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**Québec Reliability Standards Compliance Monitoring and Enforcement Program  
Implementation Plan**

**2021 Annual Implementation Plan**

**Effective Date: January 1, 2021**

**Approved by the Régie: November 5, 2020**

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## **I. Introduction**

The Québec Reliability Standards Compliance Monitoring and Enforcement Program Implementation Plan (Implementation Plan) is the annual operating plan carried out by the Northeast Power Coordinating Council, Inc. (NPCC), while performing its responsibilities and duties as described in the *Québec Reliability Standards Compliance Monitoring and Enforcement Program* (QCMEP). NPCC carries out QCMEP activities in accordance with the *Agreement on the Implementation of the Québec Reliability Standards Compliance Monitoring and Enforcement Program* (QCMEP Agreement).

The Electric Reliability Organization (ERO) Enterprise (ERO Enterprise) consists of the North American Electric Reliability Corporation (NERC), NPCC and other Regional Entities. The ERO Enterprise developed one ERO Compliance Monitoring and Enforcement Program Implementation Plan (ERO Enterprise IP). NPCC developed the Québec Implementation Plan using the same approach and concepts that are used during the development of the ERO Enterprise IP. This Implementation Plan represents NPCC's high-level priorities for the QCMEP for 2021. However, NPCC will adapt monitoring activities for each registered entity based on its unique characteristics. Registered Entities are responsible for compliance to all requirements applicable to their registered functions.

During the implementation year, NPCC, with approval from the Régie, may update the Québec Implementation Plan. Updates could be needed to reflect changes to compliance monitoring processes, major events, Régie orders, or other development. Any updates to the Québec Implementation Plan will be communicated to registered entities and NERC, if applicable.

## **II. Overview of Framework**

The ERO Enterprise uses the Risk-based Compliance Oversight Framework (Framework) to identify both ERO-Enterprise wide risks to reliability and mitigating factors that may reduce or eliminate a specific risk to reliability. The ERO Enterprise accomplishes this by using the risk element development process. As such, the ERO Enterprise identifies risk elements using data including, but not limited to: compliance findings; event analysis experience; data analysis; and the expert judgment of ERO Enterprise staff, committees, and subcommittees (e.g., NERC Reliability Issues Steering Committee). Reviewed publications include the Reliability Issues Steering Committee's (RISC) report.<sup>1</sup> The State of Reliability Report<sup>2</sup>, the Long-Term Reliability Assessment, publications from the RISC, special assessments, the ERO Enterprise Strategic Plan, and ERO Event Analysis Process insights. The ERO Enterprise uses these risk elements to identify and prioritize interconnection and continent-wide risks to reliability. These identified risks are used by NPCC to develop the list of actively monitored standards and requirements and to focus compliance monitoring and enforcement activities in Québec.

The ERO Enterprise reviewed and reassessed the 2020 risk elements to determine applicability for 2021. Those areas of focus identified as ERO Enterprise IP in Table 2 below are a result of this

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<sup>1</sup> [ERO Reliability Risk Priorities: November 2019](#)

<sup>2</sup> [NERC State of Reliability 2020: July 2020](#)

reassessment. NPCC also considered Québec risks, specific circumstances, and operational characteristics associated with registered entities in Québec for 2021. NPCC identified additional areas of focus for the Québec Region, which are identified as Québec Specific in Table 2.

Although the Implementation Plan identifies NERC Reliability Standards and Requirements to be considered for focused QCMEP activities, NPCC will use the Framework and other risk-based processes, including Inherent Risk Assessments, to develop an informed list of NERC Reliability Standards and Requirements specific to the risk a registered entity poses to the reliability of the electric power transmission system. The Implementation Plan and the list of actively monitored standards and requirements in Québec is not intended to be a representation of just “important” Reliability Standards requirements; rather, it is intended to reflect NPCC’s prioritization, based on various inputs (such as collected data), within the QCMEP and to communicate to registered entities to bring focus within their operations to address each prioritized risk.

### **A. Inherent Risk Assessment**

NPCC will continue to perform an Inherent Risk Assessment (IRA) of registered entities to categorize the potential risks posed to the reliability of the electric power transmission system. An IRA is performed by NPCC for all registered entities that have been considered for an audit in the annual implementation plan. The IRA’s objective is to identify additional areas of focus and determine the registered entity’s final compliance monitoring scope and oversight plan. An IRA considers entity-specific risk factors such as assets, systems, geography, interconnectivity, prior compliance history, and overall unique entity composition when determining the compliance oversight plan for a registered entity. These risk factors are evaluated against the violation risk factors included in the standard, and categorized as high, medium, and low. The risk factors ratings then serve to map to a proposed scope for monitoring purposes.

Where NPCC has little or no compliance monitoring history, NPCC is unlikely to remove NERC Reliability Standard requirements from an audit’s scope. The final set of Reliability Standards and requirements subject to compliance monitoring activities will be determined by a given entity’s IRA.

Approximately two (2) months prior to receiving an audit notification, NPCC may request certain information from a registered entity to conduct the IRA. However, NPCC will use already available information, if possible, to conduct the IRA without requiring pre-audit information from the registered entity.

### **B. Compliance Monitoring Tools**

The Québec Implementation Plan documents the planned compliance monitoring tools (i.e., off-site or on-site audits, spot checks, or guided self-certifications). Reliability Coordinators, Balancing Authorities, and Transmission Operators will remain on an audit cycle of at least every three (3) years. The remaining registered entity functions are on an audit cycle of at least every six (6) years. The determination of the appropriate compliance monitoring tools is adjusted, as needed, within a given implementation year.

### C. Enforcement of Reliability Standards

The QCMEP permits risk-based enforcement of standards. If after NPCC’s evaluation, a Non-Compliance involves only a low-level risk for the reliability of electric power transmission and the registered entity takes steps to correct the Non-Compliance, NPCC may recommend the Non-Compliance be processed using the simplified identification, correction, and monitoring procedure. Under the simplified procedure, if the situation is corrected to the Régie’s satisfaction, no financial penalty or sanction is imposed on the registered entity. This process encourages prompt identification and correction of Non-Compliance issues by registered entities.

Penalties and sanctions are warranted for some moderate risk violations and most, if not all, serious or substantial risk violations. Penalty or Sanction credits are typically offered when the registered entity offers valued behavior such as cooperation, accountability (affirmatively accepting responsibility for Non-Compliance), a culture of compliance, and self-identification of Non-Compliance.

### III. Content of Annual Implementation Plan

#### A. Risk Elements

Table 1 presents the risk elements identified by the ERO Enterprise for 2021. The risk element development process considers data, reports, and publications that identify risks which translate into compliance monitoring. The 2021 risk elements are compared to the previous years’ risk elements.

Table 1: Comparison of Risk Elements			
2016-2018 Risk Elements	2019 Risk Elements	2020 Risk Elements	2021 Risk Elements
Critical Infrastructure Protection	Improper Management of Employee and Insider Access	Management of Access and Access Controls	Remote Connectivity and Supply Chain
Extreme Physical Events	Insufficient Long-Term Planning Due to Inadequate Models	Insufficient Long-Term and Operations Planning Due to Inadequate Models	Poor Quality Model Impacting Planning and Operations
Maintenance and Management of BPS Assets	Insufficient Operational Planning Due to Inadequate Models		
Monitoring and Situational Awareness	Spare Equipment with Extended Lead Time	Loss of Major Transmission Equipment with Extended Lead Times	Loss of Major Transmission Equipment with Extended Lead Times
Protection System Failures	Inadequate Real-time Analysis During Tool and Data Outages	Inadequate Real-time Analysis During Tool and Data Outages	Inadequate Real-time Analysis During Tool and Data Outages
Event Response/Recovery	Improper Determination of Misoperations	Improper Determination of Misoperations	Determination and Prevention of Misoperations

<b>Table 1: Comparison of Risk Elements</b>			
<b>2016-2018 Risk Elements</b>	<b>2019 Risk Elements</b>	<b>2020 Risk Elements</b>	<b>2021 Risk Elements</b>
Planning and System Analysis	Inhibited Ability to Ride Through Events	Gaps in Program Execution	Gaps in Program Execution
Human Performance	Gaps in Program Execution		

**B. Reliability Standards Effective**

The Régie adopts and makes effective NERC Reliability Standards and their Québec appendices (the Reliability Standards). The Reliability Standards effective in Québec and those to become effective in Québec are identified on the [Reliability Standards](#) webpage on the Régie’s website.

**C. Québec Areas of Focus**

NPCC compared the specific areas of focus that were developed in the 2021 ERO Enterprise IP, with the Reliability Standards that are effective to develop the specific areas of focus for the 2021 Québec Implementation Plan. Some of the Reliability Standards identified in the 2021 ERO IP are a different version than those in effect in Québec. However, the requirements identified are either identical or substantially similar and therefore are included in the Actively Monitored List for Québec.

Table 2 shows the list of Reliability Standards and requirements that will be actively monitored by NPCC.

**Table 2: Actively Monitored Standards and Requirements for 2021**

Area of Focus Identification	Risk Element	Standard	Requirement(s)	Monitored Function(s)
Québec Specific	Gaps in Program Execution	CIP-002-5.1a	R1, R2	BA, DP, GOP, GO, RC, TOP, TO
Québec Specific	Gaps in Program Execution	CIP-003-7	R1, R2	BA, DP, GOP, GO, RC, TOP, TO
Québec Specific	Gaps in Program Execution	CIP-003-8 (as of October 1, 2021)	R1, R2	BA, DP, GOP, GO, RC, TOP, TO
ERO Enterprise IP	Remote Connectivity and Supply Chain	CIP-005-5	R2	BA, DP, GOP, GO, RC, TOP, TO
ERO Enterprise IP	Remote Connectivity and Supply Chain	CIP-007-6	R1	BA, DP, GOP, GO, RC, TOP, TO
Québec Specific	Gaps in Program Execution	CIP-008-5	R3	BA, DP, GOP, GO, RC, TOP, TO
Québec Specific	Gaps in Program Execution	CIP-009-6	R2	BA, DP, GOP, GO, RC, TOP, TO
ERO Enterprise IP	Remote Connectivity and Supply Chain and Gaps in Program Execution	CIP-010-2	R1	BA, DP, GOP, GO, RC, TOP, TO
Québec Specific	Gaps in Program Execution	CIP-010-2	R4	BA, DP, GOP, GO, RC, TOP, TO
Québec Specific	Remote Connectivity and Supply Chain	CIP-011-2	R1, R2	BA, DP, GOP, GO, RC, TOP, TO
Québec Specific	Gaps in Program Execution	EOP-005-3	R1, R3, R5, R7, R8, R10, R11	TOP
Québec Specific	Gaps in Program Execution	EOP-006-3	R1, R2, R3, R4, R5	RC
Québec Specific	Poor Quality Models Impacting Planning and Operations	FAC-002-2	R1	PA, TP
Québec Specific	Poor Quality Models Impacting Planning and Operations	FAC-002-2	R2, R5	GO
ERO Enterprise IP	Gaps in Program Execution	FAC-003-3	R1, R2, R3, R6, R7	GO, TO
ERO Enterprise IP	Gaps in Program Execution	FAC-003-4 (as of April 1, 2021)	R1, R2, R3, R6, R7	GO, TO
ERO Enterprise IP	Gaps in Program Execution	FAC-008-3	R6	GO, TO
ERO Enterprise IP	Inadequate Real-time Analysis during Tool and Data Outages	IRO-008-2	R4	RC
Québec Specific	Gaps in Program Execution	MOD-025-2	R1, R2	GO
Québec Specific	Poor Quality Models Impacting Planning and Operations	MOD-032-1	R2	BA, GO, LSE, RP, TO, TSP
ERO Enterprise IP	Poor Quality Models Impacting Planning and Operations	MOD-033-1	R1	PA
ERO Enterprise IP	Poor Quality Models Impacting Planning and Operations	MOD-033-1	R2	RC, TOP

**Table 2: Actively Monitored Standards and Requirements for 2021**

Area of Focus Identification	Risk Element	Standard	Requirement(s)	Monitored Function(s)
Québec Specific	Gaps in Program Execution	PER-005-2	R1	RC, BA, TOP
Québec Specific	Gaps in Program Execution	PER-005-2	R3, R4	RC, BA, TOP, TO
Québec Specific	Gaps in Program Execution	PER-005-2	R6	GOP
ERO Enterprise IP	Determination and Prevention of Misoperations	PRC-004-5(i)	R1, R3	GO, TO, DP
Québec Specific	Determination and Prevention of Misoperations	PRC-004-5(i)	R5	DP, GO, TO
ERO Enterprise IP	Gaps in Program Execution	PRC-005-2	R3	DP, GO, TO
Québec Specific	Gaps in Program Execution	PRC-006-3	D.A.3	PC
Quebec Specific	Gaps in Program Execution	PRC-019-2	R1	GO, TO
Quebec Specific	Gaps in Program Execution	PRC-025-1	R1	DP, GO, TO
ERO Enterprise IP	Inadequate Real-time Analysis during Tool and Data Outages	TOP-001-3	R13	TOP
Québec Specific	Gaps in Program Execution	TOP-003-3	R1	TOP
Québec Specific	Gaps in Program Execution	TOP-003-3	R2	BA
Québec Specific	Gaps in Program Execution	TOP-003-3	R5	DP, GO, GOP, BA, LSE, TO, TOP
ERO Enterprise IP	Loss of Major Transmission Equipment with Extended Lead Times	TPL-001-4	R2.1.5	PA, TP
Québec Specific	Poor Quality Models Impacting Planning and Operations	VAR-002-4.1	R2	GOP



#### IV. Compliance Monitoring

##### A. Compliance Audits

Compliance Audits are carried out according to the schedule set out in the Québec Implementation Plan. The Annual Audit Plan for this 2021 Québec Implementation Plan is in Table 3 below.

Table 3 : Audit plan for 2021			
Off-site Operations & Planning Audits			
Registered Entity	Acronym	Functions Audited	Audit Date
Énergie Renouvelable Brookfield (Énergie La Lièvre s.e.c.)	ÉLL	GOP, GO, TO, DP	TBD
Énergie éolienne Le Plateau I S.E.C. (Le Plateau I Wind)	ÉLP	GOP, GO	TBD
Des Moulins Wind (Énergie éolienne Des Moulins S.E.C.)	MOU	GOP, GO	TBD
Parcs éoliens de la Seigneurie de Beaupré	SDB	GOP, GO	TBD

##### B. Self-Certification

NPCC, as authorized or requested by the Régie, may implement check the box Self-Certifications or Guided Self-Certifications on a quarterly basis. The Self-Certification notification from NPCC will identify whether the self-certification applies to the entire Reliability Standard or whether it applies to specific requirements and/or sub-requirements. The notification will also identify whether or not evidence should accompany the Self-Certification and will provide a specific amount of time to respond to the Self-Certification.

NPCC is not identifying waivers to self-certifications in 2021. There are several Reliability Standards NPCC will be performing self-certifications for in 2021. Specifically, NPCC will be requesting guided self-certifications for the Reliability Standard requirements listed below:

Table 4 : Self-Certifications for 2021		
Standard	Requirement	Functions
CIP-003-7	R1, R2	BA, RC, TOP
CIP-003-8	R1, R2	BA, RC, TOP
CIP-008-5	R3	BA, RC, TOP
CIP-009-6	R2	BA, RC, TOP
CIP-011-2	R1, R2	BA, RC, TOP
EOP-005-3	R1, R3, R5, R7, R8, R10, R11	TOP
EOP-006-3	R1, R2, R3, R4, R5	RC
PER-005-2	R1, R3, R4	BA, RC, TOP
TOP-003-3	R1, R2	BA, TOP

### **C. Spot Checks**

NPCC, as authorized or requested by the Régie, may initiate a Spot Check at any time. NPCC will provide the registered entity at least 20 days advance notice of a Spot Check.

### **D. Non-Compliance Self-Reporting**

A registered entity shall submit a Non-Compliance Self-Report at the time the registered entity becomes aware that it is not complying or may not have complied with a Reliability Standard declared in effect by the Régie, or that a change in the severity of a previously reported Non-Compliance has occurred. Reports will be made through the Régie's *Système de Surveillance de la Conformité au Québec* (SSCQ).

Registered entities should include sufficient information in Self-Reports to permit NPCC to assess the Non-Compliance and the risk it poses to the reliability of the electric power transmission system. This must include a description, scope, and root cause(s) of the Non-Compliance. Self-Reports should also include a comprehensive description of any mitigation measures and whether they have concluded or are still in progress. The mitigation measures must correct the issue, address the contributing cause(s), and prevent recurrence.

### **E. Periodic Data Submittals**

Registered entities shall provide Periodic Data Submittals (PDS) for the Reliability Standard requirements and by the deadlines described in Table 5.

However, 2021 PDS are not required for any Reliability Standard that is not identified in this Implementation Plan.

**Table 5: 2021 Periodic Data Submittal Schedule**

Reliability Standard	Requirement	Text	Function	Submit To	Submittal Frequency	Due Dates
BAL-003-1.1	R1	Each Frequency Response Sharing Group (FRSG) or Balancing Authority that is not a member of a FRSG shall achieve an annual Frequency Response Measure (FRM) (as calculated and reported in accordance with Attachment A) that is equal to or more negative than its Frequency Response Obligation (FRO) to ensure that sufficient Frequency Response is provided by each FRSG or BA that is not a member of a FRSG to maintain Interconnection Frequency Response equal to or more negative than the Interconnection Frequency Response Obligation.	BA	NPCC and Régie through SSCQ	Annually	March 8, 2021
EOP-004-4	R2	Each Responsible Entity shall report events specified in EOP-004-4 Attachment 1 to the entities specified per their event reporting Operating Plan by the later of 24 hours of recognition of meeting an event type threshold for reporting or by the end of the Responsible Entity's next business day (4 p.m. local time will be considered the end of the business day).	See Standard	NERC	Event driven as per R2	Within 24 hours of recognition of meeting an event type threshold for reporting or by the end of the next business day if the event occurs on a weekend
EOP-008-2	R8	Each Reliability Coordinator, Balancing Authority, and Transmission Operator that has experienced a loss of its primary or backup functionality and that anticipates that the loss of primary or backup functionality will last for more than six calendar months shall provide a plan to its Regional Entity within six calendar months of the date when the functionality is lost showing how it will re-establish primary or backup functionality.	RC/BA/TOP	NPCC and Régie through SSCQ	Event driven as per R8	Within six calendar months of the date when the functionality is lost
FAC-003-3 (until March 31, 2021)	C.1.4	The applicable Transmission Owner and applicable Generator Owner will submit a quarterly report to its Regional Entity, or the Regional Entity's designee, identifying all Sustained Outages of applicable lines operated within their Rating and all Rated Electrical Operating Conditions as determined by the applicable Transmission Owner or applicable Generator Owner to have been caused by vegetation, except as excluded in footnote 2, and include as a minimum the following: ...	TO/GO	NPCC and Régie through SSCQ	Quarterly, but only if there are FAC-003 events in the quarter.	Within 20 days after the end of the quarter AND only if there was a qualifying event in the previous quarter
FAC-003-4 (as of April 1, 2021)	C.1.4	The applicable Transmission Owner and applicable Generator Owner will submit a quarterly report to its Regional Entity, or the Regional Entity's designee, identifying all Sustained Outages of applicable lines operated within their Rating and all Rated Electrical Operating Conditions as determined by the applicable Transmission Owner or applicable Generator Owner to have been caused by vegetation, except as excluded in footnote 2, and include as a minimum the following: ...	TO/GO	NPCC and Régie through SSCQ	Quarterly, but only if there are FAC-003 events in the quarter.	Within 20 days after the end of the quarter AND only if there was a qualifying event in the previous quarter
PRC-002-2	R12	Each Transmission Owner and Generator Owner shall, within 90-calendar days of the discovery of a failure of the recording capability for the SER, FR or DDR data, either: • Restore the recording capability, or • Submit a Corrective Action Plan (CAP) to the Regional Entity and implement it.	TO/GO	NPCC and Régie through SSCQ	Event driven as per R12	Within 90 calendar days of the discovery of a failure of the recording capability for the SER, FR or DDR data
PRC-023-4	R5	Each Transmission Owner, Generator Owner, and Distribution Provider that sets transmission line relays according to Requirement R1 criterion 12 shall provide an updated list of the circuits associated with those relays to its Regional Entity at least once each calendar year, with no more than 15 months between reports, to allow the ERO to compile a list of all circuits that have protective relay settings that limit circuit capability.	TO/GO/DP	NPCC and Régie through SSCQ	Annually, but only if the entity chooses to set relays using Criterion 12 of R1	If the entity chooses to set relays on circuits according to Criterion 12 of R1, the entity must at least once each calendar year, with no more than 15 months between reports, provide the updated list to NPCC.
PRC-023-4	R6.2	Provide the list of circuits to all Regional Entities, Reliability Coordinators, Transmission Owners, Generator Owners, and Distribution Providers within its Planning Coordinator area within 30 calendar days of the establishment of the initial list and within 30 calendar days of any changes to that list.	PA	NPCC and Régie through SSCQ	Event driven as per R6.2	Within 30 calendar days of the establishment of the initial list and within 30 days of any changes to list

**V. NPCC Submission Attestation**

NPCC attests that this 2021 Québec Implementation Plan is both necessary and sufficient at this time for the compliance monitoring of the Reliability Standards in effect in Québec.