
Quintin Lee	Manager, Events Analysis
Michael Lombardi	Director, Reliability Assessments
Faisal Nahian	Senior Network and Infrastructure Engineer
Scott Nied	Vice President, Compliance
Andrey Oks	Director of Operations Coordination
Patrick Palompo	Senior Compliance Engineer
Anil Rauniyar	Senior CIP Analyst
Shayan Rizvi	Senior Reliability and Performance Analysis Engineer
Rafael Sahiholamal	Manager, System Protection
Travis Tate	Compliance Auditor
Doug Vitale	Manager, Security Outreach



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
March 1, 2023

Guests

John Babu	Chair, Task Force on System Protection
Milo Blair	NPCC Board Chair
Joy Brake	Chair, Task Force on System Studies
Calvin Curry	Orange and Rockland Utilities, Inc.
Petar Novakovic	Independent Electricity System Operator
Timothy Nurse	Eversource Energy
Frank Peng	Chair, CO-12 Operations Planning Working Group
Edward Roedel	Chair, Task Force on Coordination of Planning
Jon Sawyer	New York ISO
Nitish Sharma	National Grid
Nicolas Turcotte	Hydro-Québec

Antitrust Guidelines for NPCC Meetings

Mr. Hogue read the NPCC Antitrust Guidelines provided in the agenda package.

Safety Message

Mr. Klaube provided a safety message with useful tips regarding the changing weather and temperature associated with the upcoming spring season.

Quorum Statement

Mr. Lombardi indicated that a quorum had been achieved, by member attendance, proxy, or alternate designation. No written proxies were submitted.

Board Chair Report

Mr. Blair introduced himself as the new NPCC Board Chair and thanked the RCC for the tremendous work they have done and are doing to focus on the reliability of the transmission system.

He indicated that the NPCC Board wants to be considered a resource, providing help with streamlining priorities and resolving any identified process related bottlenecks. He also noted that the NPCC Strategic Plan provides direction to the organization, and he encouraged the RCC to have input in the revisions of the NPCC Strategic Plan.

Mr. Blair along with the Mr. Dickerson, NPCC CEO, have been engaged with the FERC, NERC, and the ERO Enterprise. He highlighted recent discussions regarding the controllability, interconnection, reliability guidelines and standards related to inverter based resources. He acknowledged the expertise that comes from the northeast and recognized the knowledge and resources brought to this issue by the RCC.

President & CEO Report

Preliminary 2024 NPCC Budget Development Schedule

Ms. Hala shared the schedule for the development of the 2024 Business Plan and Budget included in the agenda package. The schedule includes a two week comment period from May 3



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
March 1, 2023

to May 17, 2023. A presentation to the RCC will be provided at its June 7, 2023 meeting. The NPCC 2024 Business Plan and Budget will be recommended for approval at the June 21, 2023 NPCC Board meeting.

Chair Report

Agenda

Ms. Philip reviewed the Agenda provided in the agenda package. The content of the agenda was unchanged; however, agenda item for the NPCC 2023 Summer Reliability Assessment will be moved up and discussed after the consent agenda due a scheduling conflict of the presenter.

The RCC then approved the Agenda as discussed.

Approved RCC Scope

Ms. Philip noted the RCC Scope was approved by the NPCC Board on January 18, 2023. An approved copy of the scope is included in the agenda package and has been posted on the NPCC website.

Approved RCC 2023-2024 Work Plan

Ms. Philip reported the RCC 2023-2024 Work Plan was approved by the NPCC Board on January 18, 2023. An approved copy of the work plan is included in the agenda package and has been posted on the NPCC website.

RCC 2023 Meeting Schedule

Ms. Philip referred to the RCC 2023 meeting dates included in the agenda package and noted that the RCC had previously agreed to hold two in-person meetings with one in June and the other in December 2023. Ms. Philip noted that there has been an update with meeting logistics that Mr. Lombardi will address.

Mr. Lombardi indicated that the NPCC New York City office is not large enough to host an RCC meeting and does not have a meeting coordinator. He noted that the NPCC staff had reached out to the RCC members that had indicated they could potentially host the June 7, 2023 RCC meeting at their facilities. As a result of member facilities not being available a WebEx meeting is being planned in June.

[Subsequent to the March 1, 2023 meeting, a member location was identified. The June 7, 2023 meeting is scheduled to be held at the New York Power Authority office in White Plains, NY]

Development of Proposed 2024 NPCC Corporate Reliability Goals

Mr. Lombardi noted that the 2023 NPCC Corporate Reliability Goals were approved by the NPCC Board and will be discussed later in the agenda.

He indicated that this item notes that the 2024 NPCC Corporate Reliability Goals will be developed in 2023 Q4 following the September NPCC Board Strategy Session. This process change allows development of the NPCC 2024 NPCC Corporate Reliability Goals to occur earlier in the 2023 calendar year.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
March 1, 2023

Proposed NPCC Portal

Mr. Nahian indicated that NPCC is consolidating all its existing documents sharing platforms into a new NPCC portal that uses SharePoint online to enhance the security and monitoring capabilities.

He reviewed the NPCC Portal Implementation Timeline included in the agenda package. In 2023 Q1, the NPCC portal activities are to plan, setup configuration and test. The Q1 activities are on schedule. He indicated that the 2023 Q2 activities will consist of scheduling and migrating the current document libraries as well as providing training materials and login requirements to NPCC members. The 2023 Q3 activities will be focused on enhancement and improvement and 2023 Q4 will be focused on automatic data retention & destruction, documentation, and project closeout.

2023 DER/VER Forums

Mr. Dunbar indicated that the NPCC Regional Standards Committee (RSC) will continue to host DER/VER Forums during 2023 on relevant topics and the forum dates during May, August and October will be announced. The forums are part of NPCC's Strategic Corporate Plan and reflect the direction provided by the NPCC Board of Directors to continue outreach efforts with all our stakeholders. He encouraged the RCC members to provide him with any topics and speakers that they would like to be included in the forums.

He noted that all DER/VER Forum presentations and recordings are posted on the NPCC public website.

Consent Agenda

The Reliability Coordinating Committee unanimously approved the following Consent Agenda Items:

December 6, 2022 RCC Meeting Minutes

Approved as provided in the agenda package.

December 16, 2022 RCC Meeting Minutes

Approved as provided in the agenda package.

RCC Roster Changes

The following changes to the RCC membership were approved:

Sector 1 – Transmission Owners

Edward Roedel to succeed David Bradt as the representative for The United Illuminating Company

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

David Cloutier to serve as an alternate for Eversource Energy

Task Force/Working Group Roster Changes

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

Task Force on Coordination of Planning

- ✓ Robert Eisenhuth of PSEG Long Island to succeed Vincent Fihey of the Hydro-Québec TransÉnergie as the Vice Chair.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
March 1, 2023

- ✓ Arash Nezam Sarmadi of National Grid to succeed Mark Stevens of National Grid as an alternate representative.
- ✓ André Dagenais of Hydro-Québec to succeed Steve Blackburn of Hydro-Québec as an alternate representative.
- ✓ Sunil Palla of the New York Power Authority to succeed Bharath Annabathina of the New York Power Authority as an alternate representative.

Task Force on Coordination of Operation

- ✓ Patrick Doyle of Hydro-Québec TransÉnergie to no longer serve as an alternate representative.

Task Force on System Studies

- ✓ Amine Sibachir of Hydro-Québec to succeed Steve Blackburn of Hydro-Québec as an alternate representative.
- ✓ Arash Nezam Sarmadi of National Grid to succeed Mark Stevens of National Grid as the primary representative.
- ✓ Mark Forchilli of National Grid to serve as an alternate representative.
- ✓ Joe Adadjo of Eversource Energy to succeed Jim DiLuca of Eversource Energy as the primary representative.

Task Force on Infrastructure Security & Technology

- ✓ Joshua London of Eversource Energy to serve as an alternate representative.
- ✓ Keith Darlin of New York State Electric & Gas to serve as an alternate representative.

CO-1 Control Performance Working Group

- ✓ Megan Doner of Independent Electricity System Operator will no longer serve as an alternate representative.

CO-2 System Operator Training Working Group

- ✓ Jordan Cope of the Independent Electricity System Operator to succeed Robert Kapteyn of the Independent Electricity System Operator as an alternate representative.
- ✓ Ryan Smith of ISO New England to serve as an alternate representative.

CO-8 Systems Operations Managers Working Group

- ✓ Matthew Wharton of PJM to succeed Simon Tam as an alternate representative.
- ✓ Anuradha Satish of Independence Electricity System Operator to succeed Matthew Vos as an alternate representative.
- ✓ Jean-Sébastien Labbé of Hydro-Québec will serve as an alternate representative.

CO-10 System Operational Tools Working Group

- ✓ Thomas Weldon of ISO New England to succeed Osman Bileya of ISO New England as the primary representative.
- ✓ Osman Bileya of ISO New England to succeed Mike Zeoli of ISO New England as an alternate representative.
- ✓ Magalie Briere of Hydro-Québec to succeed Eugen Dimbu of Hydro-Québec as the primary representative.
- ✓ Daniel Ilse of the New York ISO to succeed Frank Kopeki of the New York ISO as an alternate representative.

CO-11 Restoration Working Group

- ✓ Marc Lyons of ISO New England to succeed John Pearson of ISO New England as an alternate representative.
- ✓ Corey Finch of National Grid to serve as the primary representative.

CO-12 Operations Planning Working Group

- ✓ Mallory Waldrip of ISO New England to serve as an alternate representative.
- ✓ Kim McKinley of the New Brunswick System Operator to succeed Rod Hicks of the New Brunswick System Operator as an alternate representative.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
March 1, 2023

- ✓ Nick Miner of ISO New England to succeed David Evans of ISO New England as an alternate representative.

CP-8 Working Group on the Review of Resource and Transmission Adequacy

- ✓ Steven Judd of ISO New England to succeed Fei Zeng of ISO New England as the primary representative.
- ✓ Ying Guo, Swagata Sharma and Kevin Osse of the New York ISO will no longer serve as observers.
- ✓ Peter Wong of ISO New England will no longer serve as an observer.
- ✓ Syeda Lubna of the New York ISO to serve as an observer.
- ✓ Guilherme Larangeira and Helve Saarela of ISO New England to serve as observers.
- ✓ John Delatto of PSEG Long Island to succeed Khatune Zannat as the primary representative.
- ✓ Hilme Athar of PSEG Long Island to succeed John Delatto as an alternate representative.

IST-2 Telecommunications Working Group

- ✓ Guillaume Lavoie of Hydro-Québec TransÉnergie to serve as an alternate representative.

SS-37 Base Case Development Working Group

- ✓ Siddharth Tyagi of the Independent Electricity System Operator to succeed Jeff Wai of the Independent Electricity System Operator as an alternate representative.
- ✓ Trupti Abhang of the New Brunswick Power Corporation to serve as an alternate representative.
- ✓ Sandra Gorgey of the Nova Scotia Power to succeed Peter Huynh of the Nova Scotia Power as an alternate representative.

SS-38 Working Group on Inter-Area Dynamic Analysis

- ✓ Nitish Sharma of National Grid to succeed Arash Nezam Sarmadi of National Grid as an alternate representative.

SS-39 Geomagnetic Disturbances Working Group

- ✓ Nathan Hansen of New York ISO to serve as an alternate representative.

2022 BPS List

Approved as provided in the agenda package.

2022 Interim Area Transmission Reviews

- ✓ New Brunswick - Approved as provided in the agenda package.
- ✓ New England - Approved as provided in the agenda package.
- ✓ Nova Scotia - Approved as provided in the agenda package.
- ✓ Québec - Approved as provided in the agenda package.

Policy Discussion

NPCC 2023 Corporate Reliability Goals

Mr. Lombardi indicated that the NPCC Board approved the NPCC 2023 Corporate Reliability Goals on February 8, 2023.

Messrs. Oks, Dunbar and Lombardi highlighted the following NPCC 2023 Corporate Reliability Goals, included in the agenda package, associated with the RCC:

- ✓ I-A Enhancing System Resilience
 - Goal IA-6 SAIS - Continuous improvement of SAIS program area.
Mr. Oks indicated that Goal IA-6 SAIS will determine how NPCC can enhance its situation awareness capabilities. A quarterly status report for this goal is provided the agenda package.
 - Goal IA-7 SAIS - Enhance System Resilience.
Mr. Oks identified that Goal IA-7 SAIS focuses on cold weather preparedness; specifically, development of an NPCC Cold Weather Preparedness Workshop.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
March 1, 2023

- ✓ I-B Assuring Energy Sufficiency.
 - Goal IB-1 RAPA - Provide recommendation(s) for energy sufficiency assessments within the NPCC.

Mr. Lombardi indicated that this is a continuation of last year's goal as it involves the multi-year industry activities associated with the EPRI Resource Adequacy for a Decarbonized Future Project and the US DOE Atlantic Offshore Wind Study. The outcome of this goal is how to better perform energy sufficiency and resource adequacy assessments. A quarterly status report for this goal is provided the agenda package.
 - Goal IB-1 SAIS - Assess gas-electric interdependencies.

Mr. Oks reported that this Goal is an extension of last year's goal and brings key stakeholders to the table to coordinate and collaborate to mitigate the risks of critical natural gas-electric interdependencies within the NPCC region.
- ✓ II Reliably Integrating the Resources brought forward by Societal De-Carbonization Objectives, including Distributed Energy Resources (DER) and Variable Energy Resources (VER).
 - Goal II-1 RAPA - Assess current inverter-based resources (IBR) Electromagnetic Transient (EMT) modeling practices to improve reliable integration of IBRs within NPCC.

Messrs. Lombardi and Lal indicated that this goal conducts a survey to determine the extent of IBR EMT modeling, software, and studies performed by the NPCC members and provide propose recommendations for the use and coordination of IBR EMT modeling and practices within NPCC.
 - Goal II-2 STD - Enhance the reliable integration of increasing amounts of DERs, VERs (including offshore wind (OSW)) by continuing outreach and information sharing opportunities with stakeholders emphasizing the role of future transmission, electric vehicle (EV) and building electrification integration. Review and revise, as required, the applicable NPCC Directories to address reliability contributions and challenges of changing technologies.

Mr. Dunbar indicated that IEEE Standard 2800-2022 will be reviewed to develop recommendations for incorporating provisions of the IEEE standard into the NPCC criteria. He also noted that four DER/VER Forums will be conducted to identify the need for regional transmission coordination because of building electrification, EVs and OSW integration.
 - Goal II-3 STD - Enhance outreach to states, provinces, planning authorities and other stakeholders to establish a higher degree of coordination and transparency during the energy transition brought forward by societal decarbonization objectives.

Mr. Dunbar reviewed the schedule to conduct four outreach sessions in 2023. A quarterly status report for this goal is provided the agenda package.
- ✓ III Addressing Cyber and Physical Security Threats
 - Goal III-1 SAIS - Expand regional support for and interaction with the EISAC and Canadian partners to facilitate information and best practices sharing within Northeastern North America. Enhance outreach and information exchange through interactions with agencies (e.g., NERC E- ISAC, DHS, DOE, Natural Resources Canada, and Federal, State and Local Law Enforcement) and to foster a more efficient working model for information and intelligence sharing.

Mr. Oks indicated that two cyber and two physical webinars/workshops are being planned to address cyber and physical security risk topics.

January 25, 2023 NERC 2023 Reliability Leadership Summit

Messrs. Oks and Klaube provided an overview of the 2023 Reliability Leadership Summit. The summit is used to identify, assess, and manage reliability priorities across the Electric Reliability



NORTHEAST POWER COORDINATING COUNCIL

Reliability Coordinating Committee Minutes

March 1, 2023

Organization and to document risks in the NERC Reliability Issues Steering Committee biennial report.

The summit was hosted by NERC and the Reliability Issues Steering Committee on January 25, 2023, in the Washington, DC and focused on four specific areas:

- ✓ Energy Policy;
- ✓ Security;
- ✓ Grid Transformation and Impact on Resiliency; and,
- ✓ New Technologies.

January 31 – February 2, 2023 NERC Reliability and Security Technical Committee Work Plan Summit

Mr. Oks noted that the Reliability and Security Technical Committee Work Plan Summit agenda is included in the agenda package. The summit was held January 31, 2023 through February 2, 2023; the RSTC leadership and the NERC Staff, and the leadership of the RSTC groups reviewed the RISC recommendations, the cold weather report recommendations, and the Risk Registry against the current RSTC work plan to identify and priorities any revisions to the work plan.

February 15-16, 2023 NERC MRC/BOT Meeting(s)

Mr. Oks mentioned that the agenda packages for the February 15-16, 2023 NERC MRC/BOT Meetings are included in the RCC agenda package. Mr. Oks noted that the February 15 Technical Session focused on three topics:

- ✓ Winter Preparations;
- ✓ Recent Physical Attacks; and,
- ✓ Integration of Inverter-based Resources.

Discussion Items

NPCC 2022-2023 Winter Operations Review

Mr. Oks summarized that the winter has been relatively mild without major incident. Following the introduction from Mr. Oks, each NPCC Area provided an overview of their respective NPCC 2022-2023 Winter Operations experience. While cold weather in the northeast region of the U.S. and Canada resulted in some NPCC Areas hitting all-time peak loads and experiencing tight supply conditions, each NPCC Area reliably served their respective peak load exposure.

Presentations given by Hydro-Quebec, Ontario, New England, and New Brunswick are included in the agenda package.

NPCC 2023 Summer Reliability Assessment

Messrs. Peng and Klaube presented the *2023 NPCC Summer Reliability Assessment* preliminary results as prepared by the NPCC CO-12 and the CP-8 Working Groups and as provided in the agenda package. The final report will be submitted for the RCC comment, and the Task Force on Coordination of Operation and the Task Force on Coordination of Planning consideration of approval on April 3, 2023. The assessment will be posted on the NPCC public website following the May 3, 2023 NPCC Board of Directors meeting.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
March 1, 2023

NPCC Task Force 2023-2024 Work Plan Overview

Ms. Philip called on each Task Force Chair to highlight their respective activities. Ms. Philip noted that additional information can be found in the agenda package, which contains all the individual Task Force updates.

Task Force on Coordination of Planning (TFCP)

Mr. Eisenhuth highlighted the following TFCP activities:

- ✓ Evaluated and approved 2022 Area Transmission Reviews;
- ✓ Reviewed and approved Remedial Action Schemes;
- ✓ Engaged with the Directory No. 1 Working Group;
- ✓ Each area shared their efforts to support energy transition to a de-carbonized and electrified society; and,
- ✓ Discussed and reviewed each areas planned implementation of IEEE 2800-2022.

Task Force on System Studies (TFSS)

Ms. Brake highlighted the following TFSS activities:

- ✓ Evaluated and approved 2022 Area Transmission Reviews;
- ✓ Performed annual update of the Bulk Power System List;
- ✓ Reviewed the classification type of Remedial Action Schemes; and,
- ✓ Reviewing energy transition and the need of EMT models.

Task Force on Infrastructure Security & Technology (TFIST)

Mr. Curry highlighted the following TFIST activities:

- ✓ Involvement in CIP Standard development and implementation
- ✓ Coordinate Communications
- ✓ Security Bulletin - Securing Small and Medium-Sized Businesses Supply Chains
- ✓ Support of associated NERC activities:
 - Security Integration and Technology Enablement Subcommittee;
 - Supply Chain Working Group; and,
 - IST-5 / Physical Security Working Group.

Task Force on Coordination of Operation (TFCO)

Mr. Oks highlighted the following TFCO activities:

- ✓ Directory No. 1, *Design and Operation of the Bulk Power System*;
- ✓ Directory No. 2, *Emergency Operations*;
- ✓ Continuing to monitor the activities around the February 2021 Winter Storm Uri event specifically the recommendation efforts being performed by the industry to determine NPCC opportunities to address any gaps from a regional perspective; and,
- ✓ Conducted Hydro-Québec Area Restoration Plan reviews in January 2023.

Task Force System Protection (TFSP)

Mr. Babu highlighted the following TFSP activities:

- ✓ Continuing the review of facility presentations;
- ✓ Reviewing and approving of Remedial Action Schemes; and,
- ✓ Engaged in ongoing discussions with TFCP on Live Tank Breakers.

NPCC 2023 Corporate Reliability Goals

Goal IA-6 SAIS Quarterly Status Report

Mr. Oks presented the Goal IA-6 SAIS. NPCC Situation Awareness Staff will be working with other Regional Entities' Situation Awareness departments to review and evaluate other Regional



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
March 1, 2023

Entities' Situation Awareness capabilities (tools, processes, reporting, response plans, et cetera) to look for opportunities to enhance NPCC's Situation Awareness team effectiveness in maintaining near real-time situation awareness of condition on the BPS.

The work plan is to engage and collaborate with four other Regional Entities over the course of the 2023 and based on the review and evaluation of other REs' capabilities, and input from the CO-8 WG and TFCO, NPCC Staff will identify recommendations to improve NPCC's real-time situation awareness of conditions on the BPS.

Goal IB-1 RAPA Quarterly Status Report

Messrs. Klaube and Lombardi presented the Goal IB-1 RAPA which involve the US DOE Atlantic Offshore Wind Transmission (AOSWT) Study and the EPRI Resource Adequacy for a Decarbonized Future initiative.

The US DOE Atlantic Offshore Wind Transmission Study is evaluating coordinated transmission solutions to enable offshore wind energy deployment along the U.S. Atlantic Coast. The US DOE has completed year one of its two year study. In this second year, the study will:

- ✓ Complete production cost modeling, capital investment estimation, and reliability studies,
- ✓ Perform stability analysis, transient-fault-behavior analysis, and resilience studies for the land based and offshore grid, and
- ✓ Deliver the final report.

NPCC staff is continuing their participation in the study plenary technical review committee and will provide quarterly updates to the RCC on the 2023 project deliverables.

EPRI has led the *EPRI Resource Adequacy for a Decarbonized Future* initiative since 2021 to accelerate the ongoing evolution of resource adequacy processes tools in decarbonizing power systems. The NPCC CP-8 Working Group on the Review of Resource and Transmission Adequacy is assisting the development of a regional case study reviewing a high renewable penetration future. Project deliverables (i.e., technical briefs, reports, and regional case results) summarizing solutions for resource adequacy gaps are being developed in 2023. NPCC Staff will continue to provide quarterly updates to the RCC on the progress of these deliverables.

Goal II-3 STD Quarterly Status Report

Mr. Dunbar presented the Goal II-3 STD which specifies the completion of three briefings with State and Provincial Regulators on NERC and NPCC reliability assessments to promote awareness of effective regional transmission planning in the face of the changing resource mix and the completion of a fourth briefing to identify specific Northeast emerging reliability risks.

NPCC anticipates coordinating separate State and Provincial outreach forums focused on NERC's Long Term Reliability Assessment (LTRA), NERC's Summer and Winter Reliability Assessments and NPCC's regional Reliability Assessment and Performance (RAPA) activities in support of these assessments.

An additional session to identify specific northeast emerging reliability risks associated with cyber and physical security will also be conducted.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
March 1, 2023

Informational Items

Mr. Philip referred the RCC to the Informational Items materials provided in the Agenda package.

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

Next RCC Meeting Date

June 7, 2023

Location

NYPA Office, White Plains, NY

Future RCC Meeting Dates

September 12, 2023

December 5, 2023

December 15, 2023

Location

[WebEx meeting]

TBD

[WebEx meeting]



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
March 1, 2023

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

and,

Federal Energy Regulatory Commission – David Ortiz, David O'Connor, Juan Villar

La Régie de L'Énergie – Christian Garneau

Ontario Energy Board – Catherine Ethier

United States Department of Energy – Adria Brooks

New Brunswick Department of Energy and Mines – David Sollows

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



September 13, 2023

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 June 7, 2023 RCC Meeting

Sir / Madam:

Attached are the Minutes of the June 7, 2023 meeting of the NPCC Reliability Coordinating Committee, as approved at the September 12, 2023 RCC meeting .

Sincerely,

Michael R. Lombardi

Michael R. Lombardi
Director, Reliability Assessments

cc: NPCC Staff



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

Ms. Philip called the meeting of the Reliability Coordinating Committee (RCC), held at the New York Power Authority White Plains, New York to order at 10:00 am.

Attendance

Officers of the Reliability Coordinating Committee

Anie Philip, Chair

Michael Jones, Co-Vice Chair

Maxime Nadeau, Co-Vice Chair

Long Island Power Authority

National Grid USA

Hydro-Québec

Sector 1 - Transmission Owners

Central Hudson Gas & Electric Corporation

Central Maine Power Company

Consolidated Edison Company of New York, Inc.

Eversource Energy

Hydro-One, Inc.

Long Island Power Authority

National Grid USA

New Brunswick Power Corporation

New York Power Authority

New York State Electric & Gas Corporation

Nova Scotia Power, Inc.

Orange & Rockland Utilities, Inc.

Rochester Gas & Electric Corporation

The United Illuminating Company

Vermont Electric Power Company, Inc.

Michael E. Ridolfino

Damian Interrante - Alternate

(via written proxy)

Martin Paszek - Alternate

George Wegh

Ajay Garg - Alternate

Anie Philip

Abhinav Rawat

Randy MacDonald

(proxy to Frank Ronci)

(via written proxy)

Chris Milligan

(proxy to Martin Paszek)

(via written proxy)

(via written proxy)

Frank Etori - Alternate

Sector 2 – Reliability Coordinators

Hydro-Québec

Ontario IESO

ISO New England, Inc.

New Brunswick Power Corporation

New York ISO

Maxime Nadeau

Gabriel Adam

James Helton

Scott Brown

Zach Smith

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

Entities

Consolidated Edison Company of New York, Inc.

Eversource Energy

Hydro-Québec

Long Island Power Authority

National Grid USA

New York Power Authority

Lincoln Burton - Alternate

David Cloutier - Alternate

Hakim Sennoun - Alternate

(proxy to Anie Philip)

Mike Jones

Gian DeLuca

Andrew Stewart - Alternate



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

Sector 4 Generation Owners

Consolidated Edison Company of New York, Inc.	(proxy to Martin Paszek)
Dominion Energy, Inc.	Sean Bodkin
Long Island Power Authority	(proxy to Anie Philip)
New York Power Authority	Frank Ronci
	Salvatore Spagnolo - Alternate
NextEra Energy Resources	Rigoberto Milla
Ontario Power Generation	David Kwan - Alternate
Talen Energy Marketing	(via written proxy)
Vistra Energy Corporation	Ken Stell

Sector 5 – Marketers, Brokers, and Aggregators

Consolidated Edison Company of New York, Inc.	(proxy to Martin Paszek)
Long Island Power Authority	(proxy to Anie Philip)
New York Power Authority	Christine Schmitt
	Fernando Granitto - Alternate
Utility Services of Vermont, LLC	(via written proxy)

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

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

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

New York State Reliability Council, LLC	Roger Clayton
RLC Engineering	David Conroy

NPCC Staff

Andrey Oks	Director of Operations Coordination
Brian Hogue	Information Systems & Security Management
Faisal Nahian	Senior Network and Infrastructure Engineer
Gerry Dunbar	Director, Reliability Standards and Criteria
Jessica Hala	Vice President, Finance and Treasurer
Karie Barczak	Senior Compliance Engineer
Khatune Zannat	Senior Reliability Assessment Engineer
Michael Lombardi	Director, Reliability Assessments
Neeraj Lal	Manager, System Studies
Quintin Lee	Manager, Events Analysis
Rafael Sahiholamal	Manager, System Protection
Lacy Skinner	Senior Engineer, Operations Coordination
Ryan McSherry	Senior Operations Engineer

Guests

Vincent Fihey	Chair, Task Force on Coordination of Planning
Ovidiu Vasilachi	Vice-Chair, Task Force on System Protection
William Vesely	Chair, Task Force on Infrastructure Security & Technology
Andrea VanLieu	Consolidated Edison Company of New York, Inc.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

Dan Taft	Consolidated Edison Company of New York, Inc.
Isen Widjaja	Independent Electricity System Operator
Nicole Pastore	Consolidated Edison Company of New York, Inc.
David Rivera	New York Power Authority
Zahid Qayyun	New York Power Authority
Patricia Lombardi	New York Power Authority
Brian Saez	New York Power Authority
Zakia El Omari	Vermont Electric Power Company, Inc

Introduction

Ms. Philip called the meeting to order at 10:00 AM, noted that the meeting is a hybrid meeting and gave thanks to the New York Power Authority for hosting the in-person meeting.

Mr. Ronci welcome the in-person participants to the New York Power Authority and provided a facility briefing on the building layout, logistics, and emergency procedures.

Attendees, both in-person and on the phone, introduced themselves by name and company affiliation.

Antitrust Guidelines for NPCC Meetings

Mr. Hogue read the NPCC Antitrust Guidelines provided in the agenda package.

Safety Message

Mr. Lal provided a safety message on parking lot situation awareness and safety.

Quorum

Mr. Lombardi indicated that a quorum had been achieved, by member attendance, proxy, or alternate designation. Mr. Lombardi also indicated receiving the following written proxies:

Sector 1 - Transmission Owners

Brian Evans-Mongeon - Utility Services of Vermont, LLC
Edward Roedel - The United Illuminating Company
Matt Saddler - Central Maine Power Company
Nicholas Poluch - Talen Energy Supply, LLC.
Tim Lynch - New York State Electric & Gas Corp.
Will Nichols - Rochester Gas & Electric

President & CEO Report

ERO Enterprise (NERC and Regional Entities) 2024 Budgets

Ms. Hala provided an overview of both the NPCC 2024 Business Plan and Budget and the ERO Enterprise 2024 Business Plan and Budget. A presentation was provided in the Agenda package.

Ms. Hala identified the NPCC 2024 focus areas and the 2024 initiatives that are key drivers which require increases in NPCC resources. Ms. Hala reviewed the 2024 Business Plan and Budget development process and noted that following today's RCC meeting that she will be



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

meeting with the FERC to review the ERO Enterprise draft No. 1 budgets. The NPCC Board of Directors will review the 2024 budget draft for approval at its June 21, 2023 meeting.

Chair Report

Agenda

Ms. Philip reviewed the agenda provided in the agenda package. The content of the agenda was discussed and unchanged.

NPCC Office

Mr. Lombardi reported on the NPCC office relocation. NPCC is staying in the same building at 1040 Avenue of the Americas, New York, NY but moving from the tenth floor to the fourth floor. The fourth floor office is expected to be available on July 1, 2023. The new fourth floor office is approximately half the space of the tenth floor space with a smaller Boardroom; NPCC staff will ensure that the Boardroom space is available for hosting task force and working group meetings when needed.

NPCC Document Classification and Handling Procedure

Messrs. Lombardi and Nahian indicated that the ERO Enterprise developed a new data classification and handling protocol to properly safeguard and share data across the enterprise. The new protocols are being phased in across the ERO Enterprise. NPCC rolled out training to staff in April, and the new classifications labels and handling requirements became effect for NPCC on May 1. The new protocol classifies data into four categories:

- ✓ Restricted-Confidential
- ✓ Confidential
- ✓ Limited Disclosure
- ✓ Public

Mr. Nahian provided information about the new classifications and noted that specific guidance will be provided as needed.

NPCC Portal

Mr. Nahian provided a status update on the NPCC consolidation of its existing documents sharing platforms into a new NPCC portal that uses SharePoint online to enhance the security and monitoring capabilities.

He reviewed the NPCC Portal Implementation Timeline and detailed the Proposed Sharefile to Portal Migration Dates that are scheduled in June 2023. Both the timeline and June scheduled implementation dates are included in the agenda package.

April 27, 2023 and May 25, 2023 NPCC DER/VER Forum

Mr. Dunbar indicated the NPCC Regional Standards Committee continues to host DER/VER Forums on relevant decarbonization topics. The Forums are part of NPCC's Strategic Corporate Plan and reflect the direction provided by the NPCC Board of Directors to continue outreach efforts with all of our stakeholders.

On April 27, 2023, a DER/VER Forum on the challenges of Transmission Integration was conducted. The session featured speakers from EPRI, PSE&G, Americans for a Clean Energy Grid (ACEG) and the Department of Energy's Office of Grid Deployment.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

Additionally, on May 25, 2023, a DER/VER Forum on IEEE 2800-2022, *IEEE Standard for Interconnection and Interoperability of Inverter-Based Resources (IBRs) Interconnecting with Associated Transmission Electric Power Systems*, was conducted. Presentations from ISO-New England, Pacific Northwest National Laboratory (PNNL) and Walling Energy Systems Consulting were provided.

Lastly, it was noted that the future upcoming DER/VER Forums are scheduled for August 10, 2023 and October 2023.

Mr. Dunbar noted that all DER/VER Forum presentations and recordings are posted on the NPCC public website.

NPCC 2023 Corporate Reliability Goal II-2 - IEEE 2800

Mr. Dunbar reported that NPCC 2023 Corporate Goal II-2 STD calls for the development of proposed recommendations to incorporate provisions of IEEE 2800-2022, *IEEE Standard for Interconnection and Interoperability of Inverter-Based Resources (IBRs) Interconnecting with Associated Transmission Electric Power Systems*, into the applicable NPCC Criteria for RCC and RSC input.

NPCC Staff and its consultant will review IEEE 2800-2022 and identify potential enhancements to the criteria in the functional areas of Protection, Operations (Reserve and Restoration) and Planning (Modeling and Verification).

The summary review of IEEE 2800-2022 and the draft recommendations, in accordance with Goal II-2 STD, will be provided to the RCC and RSC for input during a 30-day comment period to be conducted in September 2023.

Consent Agenda

The Reliability Coordinating Committee unanimously approved the following Consent Agenda Items:

March 1, 2023 RCC Meeting Minutes

Approved as provided in the agenda package.

RCC Roster Changes

The following changes to the RCC membership were approved:

Sector 2 - Reliability Coordinators

- ✓ Kevin DePugh to no longer serve as an alternate for the New York Independent System Operator.

Sector 4 - Generator Owners

- ✓ Nicholas Poluch to succeed Scott Etnoyer as the representative for Talen Energy Supply, LLC.
- ✓ Colleen Dolan-VanZandt to succeed Nicholas Poluch as the alternate for Talen Energy Supply, LLC.
- ✓ Bendong Sun of Bruce Power will serve as the representative.

Task Force/Working Group Roster Changes

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

Task Force on Coordination of Planning

- ✓ Xia Jiang of New York Power Authority to succeed Sunil Palla as an alternate representative.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

- ✓ Yves Albert of New Brunswick Power to succeed Andrew Wilcox as an alternate representative.

Task Force on Coordination of Operation

- ✓ Jean-Sebastien Labbé of Hydro Québec (RC) will serve as an alternate representative.
- ✓ Josh Netherton of MISO will no longer serve as a representative.
- ✓ Lacy Skinner of Northeast Power Coordinating Council will serve as an alternate representative.

Task Force on System Protection

- ✓ Michael Colby of PPL will no longer serve as a primary representative.

Task Force on System Studies

- ✓ Kevin DePugh of New York ISO will no longer serve as an alternate representative.

Task Force on Infrastructure Security & Technology

- ✓ Suzanne Black of Network & Security Technologies, Inc. will serve as an alternate representative.
- ✓ Carlos Guadron of New York Power Authority will serve as an alternate representative.
- ✓ Ryan Lebel of Utility Services of Vermont, LLC will no longer serve as an alternate representative.

CO-1 Control Performance Working Group

- ✓ Lacy Skinner of Northeast Power Coordinating Council will serve as an alternate representative.

CO-2 System Operator Training Working Group

- ✓ Justin Shumaker of ISO New England will no longer serve as the Chair.
- ✓ Jason Marshall of New Brunswick Power will no longer serve as the Vice Chair.
- ✓ Jonathan Sherrard of New Brunswick Power to succeed Jason Marshall as the primary representative.
- ✓ Ryan Smith of ISO New England to succeed Justin Shumaker as the primary representative.
- ✓ Lacy Skinner of Northeast Power Coordinating Council will serve as the primary representative.

CO-8 Systems Operations Managers Working Group

- ✓ Lacy Skinner of New York Independent System Operator will no longer serve as an alternate representative.
- ✓ Lacy Skinner of Northeast Power Coordinating Council will serve as an alternate representative.
- ✓ Troy McLaughlin of ISO New England will serve as an alternate representative.
- ✓ Josh Netherton of MISO will no longer serve as a representative.

CO-10 System Operational Tools Working Group

- ✓ Lacy Skinner of Northeast Power Coordinating Council will serve as an alternate representative.

CO-11 Restoration Working Group

- ✓ Tim Hicks of New Brunswick Power to succeed Ron Daigle as the primary representative.
- ✓ Jason Marshall of New Brunswick Power will serve as an alternate representative.
- ✓ John Antonakos of Independent Electricity System Operator will no longer serve as an alternate representative.
- ✓ Declan Cahill of New York Independent System Operator to succeed Abishek Penti as the primary representative.
- ✓ Rajasekhar Reddy Dontireddy of New York Independent System Operator will serve as an alternate representative.
- ✓ David Ross of Eversource Energy will serve as the primary representative.
- ✓ Lacy Skinner of Northeast Power Coordinating Council will serve as the primary representative.

CO-12 Operations Planning Working Group

- ✓ Khatune Zannat of NPCC to serve as an observer.

CO-14 Operations Load Forecast Working Group

- ✓ Tim Hicks of New Brunswick Power will no longer serve as an alternate representative.
- ✓ Anthony Ionno of Independent Electricity System Operator will serve as an alternate representative.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

- ✓ Marcus Smith of PJM will serve as an observer.
- ✓ Lacy Skinner of Northeast Power Coordinating Council will serve as an alternate representative.

CP-8 Working Group on the Review of Resource and Transmission Adequacy

- ✓ Mikaela Lucas of New York ISO to serve as an observer.
- ✓ Khatune Zannat of NPCC to serve as an observer.

SS-37 Base Case Development Working Group

- ✓ Nathan Gomes of the Independent Electricity System Operator will serve as an alternate representative.

SS-38 Working Group on Inter-Area Dynamic Analysis

- ✓ Sandra Gorgey of Nova Scotia Power, Inc. will serve as an alternate representative.

TFSP Scope Revision

Approved as provided in the agenda package.

NPCC Directory No. 1 Implementation Plan – Extension Request

Approved as provided in the agenda package.

Approval Agenda

2022 Ontario Comprehensive Area Transmission Review

Mr. Widjaja presented the 2022 Ontario Comprehensive Area Transmission Review provided in the Agenda package. The Ontario Comprehensive Area Transmission Review assessed the reliability of the Ontario Area Bulk Power System by examining the impact of changes in forecasted system conditions and planned facilities. The Ontario comprehensive transmission assessment concluded that the Ontario transmission system, as planned through 2027, remains in conformance with NPCC Directory No. 1.

The Ontario IESO presented the 2022 Ontario Comprehensive Area Transmission Review report to the Task Force on System Studies (TFSS) at the March 2023 TFSS meeting. TFSS agreed that the Bulk Power System planned for Ontario is in conformance with NPCC Directory No. 1.

The Ontario IESO presented the 2022 Ontario Comprehensive Area Transmission Review report to the Task Force on Coordination of Planning (TFCP) at the May 9 -10, 2023 TFCP meeting. TFSS agreed that the Bulk Power System planned for Ontario is in conformance with NPCC Directory No. 1. Based on its review, TFCP recommended the RCC approval of the 2022 Ontario Comprehensive Area Transmission Review report.

The RCC then unanimously approved the 2022 Ontario Comprehensive Area Transmission Review provided in the Agenda package.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

Policy Discussion

May 3, 2023 NPCC Board Meeting - Summer 2023 Reliability Assessment

Mr. Lombardi reported that the NPCC Board was presented with the results of the NPCC 2023 Summer Reliability Assessment which forecasts the NPCC Region will have an adequate supply of electricity this summer. Mr. Lombardi indicated that the NPCC media release, “Summer Reliability Assessment Forecasts Adequate Electricity Supplies,” was published on May 4, 2023, following the NPCC Board meeting. An overview of the Summer 2023 Reliability Assessment is included in the agenda package.

May 10-11, 2023 NERC MRC/BOT Meeting(s)

Mr. Oks mentioned that the agenda packages for the May 10-11, 2023 NERC MRC/BOT Meetings are included in the RCC agenda package. Mr. Oks noted two action items from the NERC Board agenda:

- ✓ Level 3 Alert Essential Actions to Industry: Cold Weather Preparations for Extreme Weather Events III – Approved by the NERC Board. This is the first Level 3 Alert even issued and consists of eight Essential Actions, as follows:
 1. Each GO should calculate the Extreme Cold Weather Temperature (ECWT)³ for each plant location prior to the next winter season.
 2. Each GO should, pursuant to EOP-011-2 Requirement R7, identify in the cold weather preparedness plan, the Generator Cold Weather Critical Components and freeze protection measures implemented on those components prior to the next winter season.
 3. Each GO should identify which units are capable of operating at the ECWT as currently built, and which units require additional freeze protection measures to operate at that temperature.
 4. Each GO should identify which units experienced a Generator Cold Weather Reliability Event in the 2022–2023 winter season.
 5. Each TOP should update their operating plan(s) prior to the next winter season, to include provisions to minimize the overlap of circuits that are designated for manual load shed and circuits that are utilized for underfrequency load shed (UFLS) or undervoltage load shed (UVLS).
 6. Each BA should update their operating plan(s) prior to the 2023–2024 winter season, to include provisions for TOPs to implement operator controlled manual load shed; and manage generating resources in its BA Area.
 7. Each GO should provide its RC, BA, and TOP the ECWT for its location prior to the next winter season and whether Generator Cold Weather Critical Component freeze protection measures will not be implemented on components prior to the next winter season.
 8. Each GO should share their responses with their respective BAs and TOPs to allow for updates to any operating plans before the next winter seasons.
- ✓ Internal Network Security Monitoring Data Request
 - Responds to FERC directive for NERC to develop Reliability Standards requirements to require internal network security monitoring for all high impact Bulk Electric System (BES) Cyber Systems and medium impact BES Cyber Systems with External Routable Connectivity.
 - The NERC Board authorized issuance the data request to the reporting entities to provide NERC with information needed to determine the quantity of locations and types of locations as directed by the Commission and enable NERC to complete its study within the directed deadline. Once authorized, the data request will be issued through the ERO Portal.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

Mr. Oks also reported that an update was provided to the NERC Board on the Standards Process Improvement Opportunities. NERC has convened a Standards Process Stakeholder Engagement Group (SPSEG) to provide feedback and develop consensus recommendations for improving agility of the process while maintaining the key role of stakeholders in producing consensus standards. Proposed changes to the Standard Processes Manual are currently posted for a second 45-day formal comment period and additional ballot.

June 21-22, 2023 NERC Reliability and Security Technical Committee

Mr. Lombardi noted that the Reliability and Security Technical Committee DRAFT agenda is included in the agenda package. Messrs. Lombardi, Sahiholamal, and Wegh highlighted the following items:

- ✓ White Paper – Overview of Energy Reliability Assessments – Volume 1
The purpose of this whitepaper is to clarify what an energy reliability assessment is and recommend elements for consideration when performing an assessment. Energy reliability assessments account for the finite nature of stored fuels and their replenishment characteristics. In addition, the availability of natural gas to supply electric generation can impact reliability during high natural gas demand periods throughout the year.

The 45 day industry comment period was completed on April 21, 2023 and comments were addressed. The NERC ERAFT is seeking approval of the white paper at the RSTC June 21, 2023 meeting.
- ✓ SAR for Revisions to MOD-031 Standard
The NERC SPIDERWG drafted a SAR to provide clarity to MOD-031 with respect to DER and proposes implementing a process to send data for existing and forecasted DER capacity information. The NERC SPIDERWG received input and comments from the NERC RSTC and NERC RAS; the feedback received has been addressed and the NERC SPIDERWG is seeking endorsement of the SAR at the RSTC June 21, 2023 meeting.
- ✓ Reliability Guideline: DER Data Collection and Model Verification of Aggregate DER
As part of the RSTC guideline triennial review process, the NERC SPIDERWG combined two existing guidelines into this updated guideline. The guideline update focuses on data collection language describing current EMT efforts, particularly inclusion of load plus DER when modeling the Transmission-Distribution Interface to perform simulations.

At the RSTC June 21, 2023 meeting, the NERC SPIDERWG is seeking approval of this reliability guideline and retirement of:
 - Reliability Guideline: DER Data Collection for Modeling in Transmission Planning Studies
 - Reliability Guideline: DER Model Verification of Aggregate DER Modeling used in Planning Studies
- ✓ SPCWG Order 881-A Position Paper
FERC orders 881 and 881A will require industry to develop and implement Ambient Adjusted Ratings for transmission facilities in the United States. The SPCWG requests the RSTC to endorse the conclusions and recommendations of the position paper, which can then be used to help work out an appropriate implementation timeframe and may provide some guidance to the industry.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

Discussion Items

NPCC Task Force 2023-2024 Work Plan Overview

Ms. Philip called on each Task Force Chair to highlight their respective activities. Ms. Philip noted that additional information can be found in the agenda package, which contains all the individual Task Force updates.

Task Force on Coordination of Operation (TFCO)

Mr. McSherry highlighted the following TFCO activities:

- ✓ 2023 Spring NPCC System Operator Seminar (No. 90) was held on May 17-18, 2023.
- ✓ Triennial review of Directories:
 - Directory No. 1, *Design and Operation of the Bulk Power System*
 - Directory No. 2, *Emergency Operations*
 - Directory No. 5, *Reserve*
 - Directory No. 6, *Reserve Sharing Groups*
- ✓ Triennial review Area Restoration Plan reviews - completed Hydro-Québec, Maritimes, and New England

Task Force on System Studies (TFSS)

Mr. Lal highlighted the following TFSS activities:

- ✓ 2023 Area Review Proposals:
 - Maritimes_NB – Interim
 - Maritimes_NS – Interim
 - New England - Interim
 - New York - Interim
 - Ontario - Interim
 - Québec - Intermediate
- ✓ Mid-year RAS list update
- ✓ Electromagnetic Transient (EMT) modeling survey

Task Force on Coordination of Planning (TFCP)

Mr. Fihey highlighted the following TFCP activities:

- ✓ Reviewed and approved Remedial Action Schemes
- ✓ Creation of a Remedial Action Schemes approval form
- ✓ Energy Transition discussions, for example:
 - Area collaboration
 - Tie strength requirements
 - Longer term resource adequacy studies
 - Projected reduction of natural gas resources
 - Projected increase of inverter based resources.
 - System inertia and Electromagnetic Transient (EMT) modeling

Task Force System Protection (TFSP)

Mr. Vasilachi highlighted the following TFSP activities:

- ✓ Assessment of proposed protection systems and remedial action schemes - 30 system protection facility presentations reviewed to date.
- ✓ Initiating the review of Directory No. 4, *Bulk Power System Protection Criteria*
- ✓ SP-7 reviewing protection system failure by manufacturer to identify any systemic causes.

Task Force on Infrastructure Security & Technology (TFIST)

Mr. Vesely highlighted the following TFIST activities:



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

- ✓ Support of associated NERC activities:
 - NERC Project 2016-02, Modifications to CIP Virtualization suite of standards
 - NERC Project 2023-03 Internal Network Security Monitoring Standard Authorization Request
 - NERC CIP-003-9, Cyber Security — Security Management Controls
- ✓ Operational technology

Operational Technologies Policy Forum

Mr. Vesely reported that one of the goals of the policy forum is create a means to coordinate operational technology (OT) and control system leadership communication among utilities in the northeast. He noted that in a number of companies, unlike information technology with a Chief Information Officer, there is a gap in identifying the who in cyber security has the executive leadership for operational technologies as OT responsibilities are often distributed through the applicable program areas.

Ms. Philip indicated that RCC members should talk internally at their companies and come to the next RCC meeting prepare to discuss proposed next steps to address any gap in OT structures, coordination, and responsibilities.

2023 Corporate Reliability Goals

Goal IA-6 SAIS Quarterly Status Report

Mr. McSherry presented the Goal IA-6 SAIS quarterly status report. As part of the NPCC's 2023 Goals, NPCC Situation Awareness (SA) Staff will be working with other Regional Entities' SA departments to review and evaluate other Regional Entities' SA capabilities (tools, processes, reporting, response plans, etc.) to look for opportunities to enhance NPCC's SA team effectiveness in maintaining near real-time situation awareness of condition on the BPS.

The work plan is to engage and collaborate with four other Regional Entities over the course of the 2023, per (current, tentative) schedule below, and based on the review and evaluation of other REs' capabilities identify recommendations to improve NPCC's real-time situation awareness of conditions on the BPS. Additionally, NPCC solicited input from the CO-8 WG members during their February 16-17, 2023 and May 1-2, 2023 and TFCO members during their March 15-16, 2023 and May 11-12, 2023 meetings, for any enhancements to the NPCC's SA activities and capabilities.

- ✓ ReliabilityFirst (RF) – August 29, 2023
- ✓ Texas Reliability Entity (TRE) – July 26, 2023
- ✓ Western Electricity Coordinating Council (WECC) – October 13, 2023
- ✓ Midwest Reliability Organization (MRO) and/or SERC Reliability Corporation (SERC) – date TBD/Virtual

A quarterly status report for this goal is provided the agenda package.

Goal IB-1 RAPA Quarterly Status Report

Ms. Zannat and Mr. Lombardi presented the Goal IB-1 RAPA which involves NPCC staff participation on the Electric Power Research Institute (EPRI) Resource Adequacy for a Decarbonized Future initiative and the US DOE Atlantic Offshore Wind Transmission (AOSWT) Study. Ms. Zannat noted that NPCC staff are participating in the recently created Energy Systems Integration Group (ESIG) Redefining Resource Adequacy Task Force.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

Through both the EPRI and ESIG Resource Adequacy activities the objective is to accelerate the evolution of resource adequacy processes and tools in assessing the reliability of decarbonizing power systems. The RA activities consists of several deliverables to accomplish objectives, including, but not limited to:

- ✓ metrics and criteria for resource adequacy,
- ✓ scenario definition guidelines for resource adequacy studies (including climate and weather scenario analysis),
- ✓ review existing resource adequacy tools, and
- ✓ provide guidance and solutions for the current gaps in resource adequacy studies.

Since the last quarterly status report to the RCC, the DOE AOSWT held both a Stakeholder Workshop and a Technical Review Committee meeting. Recent study activities have focused on radial and interregional topologies, as well as production cost and resource adequacy analysis.

With the Atlantic Offshore Wind Transmission Study more than 50 percent completed, the workshop was based on the preliminary analysis which identified some initial planning and operations recommendations over the following time frames:

- ✓ Immediate Actions before 2025
- ✓ Near-term Actions for 2025 – 2030
- ✓ Mid-term Actions for 2030 – 2040
- ✓ Long-term Actions for Sustainable Growth

The AOSWT TRC reviewed results for the production cost and resource adequacy analysis performed by National Renewable Energy Laboratory (NREL). The focus for the resource adequacy analysis is to observe how much more reliable the interregional system which had additional transmission capability is compared to the radial network by comparing the equivalent firm capacity need to be added to reduce the unserved energy to the interregional offshore network. NREL will be performing analysis to estimate resource adequacy benefits for all transmission topologies.

A quarterly status report for this goal is provided the agenda package.

Goal IB-1 SAIS G-E interdependencies-critical loads

Mr. Oks presented the Goal IB-1 SAIS quarterly status report. As part of the NPCC's 2023 Goals, NPCC Situation Awareness (SA) Staff will be working with NPCC entities and gas entities within (and potentially outside) NPCC's footprint to hold roundtable discussions to share information regarding critical natural gas electric load interdependencies, and to identify opportunities to mitigate the risks of critical natural gas-electric load interdependencies within the NPCC region.

The NPCC Staff requested that the RCC provide feedback and input on the goal's activities to date and going forward and any specific topics within the scope of the goal that should be considered.

A status report for this goal is provided the agenda package.

Goal II-3 STD Quarterly Status Report

Mr. Dunbar presented the Goal II-3 STD which specifies the completion of three briefings with State and Provincial Regulators on NERC and NPCC reliability assessments to promote



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

awareness of effective regional transmission planning in the face of the changing resource mix and the completion of a fourth briefing to identify specific Northeast emerging reliability risks.

On March 31, 2023, NPCC conducted an outreach session with State and Provincial Regulators focused on regional cyber and physical challenges. During the session, a representative from the Electricity Information Sharing and Analysis Center (E-ISAC) provided insight on the E-ISAC's engagement with asset owners and the analysis of security threats and mitigation strategies.

During the same session NPCC Staff described partnerships with local and state law enforcement agencies and the current cyber and physical regional threats to the energy sector.

Additionally on May 19, 2023, an outreach briefing focused on NERC's 2023 Summer Reliability Assessment (SRA) and NPCC's regional Reliability Assessment and Performance (RAPA) activities in support of the SRA was conducted.

NPCC anticipates coordinating additional State and Provincial outreach sessions in 2023 focused on NERC's Long Term Reliability Assessment (LTRA) and NERC's 2023-2024 Winter Reliability Assessment.

A quarterly status report for this goal is provided the agenda package.

Informational Items

Ms. Philip referred the RCC to the Informational Items materials provided in the Agenda package. Mr. Oks was asked to give an update on the upcoming New England Winter Gas-Electric Forum.

June 20, 2023 New England Winter Gas-Electric Forum

Mr. Oks indicated that the upcoming forum is a continuation of the discussion from the September 8, 2022, forum about the electricity and natural gas challenges facing the New England region. This forum will discuss studies on extreme weather risks, infrastructure on the electric and gas systems in New England, and infrastructure and market design reforms to aid with the electric and gas system challenges faced historically during New England winters. The goal of this forum is to identify solutions to address the electric and gas system challenges and discuss timing of their potential implementation.

The forum is a one day event that will include panel discussions with a focus that includes the winter 2023-2024 operation period, the role the Everett marine terminal, and market design. Additional information is provided in the agenda package.

Future Meetings

Next RCC Meeting Date

September 12, 2023

Location

[WebEx meeting]

Future RCC Meeting Dates

December 5, 2023

December 15, 2023

Location

New York, NY

[WebEx meeting]



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

Other Matters

Winter Storm Elliott

Mr. Oks indicated that the inquiry is ongoing which limits the discussion at this time. However, two high level point worth noting are:

1. FERC June 15, 2023 Open Meeting will include a presentation on the *FERC-NERC-Regional Entity Joint Inquiry into Winter Storm Elliot*.
2. To ensure that the findings and recommendations are available before the upcoming winter season, the schedule has been advanced to:
 - ✓ Inquiry findings and recommendations to be presented at the FERC September 2023 Open Meeting
 - ✓ Final Report target for issuance in October 2023

Interregional Transfer Capability Study

Mr. Lal provided a heads up that the recently signed Fiscal Responsibility Act of 2023 has a directive that the Electric Reliability Organization in consultation with each regional entity and each transmitting utility shall conduct a study of total transfer capability between transmission planning regions.

In a June 2, 2023 press release, “NERC pledges to move forward on passage of the interregional transfer capability study directed in the debt ceiling legislation.” Mr. Lal indicated that NPCC does not have much information at this point as this activity is new. However, at future meetings, NPCC staff can update the RCC, as necessary, on the status of this activity once more information is available.

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



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
June 7, 2023

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

and,

Federal Energy Regulatory Commission – David Ortiz, David O'Connor, Juan Villar

La Régie de L'Énergie – Christian Garneau

Ontario Energy Board – Catherine Ethier

United States Department of Energy – Adria Brooks

New Brunswick Department of Energy and Mines – David Sollows

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



December 13, 2023

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 12, 2023 RCC Meeting

Sir / Madam:

Attached are the Minutes of the September 12, 2023 meeting of the NPCC Reliability Coordinating Committee, as approved at the December 5, 2023 meeting.

Sincerely,

Michael R. Lombardi

Michael R. Lombardi
Director, Reliability Assessments

cc: NPCC Staff



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023

Ms. Philip called the meeting of the Reliability Coordinating Committee (RCC), held by Teams to order at 10:00 am.

Attendance

Officers of the Reliability Coordinating Committee

Anie Philip, Chair
Michael Jones, Co-Vice Chair
Maxime Nadeau, Co-Vice Chair

Long Island Power Authority
National Grid USA
Hydro-Québec

Sector 1 - Transmission Owners

Central Hudson Gas & Electric Corporation

Michael E. Ridolfino
Damian Interrante - Alternate
(via written proxy)
Martin Paszek - Alternate
George Wegh
Ajay Garg - Alternate
Anie Philip
Mark Domino - Alternate
(proxy to Frank Ronci)
(via written proxy)
Chris Milligan
(proxy to Martin Paszek)
(via written proxy)
Edward Roedel
Hantz A. Presume

Central Maine Power Company
Consolidated Edison Company of New York, Inc.
Eversource Energy
Hydro-One, Inc.
Long Island Power Authority
National Grid USA
New York Power Authority
New York State Electric & Gas Corporation
Nova Scotia Power, Inc.
Orange & Rockland Utilities, Inc.
Rochester Gas & Electric Corporation
The United Illuminating Company
Vermont Electric Power Company, Inc.

Sector 2 – Reliability Coordinators

Hydro-Québec
Ontario IESO
ISO New England, Inc.
New Brunswick Power Corporation
New York ISO

Maxime Nadeau
Gabriel Adam
James Helton
Scott Brown
(proxy to Udayan Nair)

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

Consolidated Edison Company of New York, Inc.
Eversource Energy
Hydro-Québec
Long Island Power Authority
National Grid USA
New York Power Authority

Lincoln Burton - Alternate
David Cloutier - Alternate
Hakim Sennoun - Alternate
(proxy to Anie Philip)
Mike Jones
(proxy to Frank Ronci)

Sector 4 Generation Owners

Bruce Power
Consolidated Edison Company of New York, Inc.
Dominion Energy, Inc.
Long Island Power Authority
New York Power Authority
Ontario Power Generation

Bendong Sun
(proxy to Martin Paszek)
Sean Bodkin
(proxy to Anie Philip)
Frank Ronci
David Kwan - Alternate



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023

Vistra Energy Corporation

Ken Stell

Sector 5 – Marketers, Brokers, and Aggregators

Consolidated Edison Company of New York, Inc.

(proxy to Martin Paszek)

New York Power Authority

(proxy to Frank Ronci)

Utility Services of Vermont, LLC

(proxy to Devon Tremont)

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

Long Island Power Authority

(proxy to Anie Philip)

New York Power Authority

Shivaz Chopra

Robert Knowlton - Alternate

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

New York State Reliability Council, LLC

Roger Clayton

RLC Engineering

David Conroy

NPCC Staff

Andreas Klaube

Manager, Probabilistic Assessment

Andrey Oks

Director of Operations Coordination

Brian Deckert

Senior Standards and Criteria Engineer

Brian Robinson

Senior Entity Risk Assessment Analyst

Charles Dickerson

President and CEO

Damase Hebert

General Counsel & Corporate Secretary

Douglas Vitale

Security Outreach Manager

Faisal Nahian

Senior Network and Infrastructure Engineer

Gerry Dunbar

Director, Reliability Standards and Criteria

Karie Barczak

Senior Compliance Engineer

Khatune Zannat

Senior Reliability Assessment Engineer

Lacy Skinner

Senior Engineer, Operations Coordination

Matthew Forrest

Senior O&P Entity Risk Analyst

Michael Lombardi

Director, Reliability Assessments

Neeraj Lal

Manager, System Studies

Phil Fedora

Chief Engineer and Vice President Reliability Services

Quintin Lee

Manager, Events Analysis

Quoc Le

Manager, System Planning

Ruida Shu

Reliability Standards Manager

Ryan McSherry

Senior Operations Engineer

Scott Nied

Vice President, Compliance

Shayan Rizvi

Senior Reliability Assessment and Performance Analysis Engineer

Tracy D. Kinsella-DeWees

Senior Entity Risk Assessment Analyst

William Clauss

Reliability Assessment and Performance Analysis Data Analyst

Guests

David Short

Independent Electricity System Operator

Guershon Dorismond

Consolidated Edison Company of New York, Inc.

Harshil Patel

Avangrid

Jeannette Gauthier

Hydro-Québec

John Babu

Eversource

Joy Brake

Chair, Task Force on System Studies



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023

Julien Brouillard	Hydro-Québec
Keith Lee	Vice-Chair, Task Force on System Protection
Marc Morissette	Vice-chair, Task Force on System Studies
Robert Eisenhuth	Vice-chair, Task Force on Coordination of Planning
Robin Berry	National Grid
Vincent Fihey	Chair, Task Force on Coordination of Planning
William Vesely	Chair, Task Force on Infrastructure Security & Technology

Introduction

Ms. Philip called the meeting to order at 10:00 AM.

Antitrust Guidelines for NPCC Meetings

Mr. Klaube read the NPCC Antitrust Guidelines provided in the agenda package.

Safety Message

Ms. Zannat provided a safety message on Safety Awareness - School Bus Safety.

Quorum

Mr. Lombardi indicated that a quorum had been achieved, by member attendance, proxy, or alternate designation.

Development of 2024 NPCC Corporate Reliability Goals

September 6, 2023 NPCC Board Strategy Session

Mr. Dickerson indicated that the current NPCC Strategic Plan was compared to the recently approved NERC 2023 Risk Profiles. The comparison determined that the NPCC strategy is aligned with and supports the NERC risk profiles.

A new item included in NERC profile is the Energy Policy. He noted that the energy policy is specifically important to the NPCC region as the decarbonization policies of our area is probably one of the most progressive involving multiple areas such as the transmission sector, generation sector, transportation and building electrification.

Mr. Dickerson stated that the focus areas for NPCC remains the reliable integration of distributed resources, enhancing system resilience, and addressing cyber and physical threats. Although these focus areas have not changed, he indicated that this year's evolution of the strategic plan includes the addition of three initiatives:

- ✓ Interregional Transfer Capability Study
- ✓ IBR Gap Analysis for the Region
- ✓ Study of Gas System in the Northeast to support the Electric System

Mr. Dickerson informed the RCC that its input will be paramount to ensure that the NPCC 2024 Corporate Reliability Goals are helpful to the NPCC membership.

September 7, 2023 NPCC Board Meeting

Mr. Fedora gave an overview of the NPCC Board of Directors meeting and noted that NERC Board Trustee Ms. Collen Sidford attended the meeting and provided the NERC Board of



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023

Trustees perspective on NERC focus areas and emerging risk. Ms. Sidford noted that NERC, like NPCC, is involved and responding to emerging unfunded opportunities. A round table discussion with the NPCC Board of Directors covered a wide range of issues. The Board consensus was the NPCC Strategic Plan was broad enough to cover the risks discussed.

Mr. Fedora mentioned that ideas from the Board Strategy Session will be used to develop straw proposals for 2024 Corporate Reliability Goals. The proposed RAPA related goals will be discussed with the appropriate NPCC Task Forces and RCC for any input before the 2024 Corporate Reliability Goals being presented to the NPCC Board of Directors for final development and approval.

Messrs. Fedora and Lal provided an update on the Interregional Transfer Capability Study (ITCS) that is being conducted by the ERO Enterprise and industry stakeholders. The requirement to perform the ITCS comes from the United States Congress *Fiscal Responsibility Act (FRA) of 2023*. Specifically, the FRA includes a provision for NERC to conduct a study on the reliable transfer of power between neighboring transmission planning areas. Although the filing deadline for the ITCS is December 2, 2024, it is expected that interregional transfer capability will continue to be studied beyond 2024. An advisory group of industry experts is being formed with at least two volunteers from each Regional Entity. As discussed at the RCC, NPCC will propose an advisory group representative from both the United States and Canada. RCC members should make any recommendations for an advisory group representative to Mr. Fedora.

Mr. Fedora closed out the September 7, 2023, NPCC Board Meeting overview by noting a Board member retirement, administrative items, and the next NPCC Board Meeting is scheduled to be a virtual meeting on October 25, 2023.

Chair Report

Agenda

Ms. Philip reviewed the agenda provided in the agenda package. The content of the agenda was discussed and unchanged.

December 5, 2023 RCC Meeting Location

Mr. Lombardi indicated that the December 5, 2023 is scheduled as an in-person meeting with a virtual option for people attending remotely. The NPCC staff is still working to finalize a meeting location; mid-town Manhattan hotel cost is expensive, so lower Manhattan and New Jersey hotels are being explored.

NPCC Office Status Update

Mr. Nahian reported on the NPCC office relocation. As previously mentioned, NPCC is in the same building at 1040 Avenue of the Americas, New York, NY but has moved from the tenth floor to the fourth floor. The staff space is available for use, however, supply chain issues, such as boardroom furniture and server air conditioning, has delayed the use of the conference room and boardroom.

Development of 2024-2025 Task Force Work Plans

Ms. Philip directed the Task Force Chairpersons to develop their respective 2024-2025 Task Force Work Plans considering the current NPCC Strategic Plan and input received from the September meeting of the NPCC Board of Directors. The Task Force Chairpersons were asked to provide a draft of their work plans by the end of October 2023 to the RCC leadership for



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023

review. Task Forces should present their draft 2024-2025 Work Plans to the RCC for approval at the December RCC meeting.

2024 RCC Scope and 2024-2025 Work Plan

Ms. Philip indicated that the approved 2024-2025 Task Force Work Plans will inform the development of the 2024 RCC Scope and 2024-2025 Work Plan submitted to the NPCC Board of Directors for approval in early 2024.

Proposed 2024 RCC Meeting Dates and Locations

Mr. Lombardi reviewed the proposed RCC meeting dates and locations for 2024 RCC meeting. The proposed dates and locations were included in the meeting package and include meeting dates in February, May, September, and December. It was noted that the information provided is tentative for review and comment.

The 2024 meeting schedule should be finalized at the December 2023 RCC meeting.

August 10, 2023 NPCC DER/VER Forum

Mr. Dunbar provided a summary of the August 10, 2023 DER/VER Forum. The Forum was focused on key developments surrounding Offshore Wind and featured presentations from Vineyard Offshore, Eversource, the New York State Energy Research and Development Authority (NYSERDA) and Con Edison Transmission.

Mr. Dunbar noted that NPCC will be conducting its next Forum on October 12, 2023, NPCC will conduct its final DER/VER Forum of 2023 focused on Battery Energy Storage Systems.

Mr. Dunbar also highlighted that the recordings of all DER/VER Forums conducted are available on the NPCC website.

NPCC Portal Status

Mr. Nahian provided a status update on the NPCC Portal. The activities currently in progress include:

- Improve the directory and invite additional users.
- Merge email distribution groups and portal security groups.
 - Replace by mail-enabled security group.
- Set up sensitivity label.
- Set up automatic retention/destruction.
- Set up ballot response collection feature.

The next steps include:

- Finalizing the automatic retention/destruction policies.
- Retirement of the Website members area. Target Completion Date (TCD): Q3
- Retirement of the NPCC Drive. TCD: Q4

Consent Agenda

The Reliability Coordinating Committee unanimously approved the following Consent Agenda Items:

June 7, 2023 RCC Meeting Minutes

Approved as provided in the agenda package.

RCC Roster Changes

The following changes to the RCC membership were approved:



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023

Sector 1 - Transmission Owners

- ✓ Stephanie Ullah-Mazzuca to serve as an alternate for Orange & Rockland Utilities, Inc.
- ✓ Silvia Valerio to no longer serve as an alternate for The United Illuminating Company
- ✓ Ajay Garg to succeed Martin Huang as the representative for Hydro One Networks, Inc.

Sector 2 - Reliability Coordinators

- ✓ David Short to succeed Gabriel Adam as the representative for the Independent Electricity System Operator
- ✓ Gabriel Adam to succeed Dave Robitaille as an alternate for the Independent Electricity System Operator
- ✓ Udayan Nair to succeed Zachary Smith as the representative for the New York Independent System Operator
- ✓ Yachi Lin to serve as an alternate for the New York Independent System Operator

Sector 4 - Generator Owners

- ✓ Philip Moy to no longer serve as an alternate for Long Island Power Authority

Sector 5 - Marketers, Brokers, And Aggregators

- ✓ Qinling Zheng to succeed Aleksandra Gofman as the representative for the Consolidated Edison Company of New York, Inc.
- ✓ Guershon Dorismond to succeed Qinling Zheng as an alternate for the Consolidated Edison Company of New York, Inc.

Task Force/Working Group Roster Changes

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

Task Force on Coordination of Planning

- ✓ Mark Stevens of Rhode Island Energy to serve as a primary representative.
- ✓ Vincent Brisebois of Hydro-Québec Distribution to succeed Haretha Alao as an alternate representative.
- ✓ Ross Altman of the New York Independent System Operator to serve as a primary representative.
- ✓ Keith Burrell of the New York Independent System Operator to serve as the second alternate representative.
- ✓ HaHyeong Kim of Rhode Island Energy to serve as an alternate representative.
- ✓ Michael Koenig of the Consolidated Edison Company of New York, Inc. to succeed Alexander Borovinski as the primary representative.
- ✓ Yves Albert of the New Brunswick Power Corporation to succeed Andrew Wilcox as an alternate representative.

Task Force on System Protection

- ✓ Jonathan Wayne Tsoi and Sherif Hussein of PPL to serve as alternate representatives.

Task Force on System Studies

- ✓ Matthew Koenig of the Consolidated Edison Company of New York, Inc. to succeed Alexander Borovinski as the primary representative.
- ✓ Fatouma Bagnan-Beidou of Hydro-Québec to succeed Amine Ahmed Sibachir as an alternate representative.

Task Force on Infrastructure Security & Technology

- ✓ Doug Vitale of the Northeast Power Coordinating Council, Inc. to succeed Brian Hogue as the secretary.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023

CO-1 Control Performance Working Group

- ✓ Brian Valtin of the New York Independent System Operator to serve as an alternate representative.

CO-2 System Operator Training Working Group

- ✓ Allison MacKay of Nova Scotia Power Inc to serve as the primary representative.

CO-8 Systems Operations Managers Working Group

- ✓ Jean-Sebastian Labbee of Hydro-Quebec to succeed Caroline Bouchard as the primary representative.

CO-11 Restoration Working Group

- ✓ Nicholas Miner of ISO-New England, Inc to serve as an alternate representative.
- ✓ Connor Corsi of ISO-New England, Inc to serve as an alternate representative.

CP-8 Review of Resource and Transmission Adequacy Working Group

- ✓ Abdul Mohamed of the New York Independent System Operator to serve as an observer.
- ✓ Anand Chandrashekar of the New York Independent System Operator to serve as an observer.
- ✓ Josif Figueroa of the New York Independent System Operator to serve as an observer.
- ✓ Henry Fox of the New York Independent System Operator to serve as an observer.
- ✓ Banca Prinsloo of the New York Independent System Operator to serve as an observer.
- ✓ Sushil Silwal of the New York Independent System Operator to no longer serve as an observer.
- ✓ Rahul Mittal of Independent Electricity System Operator to succeed Vithy Vithyananthan as the primary representative.
- ✓ Vithy Vithyananthan of Independent Electricity System Operator to succeed Rahul Mittal as an alternate representative.
- ✓ Pantea Parvinhosseini of Independent Electricity System Operator to no longer serve as an observer.
- ✓ Phillippe Bourbeau-Allard of Hydro Quebec to succeed Harêtha Alao as an alternate representative.
- ✓ Thomas Primrose of PSEG-LI to succeed John Dellatto as the primary representative.
- ✓ Philip Moy of PSEG LI to no longer serve as an observer.

IST-2 Telecommunications Working Group

- ✓ Doug Vitale of the Northeast Power Coordinating Council, Inc. to succeed Brian Hogue as the secretary.

IST-4 Cyber security Working Group

- ✓ Brian Hogue of the Northeast Power Coordinating Council, Inc. will no longer serve as an alternate.

SP-7 Misoperations Working Group

- ✓ Lucas Setzer of Eversource Energy to serve as the primary representative.

New England Transmission Owners NPCC Directory No. 1 Implementation Plans Status Update

Approved as provided in the agenda package.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023

Approval Agenda

2022 Criteria Compliance and Enforcement Program Assessment Report

Mr. Nied provided background on the NPCC Criteria Compliance Enforcement Program (CCEP) and highlighted issues of non-compliance on Directory No.4 System Protection Criteria and Directory No. 11 Disturbance Monitoring Equipment Criteria.

Ms. Berry of National Grid (NG) clarified that the self-report of a Directory No.4 non-compliance was inadvertently submitted for the 2022 Compliance Year. Ms. Berry indicated that the self-report of a Directory No.4 non-compliance is applicable to the 2023 CCEP and will be re-submitted to correct the applicable year. For the 2022 CCEP, National Grid does not have a 2022 CCEP self-report.

Ms. Gauthier of Hydro Québec (HQ) provided a summary of a Directory No.11 non-compliance along with the status of HQ's mitigation plan.

Mr. Patel of New York State Gas and Electric (NYSEG) representing the Avangrid companies of NYSEG, Rochester Gas and Electric and Central Maine Power provided a summary on three instances of Directory No. 11 non-compliance and the status of Avangrid's mitigation plan.

After discussion, a motion was made to accept the 2022 Criteria Compliance and Enforcement Program Assessment Report with the stipulation that any references to the National Grid Directory No.4 non-compliance be removed before the final issuance of the report. Pursuant with the motion, the RCC then accepted the 2022 CCEP Assessment Report.

Hydro-Québec NPCC Directory No. 1 Implementation Plan – Live Tank Circuit Breakers

Mr. Fihey presented the Hydro Québec implementation plan to install redundant breaker failure relays at all BPS locations where live tank circuit breakers are installed to meet the recent clarification of the Directory No. 1 performance requirements.

The RCC unanimously approved the Hydro-Québec NPCC Directory No. 1 Implementation Plan provided in the agenda package (all written proxies in favor).

PRC-006-NPCC-3 Regional Standard Authorization Request

Mr. Shu requested that the RCC approved the recommendation to assign the NPCC Task Force on System Protection (TFSP) to the project scope as outlined in the RSAR provided in the agenda package.

The RCC approved the assignment of the TFSP to the project scope as outlined in the subject RSAR provided in the agenda package (all written proxies in favor).

Policy Discussion

August 16 & 17, 2023 NERC MRC/BOT Meeting(s)

Mr. Fedora mentioned that the August 16, 2023 Member Representatives Committee (MRC) meeting was preceded by a quarterly technical session which provided a preview of the Long Term Reliability Assessment, and information on the Interregional Transfer Capability Study (ITCS). The planned discussion on cloud computing was tabled to a future meeting to allow time to cover the ITCS discussion. Mr. Fedora indicated that supporting material is available on the NERC website.

Mr. Fedora indicated that the MRC meeting is more a business meeting that provided updates on FERC actives and NERC Board committee reports and technical committee reports (including



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023

its subcommittees, task forces and working groups). The MRC had a “open mic” discussion on items that need to be addressed. The discussion was summarized and presented, the next day, to the NERC Board of Trustees.

Mr. Fedora described the NERC Board of Trustees meeting as a decisional meeting. He referred to the announcement of the Board actions that is included in the RCC meeting package. Highlighted items included:

- Board approval of the 2024 NERC proposed business plan and budget (which aligns with NERC’s 2023-2025 strategic plan),
- Board approval of the revisions to NERC’s Rules of Procedure (ROP) for Reliability Standards,
- Board adoption of the modifications to TOP-003-6 and IRO-010-5,
- Board acceptance of the 2023 ERO Reliability Risk Priorities Report, and
- Board update on the progress being made on Project 2021-07 Cold Weather Standards project.

In addition to the announcement of the Board actions, the agenda packages for the August 16 & 17, 2023 NERC MRC/BOT Meetings are included in the RCC agenda package.

September 20 – 21, 2023 NERC Reliability and Security Technical Committee

Mr. Oks noted that the September 20, 2023 Reliability and Security Technical Committee (RSTC) agenda and the September 21, 2023 RSTC Informational Session agenda are both included in the agenda package. Messrs. Rizvi, Robinson, and Oks highlighted the following items:

- ✓ White Paper – Privacy and Security Impacts of DER and DER Aggregators
This white paper is a joint NERC Security Integration and Technology Enablement Subcommittee (SITES) and NERC System Planning Impacts from Distributed Energy Resources Working Group (SPIDERWG) work plan item and builds on prior work from these two groups. This paper explores the technical facets of security controls available to DER and DER Aggregators and provides an example of potential attacks that can be mitigated through the implementation of those security controls.

The white paper has previously gone for RSTC review, and the NERC SITES and NERC SPIDERWG are seeking approval of the white paper at the RSTC September 20, 2023 meeting based on the revisions to the RSTC comments and additional team member enhancements to the paper.
- ✓ SARs for Revisions to EOP-004 Standard
The NERC SPIDERWG drafted a SAR to modify EOP-004 to account for loss of aggregate DER during grid disturbances. This SAR has been through the Event Analysis Subcommittee and the Performance Analysis Subcommittee for their comments, which is included in the draft SAR. The SAR has also gone through the new RSTC SAR industry comment posting and the comments have been incorporated.

The SPIDERWG is requesting RSTC endorsement of the SAR and submitting it next to the Standards Committee.
- ✓ Proposed Revisions to the NERC Rules of Procedure (ROP) to Register Inverter-Based Resources (IBRs)
Mr. Robinson provided an update on the informational item regarding the NERC Inverter-Based Resources Registration Project. He indicated that we are in the first year



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023

of the IBR registration project that is a multi-year project slated duration for approximately three years. The first year activity of the project proposes revisions to Appendices 2, 5A, and 5B of the NERC ROP to accurately reflect and address non-BES, BPS connected IBRs (unregistered IBRs).

- Appendix 2 – Definitions Used in the ROP:
 - i) Adding the definitions of “Generator Owner – Inverter-Based Resources” (GO-IBR) and “Generator Operator – Inverter-Based Resources” (GOP-IBR) to mirror the Registry Criteria revisions proposed in Appendix 5B; and
 - ii) Revising the Reserve Sharing Group (RSG) definition for consistency with Reliability Standard Project 2022-01 Reporting ACE Definition and Associated Terms (“Project 2022- 01”).
- Appendix 5A – Organization Registration and Certification Manual: Making changes that conform with those in Appendix 5B and reducing legislative history.
- Appendix 5B – Statement of Compliance Registry Criteria:
 - i) Adding GO-IBR and GOP-IBR as new functions to the Registry Criteria to register the unregistered IBRs;
 - ii) Clarifying the scope of registration in Section I of the Registry Criteria;
 - iii) Reducing legislative history; and
 - iv) Revising the RSG definition for consistency with Reliability Standard Project 2022- 01.

Mr. Robinson indicated that the proposes revisions to the NERC ROPs are scheduled, in the next couple of weeks, to be posted for a 45 day industry comment period and filed by the year end with FERC for approval.

Looking ahead, the project schedule for year two and three include:

- Year two: the identification on GO-IBRs and GOP-IBRs requiring registration under the revised NERC ROPs, and
 - Year three: the registration of Entities with GO-IBRs and GOP-IBRs.
- ✓ Transmission Planning Energy Scenarios SAR
- Mr. Oks provided an update on the informational item regarding the need to consider three transmission planning energy-related scenarios to mitigate risks to the BPS. This need was highlighted in the NERC 2023 ERO Reliability Risk Priorities Report. The objective is to modify the TPL-001-5.1 NERC Reliability Standard and/or create one or more new Reliability Standards focused on transmission planning analyses that apply energy-related scenarios that consider the following four areas of risk at minimum:
- Normal and extreme natural events
 - Natural gas/electricity interdependencies
 - Distributed Energy Resource events
 - Cyber-informed transmission planning Summary

Mr. Oks indicated that SAR has an informal comment period scheduled from September 13 - October 5, 2023.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023

Discussion Items

Operational Technologies Policy Forum

Mr. Vesely reported on the response to the Task Force on Infrastructure Security and Technology (TFIST) survey. The survey was conducted to better understand and propose informed and recommended courses of action by TFIST regarding the impact of Operational Technology (OT) security on industry. The survey responses provided insights related to OT security issues, including:

- ✓ Company structure and governance,
- ✓ Need to leverage trade associations,
- ✓ NERC Functional Model guidance,
- ✓ Security guidance for Distributed Energy Resources (DERs) and Inverter-Based Resources (IBRs), and
- ✓ OT security integration.

The next step is for TFIST to review and discuss the observations and findings from the survey to develop proposed work plan items for the RCC consideration.

2023 Corporate Reliability Goals

Goal IA-6 SAIS Quarterly Status Report

Mr. McSherry presented the Goal IA-6 SAIS quarterly status report. As part of the NPCC's 2023 Goals, NPCC Situation Awareness (SA) Staff are working with other Regional Entities' (RE) SA departments to review and evaluate other Regional Entities' SA capabilities (tools, processes, reporting, response plans, etc.) to look for opportunities to enhance NPCC's SA team effectiveness in maintaining near real-time situation awareness of condition on the Bulk Power System (BPS).

The work plan is being executed to engage and collaborate with other RE's in 2023. NPCC Staff provided quarterly status reports at the March and June RCC meetings. Further, NPCC solicited input from the NPCC System Operations Managers (CO-8) Working Group members during their February, May, and August meetings and dually, the TFCO members during their March and May meetings, for any enhancements to the NPCC's SA activities and capabilities. Below is the schedule of conducted and planned RE reviews in 2023:

- ✓ Texas Reliability Entity (TRE) – 7/27/23 (at TRE offices in Austin, TX) - complete
- ✓ ReliabilityFirst (RF) – 8/28/23 (at RF offices in Cleveland, OH) - complete
- ✓ Western Electricity Coordinating Council (WECC) – 9/19/23 (at WECC offices in Salt Lake City, UT)
- ✓ Midwest Reliability Organization (MRO) and/or SERC Reliability Corporation (SERC) – date TBD/Virtual

Based on the evaluation, NPCC will identify recommendations by December 2023.

Goal IB-1 RAPA Quarterly Status Report / Recommendations

Mr. Klaube and Ms. Zannat presented the third quarterly status report to the RCC for Goal IB-1 RAPA which involves the NPCC Staff developing recommendations for performing energy sufficiency assessments within the NPCC. The proposed recommendations for energy sufficiency measures in NPCC and NERC reliability assessments are provided in the agenda package.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023

The proposed recommendations are based on the NPCC staff participation in the Electric Power Research Institute (EPRI) Resource Adequacy for a Decarbonized Future Project ("RA Initiative"), the US DOE Atlantic Offshore Wind Study and the related NERC and industry efforts throughout 2023. These industry efforts include but are not limited to the Energy Reliability Assessment Working Group, the Energy Systems Integration Group (ESIG) Redefining Resource Adequacy Task Force, as well as a review of various published documents from around industry.

The recommendations include consideration of improvements to identify energy sufficiency risks in NPCC Comprehensive and Interim Area Reviews of Resource Adequacy reliability assessments. Further, Staff proposed improvement to identify energy sufficiency risks in the NPCC pre-seasonal reliability assessments and the annual NPCC Long Range Adequacy Overview, consistent with the NERC reliability assessment expectations. These recommendations were sent to the Task Force on Coordination of Planning (TFCP) and CP-8 WG on the Review of Resource and Transmission Adequacy in early August, with presentations at the August 9, 2023 TFCP and August 24, 2023 CP-8 WG meetings, respectively. Comments were requested and provided by August 30, 2023 meetings. These comments were incorporated into the proposed recommendations.

The RCC provided additional feedback and comments which will be dispositioned by the NPCC staff prior to the energy sufficiency recommendations being delivered to the RCC at its December 2023 meeting.

Goal II-1 RAPA IBR EMT Recommendations

Messrs. Lal and Rizvi presented the Goal II-1 RAPA proposed recommendations for the use and coordination of Inverter-Based Resources (IBR) Electromagnetic Transient (EMT) modeling and practices within NPCC. The proposed recommendations are provided in the agenda package.

The NPCC Task Force on System Studies (TFSS) and NPCC staff developed a survey to assess current IBR EMT modeling and study practices to improve reliable integration of IBRs within NPCC. The questions in the survey were categorized to encompass the topics of studies, models, software & hardware, documentation, and outlook. Members of TFSS and subject matter experts prepared answers to the survey questions and shared them along with recommendations to NPCC for future coordination. The proposed recommendations are based on survey responses for IBR EMT modeling and coordination within NPCC.

Goal II-3 STD Quarterly Status Report

Mr. Dunbar presented the Goal II-3 STD which calls for the completion of three (3) briefings with State and Provincial Regulators on NERC and NPCC reliability assessments to promote awareness of effective regional transmission planning in the face of the changing resource mix and the completion of a fourth briefing to identify specific Northeast emerging reliability risks.

On March 31, 2023, NPCC conducted an outreach session with State and Provincial Regulators focused on regional cyber and physical challenges. During the session, a representative from the Electricity Information Sharing and Analysis Center (E-ISAC) provided insight on the E-ISAC's engagement with asset owners and the analysis of security threats and mitigation strategies. During the same session, a NPCC Staff member described partnerships with local and state law enforcement agencies and the current cyber and physical regional threats to the energy sector.

On May 19, 2023, an outreach briefing was conducted focused on NERC's 2023 Summer Reliability Assessment (SRA) and NPCC's regional Reliability Assessment and Performance (RAPA) activities in support of the SRA. Additionally, on July 28th, 2023, another session



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023

highlighted the NERC 2023 State of Reliability Report (SOR), and also provided an overview of the NERC Level 3 Alert: Essential Actions Cold Weather Preparations for Extreme Weather Events.

NPCC anticipates coordinating an additional outreach session later this year focused on NERC's Long Term Reliability Assessment (LTRA) and NERC's 2023-2024 Winter Reliability Assessment.

A quarterly status report for this goal is provided the agenda package.

Incorporating Provisions of IEEE-2800 into the Applicable NPCC Criteria

Mr. Dunbar, in accordance with 2023 NPCC Corporate Goal II-2 STD, presented a draft report that provides recommendations to enhance the NPCC Criteria by incorporating the provisions of IEEE-2800 into the applicable Criteria.

The report considers the significant industry resource changes and the impact of IBR's on the functional areas of planning, operations, and protection, while providing guidance for incorporating the provisions of IEEE-2800 into the relevant NPCC Criteria within the applicable Directories.

The risks to reliability of non-IEEE-2800 compliant IBR's are also highlighted.

The report is provided the agenda package for review and comment. Comments on the report will be received for 30 days through October 1, 2023.

After consideration of comments received, a final report will be developed and posted on the NPCC website for RCC and Task Force consideration during subsequent Directory reviews.

Informational Items

Ms. Philip referred the RCC to the Informational Items materials provided in the Agenda package. Mr. Klaube indicated that agenda material was not available for the October 10 – 11, 2023 NERC Reliability and Security Technical Committee Work Plan Summit and provided a verbal update.

2023 ERO Reliability Risk Priorities Report

Mr. Klaube highlighted that the 2023 ERO Reliability Risk Priorities Report addresses five reliability risks:

1. Energy Policy
2. Grid Transformation
3. Resilience to Extreme Events
4. Security Risks
5. Critical Infrastructure Interdependencies

These items will be at the focus of the October 10-11, 2023, NERC Reliability and Security Technical Committee Work Plan Summit that will be discussed next.

October 10 – 11, 2023 NERC Reliability and Security Technical Committee Work Plan Summit

Mr. Klaube indicated that the NERC Reliability and Security Technical Committee (RSTC) Work Plan Summit will be held at the Texas Reliability Entity (TRE) office in October 2023. The NERC sub-committees, work group and task force leadership will participate in the summit to identify opportunities or gaps between the existing work plans and findings identified in the recent



**NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023**

NERC documents, such as the 2023 ERO Reliability Risk Priorities Report and the Winter Storm Elliott Inquiry.

Future Meeting

Next RCC Meeting Date

December 5, 2023

Location

New York, NY

Future RCC Meeting Dates

December 15, 2023

Location

[WebEx meeting], if needed

Other Matters

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



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
September 12, 2023

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
and,
Federal Energy Regulatory Commission – David Ortiz, David O'Connor
La Régie de L'Énergie – Christian Garneau
Ontario Energy Board – Catherine Ethier
United States Department of Energy – Adria Brooks
New Brunswick Department of Energy and Mines – David Sollows
Nova Scotia Utility & Review Board – S. Bruce Outhouse, Q.C.



February 23, 2024

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 5, 2023, NPCC Reliability Coordinating Committee (RCC) Meeting

Sir / Madam:

Attached are the Minutes of the December 5, 2023, meeting of the NPCC Reliability Coordinating Committee, as approved at the RCC February 21, 2024, meeting.

Sincerely,

Michael R. Lombardi

Michael R. Lombardi
Director, Reliability Assessments

cc: NPCC Staff



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
December 5, 2023

Ms. Philip called the meeting of the Reliability Coordinating Committee (RCC) to order at 9:00 am.

Attendance

Officers of the Reliability Coordinating Committee

Anie Philip, Chair
Michael Jones, Co-Vice Chair
Maxime Nadeau, Co-Vice Chair

Long Island Power Authority
National Grid USA
Hydro-Québec

Sector 1 - Transmission Owners

Central Hudson Gas & Electric Corporation

Michael E. Ridolfino
Damian Interrante - Alternate
(proxy to Edward Roedel)
Martin Paszek - Alternate
George Wegh
Ajay Garg
Anie Philip
Abhinav Rawat
Randy MacDonald
(proxy to Frank Ronci)
(proxy to Edward Roedel)
Chris Milligan
Stephanie Ullah-Mazzuca - Alternate
(proxy to Edward Roedel)
Edward Roedel
Hantz A. Presume

Central Maine Power Company
Consolidated Edison Company of New York, Inc.
Eversource Energy
Hydro-One, Inc.
Long Island Power Authority
National Grid USA
New Brunswick Power Corporation
New York Power Authority
New York State Electric & Gas Corporation
Nova Scotia Power, Inc.
Orange & Rockland Utilities, Inc.
Rochester Gas & Electric Corporation
The United Illuminating Company
Vermont Electric Power Company, Inc.

Sector 2 – Reliability Coordinators

Hydro-Québec
Ontario IESO
ISO New England, Inc.
New Brunswick Power Corporation
New York ISO

Maxime Nadeau
David Short
James Helton
Scott Brown
Udayan Nair

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

Entities

Eversource Energy

Trevor Tessin
David Cloutier - Alternate
Grégory Emiel
Abdelhakim Sennoun - Alternate
Robert Eisenhuth
Mike Jones
(proxy to Frank Ronci)

Hydro-Québec

Long Island Power Authority
National Grid USA
New York Power Authority

Sector 4 Generation Owners

Consolidated Edison Company of New York, Inc.

Peter Yost
Haizhen Wang - Alternate
Sean Bodkin
(proxy to Anie Philip)

Dominion Energy, Inc.
Long Island Power Authority



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
December 5, 2023

New York Power Authority
Ontario Power Generation

Frank Ronci
David Kwan
Doug Preston - Alternate
(via written proxy)
Ken Stell

Talen Energy Marketing, LLC
Vistra Energy Corporation

Sector 5 – Marketers, Brokers, and Aggregators

Consolidated Edison Company of New York, Inc.

Qinling Zheng
Guershon Dorismond - Alternate
(proxy to Anie Philip)
(proxy to Frank Ronci)
Devon Tremont

Long Island Power Authority
New York Power Authority
Utility Services of Vermont, LLC

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

Long Island Power Authority
New York Power Authority
New York State Department of Public Service

(proxy to Anie Philip)
Shivaz Chopra
Humayun Kabir

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

New York State Reliability Council, LLC
RLC Engineering

Roger Clayton
David Conroy

NPCC Staff

Andreas Klaube	Manager, Probabilistic Assessment
Andrey Oks	Director of Operations Coordination
Brian Deckert	Senior Standards and Criteria Engineer
Damase Hebert	General Counsel & Corporate Secretary
Douglas Vitale	Security Outreach Manager
Faisal Nahian	Senior Network and Infrastructure Engineer
Gerry Dunbar	Director, Reliability Standards and Criteria
Jacqueline Jimenez	Director, Compliance
Jonathan Nicholas	Network and Infrastructure Engineer
Kelvin Trejo	IT and Data Support Specialist
Khatune Zannat	Senior Reliability Assessment Engineer
Lacy Skinner	Senior Engineer, Operations Coordination
Michael Lombardi	Director, Reliability Assessments
Michael Morrow	Senior Entity Risk Assessment Engineer
Neeraj Lal	Manager, System Studies
Nicolette Kerner	Compliance Program Support Assistant
Patrick Palompo	Senior Compliance Engineer
Phil Fedora	Chief Engineer and Vice President Reliability Services
Quintin Lee	Manager, Events Analysis
Quoc Le	Manager, System Planning
Rafael Sahiholamal	Manager, System Protection
Ryan McSherry	Senior Operations Engineer
Shayan Rizvi	Senior Reliability Assessment and Performance Analysis Engineer
William Clauss	Reliability Assessment and Performance Analysis Data Analyst



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
December 5, 2023

Guests

Frank Peng	Chair, Working Group on Operations Planning
Keith Lee	Vice-Chair, Task Force on System Protection
Marc Morissette	Chair, Task Force on System Studies
Mark Babula	ISO New England, Inc.
Ovidiu Vasilachi	Chair, Task Force on System Protection
Peter Huynh	Chair, Working Group on Inter-Area Dynamic Analysis
Philippe Bourbeau-Allard	Hydro-Québec
Steve Gould	Chair, Task Force on Coordination of Operations
Steve Judd	ISO New England, Inc.
Vincent Brisebois	Hydro-Québec
Vincent Fihey	Chair, Task Force on Coordination of Planning

Introduction

Ms. Philip called the meeting to order at 9:00 AM.

Antitrust Guidelines for NPCC Meetings

Mr. Klaube read the NPCC Antitrust Guidelines provided in the agenda package.

Safety Message

Mr. McSherry provided a safety message on the dangers of distracted driving.

Quorum

Mr. Lombardi indicated that a quorum had been achieved, by member attendance, proxy, or alternate designation.

President and CEO Report

Mr. Fedora indicated that Mr. Dickerson has a speaking engagement at the New England Power Generation Association in Boston, MA and sends his regrets that he could not be here. On behalf of Mr. Dickerson, Mr. Fedora thanked everyone for the hard work that has been done over the years and noted, as seen on this RCC agenda, that the NPCC region is a leader in terms of resource adequacy, transmission studies' energy sufficiency and interacting with NERC and the ERO Enterprise because of the hard work of your task forces members, your working groups, and the committees.

Moving forward, our work plan includes items such as a gas/electric study, situational awareness activities, offshore wind integration, and the Interregional Transfer Capability Study. There is a rich future of work for us to accomplish with all of your help moving forward.

On behalf of Mr. Dickerson, on behalf of the organization, thank you all for your effort and your continuing support of NPCC moving forward.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
December 5, 2023

Chair Report

Agenda

Ms. Philip reviewed the agenda provided in the agenda package. The content of the agenda was discussed and agenda item 8.19.1, Scope of CP-8 WG on the Review of Resource and Transmission Adequacy, was withdrawn from the agenda and will be presented at the next RCC meeting.

NPCC Office Status Update

Mr. Nahian reported that the NPCC office is still at 1040 Avenue of the Americas but has relocated from floor 10 to floor 4 and is ready to host meetings. The capacity of the large conference room is 18 people, and the capacity of the small conference room is 6 people.

Development of 2024-2025 Task Force/RCC Work Plans

Ms. Philip indicated that the 2024-2025 Task Force Work Plans have been updated to consider the current NPCC Strategic Plan and are presented for RCC approval under agenda item 5.4, 2024 - 2025 Task Force Work Plans.

2024 RCC Meeting Dates/Locations

Mr. Lombardi presented the RCC meeting dates and locations for 2024 RCC meeting and indicated the information is included in the meeting package.

October 12, 2023, NPCC DER/VER Forum

Mr. Dunbar provided a summary of the October 12, 2023, DER/VER Forum. The Forum is part of NPCC's Strategic Corporate Plan and reflects the direction provided by the NPCC Board of Directors to continue outreach efforts with NPCC stakeholders. The October Forum was focused on battery energy storage and featured presentations from Consolidated Edison of New York, the Electric Power Research Institute (EPRI), NERC, and the California Independent System Operator (CAISO).

He also indicated that the outreach efforts will continue throughout 2024 and if anybody has suggested topics, please do not hesitate to reach out to let us know.

NPCC Portal Status

Mr. Nahian indicated that thanks to all of your support, we have fully completed the transition to the NPCC portal.

Mr. Fedora added that the reason for the change is to protect the information that you provide by preventing the bad actors from getting into the NPCC systems. He publicly thanked the NPCC IT staff for diligence in safeguarding the information and reminded everyone to categorize the sensitivity of their information so that it is managed appropriately.

Consent Agenda

The Reliability Coordinating Committee approved the following Consent Agenda Items:

September 12, 2023, RCC Meeting Minutes

Approved as provided in the agenda package.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
December 5, 2023

RCC Roster Changes

The following changes to the RCC membership were approved:

Sector 4 - Generator Owners

- ✓ David Kwan to succeed Michael Cooke as the representative for the Ontario Power Generation, Inc.
- ✓ Doug Preston to succeed David Kwan as an alternate for the Ontario Power Generation, Inc.

Sector 5 - Marketers, Brokers, and Aggregators

- ✓ Devon Tremont to succeed Brian Evans-Mongeon as the representative for Utility Services, Inc.

Task Force/Working Group Roster Changes

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

Task Force on Coordination of Operations

- ✓ Joseph Ricasio of Independent Electricity System Operator to succeed Ioan Agavriloai as an alternate representative.
- ✓ Jean-Sébastien Labbé of Hydro-Québec to no longer serve as an alternate representative.

Task Force on System Protection

- ✓ Leonid Filin of Nova Scotia Power, Inc. to serve as an alternate representative.
- ✓ Wing Kong of the New York Power Authority to succeed Eric Anderson as the primary representative.
- ✓ Sherrif Hussein of PPL to serve as the primary representative.
- ✓ Jonathan Tsoi of PPL to serve as an alternate representative.

Task Force on System Studies

- ✓ Marc Morissette of Hydro-Québec to succeed Joy Brake of Nova Scotia Power, Inc. as the Chair
- ✓ Daniel Schwarting of ISO New England to succeed Marc Morissette of Hydro-Québec as the Vice Chair
- ✓ Ross Altman of New York Independent System Operator to succeed Sunil Palla as an alternate representative.
- ✓ Govind Joshi of Rhode Island Energy to succeed Mark Stevens as the primary representative.
- ✓ Yves Albert of New Brunswick Power Corporation to succeed Andrew Wilcox as the primary representative.

CP-8 Review of Resources & Transmission Adequacy Working Group

- ✓ Ahmed Elgallad of Nova Scotia Power, Inc. to succeed Kamala Rangaswamy as the primary representative.

CO-2 System Operator Training Working Group

- ✓ Lacy Skinner of Northeast Power Coordinating Council, Inc. to succeed Ryan McSherry as the primary representative.

CO-8 System Operations Managers Working Group

- ✓ Jonathan Sherrard of New Brunswick Power Corporation to succeed Marc Theriault as an alternate representative.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
December 5, 2023

- ✓ Joseph Ricasio of Independent Electricity System Operator to succeed Ioan Agavriloai as the primary representative.
- ✓ Marie-Ève Bergeron of Hydro-Québec to succeed Jean-Sébastien Labbé as the primary representative.
- ✓ Luc Bonneau of Hydro-Québec to succeed Marie-Ève Bergeron as an alternate representative.

CO-10 System Operational Tools Working Group

- ✓ Sonya Konzak of Hydro-Québec to succeed Magalie Briere as the primary representative.
- ✓ Julien Fournier of Hydro-Québec to succeed Bertrand Lambert as an alternate representative.

CO-11 Restoration Working Group

- ✓ Kevin Wozniak of Hydro One to no longer serve as an alternate representative.
- ✓ Jesse Rocca of Independent Electricity System Operator to serve as an alternate representative.
- ✓ Lacy Skinner of Northeast Power Coordinating Council, Inc. to succeed Ryan McSherry as the primary representative.

CO-12 Operations Planning Working Group

- ✓ Ahmed Elgallad of Nova Scotia Power Inc. to succeed Kamala Rangaswamy as an alternate representative.
- ✓ Kim McKinley of New Brunswick Power Corporation to succeed Tim Hicks as the primary representative.
- ✓ Tim Hicks of New Brunswick Power Corporation to succeed Kim McKinley as an alternate representative.
- ✓ Khatune Zannat of Northeast Power Coordinating Council, Inc to succeed Andrey Oks as an alternate representative.
- ✓ Andrey Oks of Northeast Power Coordinating Council, Inc to serve as an observer.
- ✓ Dave Evans of ISO New England to no longer serve as an alternate representative.
- ✓ Mink Aich of Nova Scotia Power, Inc to no longer serve as an alternate representative.

CO-14 Operations Load Forecast Working Group

- ✓ Tim Duffy of New York Independent System Operator to succeed Chuck Alonge as the primary representative.
- ✓ Chuck Alonge of New York Independent System Operator to no longer serve as the Vice Chair
- ✓ Chuck Alonge of New York Independent System Operator to serve as an alternate representative.
- ✓ Enrique Rosero of National Grid USA to serve as an alternate representative.
- ✓ Laura McLeod of New Brunswick Power Corporation to serve as an alternate representative.

SP-7 Protection Systems Misoperation Review Working Group

- ✓ Adrian Pardo of Avangrid (RGE, NYSEG, CMP, UI) to serve as an alternate representative.
- ✓ Michael Wright of Avangrid (CMP, UI) to serve as an alternate representative.

SS-37 Base Case Development Working Group

- ✓ Nathan Gomes of Independent Electricity System Operator to succeed Ayman Eltantawy as the primary representative.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
December 5, 2023

- ✓ Haytham Ahmed of Independent Electricity System Operator to succeed Susan Alexander as an alternate representative.
- ✓ Sofia Guzman of Independent Electricity System Operator to serve as an alternate representative.

SS-39 Geomagnetic Disturbance Working Group

- ✓ Juming Huang of Hydro One to succeed Cynthia Yiu as the primary representative.

2023 New York Interim Area Transmission Review

Approved as provided in the agenda package.

2023 Interim Area Reviews of Resource Adequacy

- ✓ Ontario - Approved as provided in the agenda package.
- ✓ New York - Approved as provided in the agenda package.
- ✓ Maritimes - Approved as provided in the agenda package.

2024 NPCC Criteria Compliance Enforcement Program Implementation Plan

Approved as provided in the agenda package.

2024 RCC Scope

Approved as provided in the agenda package.

Task Force on Coordination of Planning Scope

Approved as provided in the agenda package.

2024 RCC Roster

Approved as provided in the agenda package with the discussed date correction made at the meeting.

Approval Agenda

2023 Québec Comprehensive Area Review of Resource Adequacy

Mr. Emiel presented the 2023 Québec Comprehensive Review of Resource Adequacy provided in the agenda package.

The review, covering the period from winter 2023-2024 through winter 2027-2028, demonstrated that Québec 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 Québec complies with the NPCC resource adequacy reliability criterion and recommended RCC approval of the 2023 Québec Comprehensive Review of Resource Adequacy provided in the agenda package.

The RCC then approved the 2023 Québec Comprehensive Review of Resource Adequacy provided in the agenda package.

2023 New England Comprehensive Area Review of Resource Adequacy

Mr. Judd presented the 2023 New England Comprehensive Review of Resource Adequacy provided in the agenda package.

The review, covering the period from 2024 through 2028, demonstrated that New England 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.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
December 5, 2023

The Task Force on Coordination of Planning agreed with the review's conclusion that New England complies with the NPCC resource adequacy reliability criterion and recommended RCC approval of the 2023 New England Comprehensive Review of Resource Adequacy provided in the agenda package.

The RCC then approved the 2023 New England Comprehensive Review of Resource Adequacy provided in the agenda package.

2023 – 2024 NPCC Winter Reliability Assessment

Messrs. Klaube and Peng presented the *NPCC 2023-2024 Winter Reliability Assessment* provided in the agenda package.

The *NPCC 2023-2024 Winter Reliability Assessment* was approved by the Task Force on Coordination of Operation on November 17, 2023. The corresponding, *NPCC 2023-2024 Winter Multi-Area Probabilistic Assessment* was approved by the Task Force on Coordination of Planning on November 21, 2023, and is included as Appendix VIII.

The RCC then approved the *NPCC 2023-2024 Winter Reliability Assessment* provided in the agenda package with the discussed member name addition made at the meeting.

NPCC 2023 Long Range Adequacy Overview

Mr. Klaube and Ms. Zannat presented the *NPCC 2023 Long Range Adequacy Overview* provided in the agenda package. The analysis was conducted based on data reported for the 2023 NERC Long-Term Reliability Assessment.

The 2023 NPCC LRAO evaluated the NPCC Areas and adjacent region's plans to meet their Loss of Load Expectation (LOLE) planning criteria through a multi-area probabilistic assessment for the period from 2024 to 2028. The result showed that all NPCC Areas meet the annual LOLE criterion of 0.1 days/year under expected resource conditions. The analysis included the estimated annual Loss of Load Hours (LOLH) and Expected Unserved Energy (EUE). The Assessment also incorporated recommendations from the 2023 NPCC Corporate Goal IB-1 RAPA.

The results and observations of the analysis was presented at the November 8-9, 2023, TFCP meeting. TFCP recommends RCC approval of the *2023 NPCC Long Range Adequacy Overview* report.

The RCC then approved the *NPCC 2023 Long Range Adequacy Overview* provided in the agenda package.

2024 - 2025 Task Force Work Plans

The Task Force chairs/representatives highlighted their respective 2024 - 2025 Task Force Work Plans provided in the agenda package.

- ✓ Task Force on Coordination of Planning - The RCC directed the TFCP to revise the submitted work plan to reference the TFCP Scope approved in the Consent Agenda and to re-submit the updated work plan for RCC approval.
After the December 5, 2023 RCC meeting the TFCP work plan was re-submitted and approved on December 27, 2023 by an email vote of the RCC.
- ✓ Task Force on Coordination of Operation - Approved as provided in the agenda package.
- ✓ Task Force on System Studies - Approved as provided in the agenda package.
- ✓ Task Force on System Protection - Approved as provided in the agenda package.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
December 5, 2023

- ✓ Task Force on Infrastructure Security and Technology - Approved as provided in the agenda package.

2024–2025 RCC Work Plan

Following the review of the NPCC Task Forces' respective 2024 - 2025 Work Plans, the RCC reviewed its corresponding *Work Plan for Calendar Year 2024 - 2025*.

Ms. Philip provided an overview of the *Reliability Coordinating Committee Work Plan for Calendar Years 2024-2025* noting that the changes include incremental updates to the current applicable dates, clarification of ongoing activities, removal of completed or no longer applicable activities, and consistency with the 2024-2025 Task Force Work Plans, such as the addition of new activities like "Actively participate in the ERO Interregional Transmission Capability Study (ITCS)."

The RCC then recommended that the *Reliability Coordinating Committee Work Plan for Calendar Years 2024–2025*, as provided in the agenda package, be submitted for NPCC Board approval.

2023 Assessment of NPCC Underfrequency Load Shedding Program for Year 2026 Report

Mr. Huynh presented the 2023 Assessment of NPCC UFLS Program for the Year 2026. The *2023 Assessment of NPCC Underfrequency Load Shedding Program for year 2026 Report* was approved by the Task Force on System Studies on November 8, 2023.

The assessment demonstrated that the NPCC UFLS Program continues to meet all the performance requirements outlined in the NPCC Automatic Underfrequency Load Shedding standard (PRC-006-NPCC-2) and the North American Electric Reliability Corporation Automatic Underfrequency Load Shedding standard (PRC-006-5).

The RCC then approved the *NPCC Underfrequency Load Shedding Program for year 2026 Report* referred to in the agenda package.

Policy Discussion

October 25, 2023, NPCC Board of Directors Meeting

Mr. Fedora provided an update on the NPCC Strategic Plan and the Proposed NPCC 2024 Corporate Reliability Goals.

The NPCC 2024 – 2027 Strategic Plan was approved at the October 25, 2023, NPCC Board of Directors Meeting and posted on the NPCC public website following the Board meeting. The NPCC Strategic Plan underwent a slight refresh but kept the same major areas of emphasis:

- ✓ Enhancing System Resilience and Assuring Energy Sufficiency.
- ✓ Reliably Integrating the Resources (DER, IBR, and VER) Brought Forward by Societal Decarbonization Objectives.
- ✓ Addressing Cyber and Physical Threats.

Mr. Fedora indicated that it was intended at this meeting to provide thoughts and have a discussion of the proposed NPCC 2024 Corporate Reliability Goals, but the NPCC Board has decided to re-look at how the NPCC Goals are determined and set. Although specifics are not available currently, Mr. Fedora noted that some of the topics that NPCC is involved with, such as:

- ✓ Gas/electric study covering near term, midterm, and long-term periods for the region.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
December 5, 2023

- ✓ Interregional Transfer Capability Study which has been legislated by the United States Congress.
- ✓ Integration of inverter-based resources, offshore wind, and electric vehicle charging.
- ✓ Data analytics to identify and learn from the faint signals and near misses.

Mr. Fedora stated that more direction will be coming from the Board on the development of the NPCC goals but probably not until the first quarter of 2024.

November 9, 2023, FERC Reliability Technical Conference

Mr. Fedora indicated that information for the November 9, 2023, FERC Reliability Technical Conference has been posted on the NERC website. The FERC conference provided a forum for discussion of policy issues related to the reliability and security of the bulk power system and the effect on electric reliability of the Environmental Protection Agency's proposed rule under section 111 of the Clean Air Act.

Mr. Fedora stated that a diverse exchange of information occurred at the conference and encourage interested parties to read the information on the FERC website. Additionally, information is included in the agenda package regarding the "Post Technical Conference Questions."

December 6 – 7, 2023 NERC Reliability and Security Technical Committee

Mr. Oks noted that the December 6, 2023, Reliability and Security Technical Committee (RSTC) agenda and the December 7, 2023, RSTC Informational Session agenda are both included in the agenda package. Messrs. McSherry and Oks highlighted the following items:

- ✓ 6 GHz Communication Interference Whitepaper
The NERC 6 GHz Task Force is seeking RSTC approval of the 6 GHz Communication Interference Whitepaper which includes the four recommendations below to ensure reliable communication networks are available to underpin grid operations as spectrum sharing continues to increase across all bands.

Whitepaper Recommendations

- Identifying critical circuits for the individual utilities.
 - Performing and recording baseline testing for communication links / critical circuits.
 - Considering predictive events increasing likelihood for interference in communications.
 - Monitoring design versus actual performance of communication links.
- ✓ Key findings and recommendations from California battery energy storage events - Informational
A presentation will be given to the RSTC on the key findings and recommendations from the California Battery Energy storage events that occurred on March 9 and April 6, 2022. Based on the findings of the battery energy storage system (BESS) disturbance report and in the context of past disturbance reports for inverter-based resources (IBRs) performance issues, NERC identified the following key findings:
 - BESS may have the same systemic performance problems as solar photovoltaic resources.
 - BESS ride-through performance is not adequately assessed during the interconnection process.
 - Poor commissioning practices are a significant contributor to the unreliable performance of IBRs.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
December 5, 2023

- NERC will be conducting a model quality assessment of this event and subsequently issue an alert as needed.
- Lack of adequate monitoring hinders performance and event analysis.

Additionally, NERC made the following recommendations for Generator Owners (GOs):

- All GOs should check with their inverter manufacturer to ensure that their inverters are not prone to tripping on the following causes, in addition to those previously reported, during normally cleared unbalanced grid faults:
 - Unexpected, unbalanced ac current.
 - Unexpected dc bus overvoltage tripping.
 - Unstable dc bus voltage.
 - All GOs should ensure both inverter and plant level recording functions are configured to meet the requirements in the interconnection agreements. Additionally, GOs should perform the following:
 - Ensure fast logging is enabled.
 - Ensure that meter data does not freeze on the last value when subjected to system transients during grid faults.
- ✓ Transportation Electrification, BPS Reliability Impacts, and the Future – Informational
A presentation will be given to inform the RSTC on the work that NERC staff has performed in studying Interconnection-wide reliability impacts of major electrification of the transportation sector. NERC is currently collaborating with stakeholders to identify and build a strategy to guide our efforts to face the challenges of an electrified transportation sector. This presentation will have some time for RSTC members to ask questions about the content. This presentation may lead to further discussion and RSTC action at future meetings, such as the formation of a task force or similar group. NERC sees this strong stakeholder engagement as a core component. This presentation is considered direction setting.

Discussion Items

Operational Technologies Policy Forum

Mr. Vitale reported that the Task Force on Infrastructure Security and Technology (TFIST) conducted a survey and began the evaluation of the survey results at the November TFIST meeting. TFIST is exploring the next steps including the identification of an appropriate forum to discuss this issue.

2023 NPCC Tie Benefits Analysis

Mr. Klaube provided a status update on the *2023 NPCC Tie Benefits Analysis* that is part of the resource adequacy work that NPCC engages in with the CP-8 working Group. One main input to this analysis includes the *NPCC Long Range Adequacy Overview*, which was approved by the RCC in this meeting. The next step is for CP-8 to obtain the Task Force on Coordination of Planning (TFCP) review and endorsement prior to seeking RCC approval at the February 2024 meeting.

NERC Interregional Transfer Capability Study

Mr. Lal provided, as background, that the Interregional Transfer Capability Study (ITCS) is mandated by the US Congress for the ERO Enterprise to study the reliable transfer of power between neighboring transmission planning regions and to suggest prudent additions to transfer capability. The final report is to be filed with FERC on or before December 2, 2024.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
December 5, 2023

Status update:

- ✓ Transfers
 - Transfers from Canada to the United States will be studied as part of the current analysis and for NPCC the Canada to the United States transfer capability is based on the DC TIE ratings.
 - Transfers to Canada from the United States or between the Canadian provinces will not be studied in the current analysis.
 - A follow up study is planned for next year that will include transfers to Canada from the United States and transfers between the Canadian provinces.
 - The Texas interconnection will not perform a study as its transfer capability is based on its DC TIE ratings.
- ✓ NERC Website

An Interregional Transfer Capability Study (ITCS) web page has been added to the NERC Website to create a one stop shop for ITCS items such as updates, scope, framework, and meeting schedules.
- ✓ ITCS Teams

The following ITCS teams have been created:

 - ERO Project Team
 - This team consist of NERC and Regional Entity staff.
 - Develops scope of work for the NERC consultants.
 - Telos Energy – for scenario development.
 - PowerGem – to run the transfer simulations.
 - Mr. Lal (NPCC) is on this team.
 - ITCS Advisory Group
 - This group consist of industry stakeholders outside of the ERO Enterprise.
 - Provides advice to the ERO and stakeholders on the study scope, approach, results, and recommendations.
 - Messrs. Adam (IESO), Fihey (HQ), and Smith (NYISO) are on this team.
 - ITCS Working Teams
 - Scenarios, Assumptions, Metrics, Adequacy (SAMA) Team.
 - Transfer Study Team.
 - Mr. Lal (NPCC) is on this team.
 - Coordination Team.
 - Report Writing Team.
 - Mr. Lal (NPCC) is on this team.
 - NERC Rules of Procedure Section 800 Data Request
 - Issued by Mr. Lal to the Primary and Alternate Compliance Contacts and Officers on Thursday November 30, 2023, to collect Planning Coordinator data:
 - Idev or Python files to update base cases.
 - Contingency files.
 - Monitored element files.
 - Information for each nuclear unit.
 - Copy of the data request was also provided to the ITCS Advisory Group, NPCC Task Force on System Studies (TFSS) Transmission Owners and the TFSS Planning Coordinators.
 - NPCC will host a meeting to answer any questions and aid data submitters.



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
December 5, 2023

- Due date for data submittal to NPCC is January 17, 2024.
- NPCC staff will collect, verify, and forward data to NERC.
- ✓ Meetings
 - ERO Project team meets every Monday for a weekly touch base. An in-person meeting is scheduled for January 24, 2024, at the NERC Office in Washington, DC.
 - Transfer Study team meets every Friday.
 - Report writing team has only had an initial kickoff meeting but will meet frequently once report writing begins.
 - Advisory Group met on October 31, 2023, to discuss the review of the study scope, the purpose of the advisory group, and the review of the project plan and the deliverables. The next meeting of the group is scheduled for January 25, 2024, at the NERC Office in Washington, DC.

Informational Items

Ms. Philip referred the RCC to the Informational Items materials provided in the agenda package.

Future Meeting

December 15, 2023

[WebEx meeting], if needed

Other Matters

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



NORTHEAST POWER COORDINATING COUNCIL
Reliability Coordinating Committee Minutes
December 5, 2023

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
and,
Federal Energy Regulatory Commission – David Ortiz, David O'Connor
La Régie de L'Énergie – Christian Garneau
Ontario Energy Board – Catherine Ethier
United States Department of Energy – Adria Brooks
New Brunswick Department of Energy and Mines – David Sollows
Nova Scotia Utility & Review Board – S. Bruce Outhouse, Q.C.

Annexe D

**Liste des unités sous l'autorité
du Coordonnateur de la fiabilité
et celles réalisant des tâches
reliées au rôle du
Coordonnateur de la fiabilité et
description des rôles et
responsabilités**

Liste des unités sous l'autorité du Coordonnateur de la fiabilité et celles réalisant des tâches liées au rôle du Coordonnateur de la fiabilité - Description des rôles et responsabilités

Le Coordonnateur présente, dans son rapport annuel 2023, le tableau 2 contenant la liste des unités sous l'autorité du Coordonnateur de la fiabilité et celles réalisant des tâches liées au rôle du Coordonnateur de la fiabilité et leur direction d'appartenance, suivant les organigrammes d'Hydro-Québec de l'annexe A du présent rapport annuel, et présentant les rôles et responsabilités de chacune des unités.

Tableau 2

Unités sous l'autorité du Coordonnateur de la fiabilité et celles réalisant des tâches liées au rôle du Coordonnateur de la fiabilité - Description des rôles et responsabilités

VP Conception intégrée et exploitation du système énergétique	
Direction principale – Contrôle des mouvements d'énergie et exploitation du réseau	
Unité – Stratégies d'affaires	
Rôles et responsabilités	• Assurer l'alignement stratégique au sein de la direction principale • Supporter les directions en matière de suivi de la performance et d'information de gestion • Réaliser la gestion de projets d'affaires et supporter leurs livraisons
Direction – Conformité et fiabilité	
Unités - Affaires réglementaires du Coordonnateur de la fiabilité et conformité	
Rôles et responsabilités	• Assurer la gouvernance de la conformité, sa surveillance et son rendre compte • Agir à titre de représentant du Coordonnateur de la fiabilité de l'Interconnexion Québec • Fournir le soutien technique aux entités visées lors des consultations publiques

Unités – Expertise et conformité des normes de fiabilité	
Rôles et responsabilités	• Établir les stratégies d’entreprise en matière de déploiement et d’application des normes de fiabilité • Coordonner les efforts de l’entreprise relativement aux audits de conformité aux normes de fiabilité
Direction – Stratégie de conduite du système énergétique	
Unité - Stratégies d’exploitation & d’intégration des réseaux	
Rôles et responsabilités	• Assurer les stratégies de l’exploitation, la gestion des encadrements, le soutien opérationnel et l’intégration dans les pratiques des équipes d’exploitants
Unité - Stratégies des projets d’évolution du système énergétique	
Rôles et responsabilités	• Assurer une cohérence entre les besoins opérationnels et les projets d’évolution • Définir les besoins dans l’évolution des systèmes
Unité - Stratégies système énergétique	
Rôles et responsabilités	• Émettre des recommandations sur la gestion du réseau • Définir les besoins dans l’évolution des systèmes
Direction – Contrôle du système énergétique	
Unité - Programmation et contrôle du réseau	
Rôles et responsabilités	• Produire les programmes intégrés de production, de transport et d’échanges pour la zone d’équilibrage du Québec • Gérer les services complémentaires de transport (programmation de réserve, contrôle de tension etc.) • Maintenir les transits, la tension, les réserves d’exploitation, la fréquence, le temps du réseau selon les critères de fiabilité • Fournir un bilan offre/demande et les capacités de transport à court terme • Coordonner les activités de contrôle et d’échanges avec les centres de contrôle des réseaux voisins

Unité - Coordination opérationnelle des mesures d'urgence	
Rôles et responsabilités	• Coordonner et appliquer les mesures d'urgence opérationnelles
Unité - Coordination du réseau	
Rôles et responsabilités	• Surveiller et assurer la disponibilité et la fiabilité du système énergétique
Direction – Planification de la conduite du système énergétique	
Unité - Prévision & optimisation de la conduite du système énergétique	
Rôles et responsabilités	• Assurer une conduite optimale du système énergétique, incluant la prévision de la demande en temps réel, l'optimisation des approvisionnements court terme, la planification de la pointe, les prévisions météo et éolienne
Unité - Planification du système énergétique	
Rôles et responsabilités	• Soutenir la prévision stratégique de la gestion de toutes les sources d'énergie incluant la gestion hydrique et le bilan court terme
Unité - Gestion intégrée des retraits	
Rôles et responsabilités	• Optimiser la planification et la gestion des retraits, de manière intégrée et sur un horizon court, moyen et long terme
Direction – Exploitation des réseaux	
Unité - Exploitation des réseaux Centre	
Rôles et responsabilités	Pour la région Centre : • Rédiger les plans de manœuvre • Produire les régimes de travail (uniquement pour les activités de distribution) • Exécuter les activités d'exploitation • Traiter les appels d'urgence et le rétablissement du service (Opérateurs CER, Répartiteur CER, Opérateurs CED)

Unité - Exploitation des réseaux Est	
Rôles et responsabilités	Pour la région Est : • Rédiger les plans de manœuvre • Produire les régimes de travail (uniquement pour les activités de distribution) • Exécuter les activités d'exploitation • Traiter les appels d'urgence et le rétablissement du service (Opérateurs CER, Répartiteur CER, Opérateurs CED)
Unité - Exploitation des réseaux Nord-Ouest	
Rôles et responsabilités	Pour la région Nord-Ouest : • Rédiger les plans de manœuvre • Produire les régimes de travail (uniquement pour les activités de distribution) • Exécuter les activités d'exploitation • Traiter les appels d'urgence et le rétablissement du service (Opérateurs CER, Répartiteur CER, Opérateurs CED)
Unité - Exploitation des réseaux Sud-Ouest	
Rôles et responsabilités	Pour la région Sud-Ouest : • Rédiger les plans de manœuvre • Produire les régimes de travail (uniquement pour les activités de distribution) • Exécuter les activités d'exploitation • Traiter les appels d'urgence et le rétablissement du service (Opérateurs CER, Répartiteur CER, Opérateurs CED)
Direction - Exploitation des mobiles	
Unité - Exploitation réseau Montréal/Nord-Ouest	
Rôles et responsabilités	Pour le secteur MTL/Nord-Ouest : • Agir à titre de premier intervenant sur les réseaux • Réaliser les inspections • Rédiger les plans de manœuvre et les exécuter (Opérateurs mobiles, centrale et régional)

Unité - Exploitation réseau Centre-Est	
Rôles et responsabilités	Pour le secteur Centre - Est : • Agir à titre de premier intervenant sur les réseaux • Réaliser les inspections • Rédiger les plans de manœuvre et les exécuter (Opérateurs mobiles, centrale et régional)
Unité - Exploitation réseau Sud – Ouest	
Rôles et responsabilités	Pour le secteur Sud - Ouest : • Agir à titre de premier intervenant sur les réseaux • Réaliser les inspections • Rédiger les plans de manœuvre et les exécuter (Opérateurs mobiles, centrale et régional)
Unité - Exploitation réseau Nord – Est	
Rôles et responsabilités	Pour le secteur Nord - Est : • Agir à titre de premier intervenant sur les réseaux • Réaliser les inspections • Rédiger les plans de manœuvre et les exécuter (Opérateurs mobiles, centrale et régional)

Direction principale- Conception intégrée et optimale du système énergétique	
Direction – Conception intégrée et optimale du système énergétique	
Rôles et responsabilités	• Évaluer et analyser le comportement du système énergétique afin d'établir les solutions intégrées en matière de stratégies, de critères et d'exigences d'exploitation, ainsi que de réglages de systèmes de régulation et d'automatismes de réseau • Établir les capacités de transit du réseau, des équipements, des sources de production et des interconnexions afin d'optimiser l'exploitation du système énergétique tout en favorisant la continuité et la qualité du service. • Planifier et réaliser les études, avants projets, d'équipements de pérennité et de croissance en Production (thermique, hydraulique, éolienne et toute autre forme d'énergie), Transport, l'administration, l'ingénierie, l'approvisionnement, la construction et la mise en service en réseaux autonomes. • Réaliser les projets de maintenance, de pérennité et de transition énergétique des réseaux autonomes. • Assurer la représentation et le rendre compte à la Régie de l'énergie pour l'ensemble des dossiers réseaux autonomes et développer, maintenir des relations d'affaires avec les partenaires internes, externes et à l'extérieur du Québec
VP Conception intégrée et exploitation du système énergétique	
Direction - Évolution de la conduite du système énergétique	
Unité - Évolution des systèmes conduite du réseau (Fonctions conduite)	
Rôles et responsabilités	• Diriger le projet MSCR qui vise à moderniser les systèmes de conduite du système énergétique de l'entreprise et assumer les responsabilités en matière de portée, de coûts, d'échéanciers et de qualité

Unité - Évolution des systèmes conduite du réseau (Fonctions fiabilité et contrôle)	
Rôles et responsabilités	• Diriger le projet MSCR qui vise à moderniser les systèmes de conduite du système énergétique de l'entreprise et assumer les responsabilités en matière de portée, de coûts, d'échéanciers et de qualité
Unité - Évolution des systèmes conduite du réseau (Orientation technique et fonction)	
Rôles et responsabilités	• Fournir les orientations et positionnements techniques et fonctionnelles aux équipes de livraison MSCR et assurer les arrimages transversaux entre les différentes parties prenantes du projet
Unité - Évolution projets technologiques systèmes énergétiques	
Rôles et responsabilités	• Assurer l'évolution des activités d'exploitation du réseau afin de tirer profit des nouveaux systèmes de conduite du réseau et des nouvelles technologies • Exercer les différents mandats de modernisation des systèmes de conduite du réseau (MSCR) en collaboration avec les divisions ou groupe impliquée

Vice-présidence - Technologies de l'Information et des communications	
Direction - Cybersécurité	
Unité - Opérations de cybersécurité	
Rôles et responsabilités	• Gérer les points de contrôle de cybersécurité • Assurer une surveillance 24/7 des actifs • Assurer le respect des normes d'entreprise et cadres réglementaires en matière de cybersécurité
Direction - Exploitation technologies numériques (TN)	
Unité - Évolution & support exploit. des opérations TN	
Rôles et responsabilités	• Assurer des services d'exploitation 24/7 • Mettre en place, configurer et déployer des actifs TN
Unité - Gestion de l'exploitation TN	
Rôles et responsabilités	• Entretenir et maintenir les actifs TN
Unité - Tour de contrôle Énergie	
Rôles et responsabilités	• Gérer, exploiter et assurer la disponibilité et la stabilité des actifs TN en lien avec la conduite du réseau
Unité - Tour de contrôle infra. & corpo.	
Rôles et responsabilités	• Gérer, exploiter et assurer la disponibilité et la stabilité des actifs TN en lien avec les infrastructures corporatives
Direction principale - Télécommunications	
Direction - Gestion du réseau des télécommunications	
Rôles et responsabilités	• Gérer les télécommunications requises pour la conduite du réseau