

Canadian Provincial Summaries of Standard-Making and Enforcement Functions with U.S. Comparators

Last Updated: February 2020

The Federal, Provincial, and Territorial Monitoring and Enforcement Sub-group developed the following Canadian provincial summaries and will review them annually and update them as needed. If you have comments on the summaries, please submit them to NERC Manager of International Relations [Hugo Perez](#).

Information for Prince Edward Island, the Yukon, and Nunavut was not available at the time of posting.

The Northwest Territories has small, isolated distribution systems that are not connected to the continental grid. These systems are regulated by the Northwest Territories Public Utilities Board.

▶ Alberta – US Comparator

Standard-Making and Enforcement Functions

Prepared by: ▶ Alberta Market Surveillance Administrator ▶ October 11, 2019

CURRENT RELIABILITY STANDARDS

Below is a link to current reliability standards in Alberta:

<http://www.aeso.ca/rulesprocedures/17006.html>

KEY ORGANIZATIONS IN ALBERTA'S ELECTRICITY SECTOR

ALBERTA ENERGY

Alberta Energy is responsible for setting the policy and legislative framework for Alberta's electricity system. Alberta Energy develops solutions and advises on all aspects of energy policy for Alberta, including electricity, natural gas and oil.

ALBERTA UTILITIES COMMISSION

The Alberta Utilities Commission ("AUC") is an independent, quasi-judicial agency that is responsible for ensuring that the delivery of utility service in Alberta takes place in a manner that is fair, responsible and in the public interest.

The AESO forwards Alberta reliability standards to the AUC, with the AESO's recommendation that the AUC approve or reject them. The AUC must follow the AESO's recommendation related unless an interested person satisfies the AUC that the recommendation is either "technically deficient" or "not in the public interest". The AUC is also the adjudicative body for compliance enforcement in respect of both ISO rules and Alberta reliability standards.

ALBERTA ELECTRIC SYSTEM OPERATOR

The Independent System Operator ("ISO") in the Province of Alberta is the Alberta Electric System Operator ("AESO"), a statutory corporation pursuant to the *Electric Utilities Act*. The AESO has a duty to provide for the safe, reliable and economic operation of the interconnected electric system and to promote a fair, efficient, economic and openly competitive market for electricity.

As set out in the Alberta *Transmission Regulation*, the reliability standards that apply in Alberta are the reliability standards adopted by the AESO after consulting with those market participants that it considers likely to be directly affected by the Alberta reliability standards, forwarding the proposed reliability standards to the AUC and receiving AUC approval. The AESO is required by legislation to monitor market participant compliance with ISO rules, the Alberta reliability standards and the AUC rules respecting load settlement.

MARKET SURVEILLANCE ADMINISTRATOR

The Market Surveillance Administrator ("MSA") is a statutory corporation established under the *Electric Utilities Act* and continued under the *Alberta Utilities Commission Act*. The mandate of the MSA is to carry

out surveillance in respect of the Alberta electricity markets and the Alberta retail gas market to ensure they operate in a fair, efficient, and openly competitive manner. The scope of the MSA's legislative mandate includes the enforcement of ISO rules and reliability standards effective in Alberta. Under rules established by the AUC, the MSA may issue specified penalties for contravention of ISO rules or reliability standards or may request a hearing or other proceeding before the AUC to seek an administrative penalty or other relief. The MSA's mandate of enforcement for both ISO rules and Alberta reliability standards extends to Alberta market participants and the AESO.

The following table identifies the provincial organizations responsible for each of the functions that underpin the framework for monitoring and enforcing compliance with reliability standards in the province, and the U.S. organizations that support this framework. It also identifies the U.S. organizations that are involved in standards development, monitoring and enforcing compliance with reliability standards in the U.S.

FUNCTIONS		PROVINCIAL ORGANIZATION	RELEVANT US ORGANIZATION	US COMPARATOR
STANDARDS MAKING	Standards Approval	AUC ⁽¹⁾	Not Applicable	FERC
	Standards Development	AESO ⁽¹⁾	NERC (1)	NERC, WECC
	Entity Registration	AESO ⁽²⁾	Not Applicable	NERC and WECC in their respective roles
COMPLIANCE MONITORING	Compliance Monitoring and Violation Detection	AESO/MSA ⁽³⁾⁽⁵⁾⁽⁶⁾	WECC (3)	NERC and WECC in their respective roles, FERC
ENFORCEMENT PROCESSES	Execution of Investigations	AESO/MSA ⁽⁷⁾	Not Applicable	NERC and WECC in their respective roles, FERC
	Violation Determination and Sanction Imposition	MSA ⁽⁸⁾⁽⁹⁾⁽¹⁰⁾	Not Applicable	NERC, WECC, FERC
VIOLATION PREVENTION AND OUTREACH	Violation Prevention, Outreach, including education	AESO/MSA ⁽⁴⁾	NERC and WECC	NERC, WECC, FERC
APPEALS	First Right of Appeal	AUC ⁽¹¹⁾	Not Applicable	NERC

FUNCTIONS		PROVINCIAL ORGANIZATION	RELEVANT US ORGANIZATION	US COMPARATOR
	Second Right of Appeal	Review and Variance application to the AUC ⁽¹²⁾	Not Applicable	FERC
	Third Right of Appeal	Court of Appeal of Alberta ⁽¹³⁾	Not Applicable	US Court of Appeals
OVERSIGHT	Approval of Alberta's Rules of Procedure	Not Applicable	Not Applicable	FERC
	Approval of Alberta's Compliance Monitoring Plan	AESO ⁽⁵⁾ /MSA ⁽⁶⁾	Not Applicable	NERC and WECC
	Performance Oversight of CMP	AESO ⁽⁵⁾ /MSA ⁽⁶⁾	Not Applicable	NERC BOT CC
	Violation Prevention and Outreach	AESO/MSA	NERC and WECC	NERC and WECC in their respective roles, FERC

TABLE DEFINITIONS

PROVINCIAL ORGANIZATION

The Alberta organization accountable and responsible for performing the function according to provincial legislation for matters concerning Alberta entities.

RELEVANT US ORGANIZATION

The US organization engaged to perform the function according to an executed Memorandum of Understanding for matters concerning Alberta entities.

US COMPARATOR

The US organization that is responsible for performing the functions according to US law.

TABLE NOTES

(1) ELECTRIC RELIABILITY ORGANIZATION

Pursuant to section 20 of the Alberta *Transmission Regulation*, NERC is recognized as the Electricity Reliability Organization (“ERO”) in Alberta. NERC reliability standards are assessed by the AESO to determine whether they are capable of applying in Alberta and to ensure, to the extent reasonable, that any new or modified standard that will apply in Alberta will not require a material change in the framework for the electricity market or capacity market.

(2) ENTITY REGISTRATION

Market participants have a duty to comply with Alberta reliability standards that are applicable to them under the Electric Utilities Act. The AESO maintains a registry that is used to administer the compliance monitoring program, including scoping and scheduling of monitoring activities. However, even a market participant that is not registered must comply with the applicable Alberta reliability standards. The AESO bases registration on the Alberta Reliability Standards Functional Model and Criteria for Registration which maps Alberta market participant roles to the AESO functional model roles.

(3) COMPLIANCE ACCOUNTABILITY

The Alberta Transmission Regulation mandates that the AESO monitor the compliance by market participants with Alberta reliability standards. Further to the MSA’s mandate under the Alberta Utilities Commission Act, the MSA oversees compliance of the AESO in respect of Alberta reliability standards applicable to the AESO. The MSA has entered into a services agreement with WECC such that WECC conducts compliance monitoring of the AESO under the auspices of the MSA.

(4) PREVENTION AND OUTREACH

The AESO conducts periodic stakeholder meetings for the purpose of updating entities on Alberta reliability standard development activities and changes to the compliance monitoring program. In addition, the MSA provides guidance on compliance trends and expectations via its compliance reporting activities.

(5) MONITORING

The AESO has established the Alberta Reliability Standards Compliance Monitoring Program (“CMP”) and associated processes and procedures for monitoring Alberta market participants. The AESO oversees performance of the CMP.

(6) MONITORING

The MSA is the compliance monitor with respect to the AESO. In this regard, the MSA has entered into a service agreement with WECC to conduct compliance monitoring of the AESO under the auspices of the

MSA including self-certification and compliance audits. Under the services agreement, WECC assists the MSA in the development of an Implementation Plan annually. The Implementation Plan is applicable solely to the AESO and is subject to MSA approval and oversight.

(7) INVESTIGATIONS

The AESO and WECC (as applicable) are required to refer suspected contraventions of Alberta reliability standards to the MSA for disposition. The MSA may also investigate and make its own independent conclusions for violation determinations and sanctions for all Alberta entities, including the AESO.

(8) VIOLATION DETERMINATION AND SANCTION IMPOSITION

MSA makes violation and sanction determinations for all Alberta entities and the AESO. In accordance with AUC rules, the MSA may issue a notice of specified penalty for contravention of an Alberta reliability standard. Alternatively, the MSA may seek an administrative penalty before the AUC or other relief. The maximum administrative penalty amount is \$1,000,000 per day on which the contravention occurs or continues.

(9) VIOLATION DETERMINATION AND SANCTION IMPOSITION

NERC and WECC have no authority to impose sanctions on Alberta entities or the AESO.

(10) PUBLIC DISCLOSURE

In the event that the MSA issues a notice of specified penalty for contravention of a reliability standard, the name of the responsible entity is made public on the MSA website in accordance with AUC rules. A copy of the notice of specified penalty issued to the entity is typically the form of disclosure. In the event of an administrative proceeding before the AUC, the outcome of the proceeding is made public in an AUC decision.

(11) APPEALS TO MSA DETERMINATIONS

If a registered entity or the AESO fails to pay or disputes a specified penalty issued by the MSA, the MSA is required to notify the AUC and request a hearing. The AUC may confirm or rescind the notice of specified penalty or may impose an administrative penalty.

(12) REVIEW OF AUC DECISIONS

A registered entity or the AESO may seek application to review and vary a decision of the AUC.

(13) APPEAL OF AUC DECISIONS

A registered entity or the AESO may seek leave to appeal a decision of the AUC with the Court of Appeal of Alberta.

▶ British Columbia – US Comparator

Standard-Making and Enforcement Functions

Prepared by: ▶ British Columbia Utilities Commission ▶ October 11, 2019

CURRENT RELIABILITY STANDARDS

A list of Mandatory Reliability Standards adopted in British Columbia (BC), is accessed from both the BCUC and WECC websites:

<https://www.wecc.org/Standards/Pages/Default.aspx>

KEY ORGANIZATIONS IN BRITISH COLUMBIA'S ELECTRICITY SECTOR

MINISTRY OF ENERGY, MINES AND PETROLEUM

The Ministry of Energy, Mines and Petroleum Resources is responsible for the BC electricity sector. The Ministry develops and oversees BC policies with regard to electrical power generation and transmission, including replacing and upgrading infrastructure. See the *2007 BC Energy Plan: A Vision for Clean Energy Leadership*. The Ministry administers statutes relating to the energy sector and has policy responsibilities under the *Utilities Commission Act (UCA)*. The Ministry also oversees the British Columbia Hydro and Power Authority (BC Hydro) through the *British Columbia Hydro and Power Authority Act*.

BRITISH COLUMBIA UTILITIES COMMISSION

The British Columbia Utilities Commission (BCUC) is an independent, quasi-judicial, regulatory agency that operates under and administers the UCA. The BCUC's primary responsibility is the regulation of energy utilities under its jurisdiction to ensure that the rates charged for energy are fair, just and reasonable, and that utilities provide safe, adequate and secure service to their customers.

The BCUC's mandate in the MRS Program is described in legislation (UCA). Specifically, the BCUC adopts or rejects reliability standards in BC and is responsible for the administration of the BC MRS Program. In addition, the BCUC also has the authority to impose administrative penalties for contraventions of MRS in accordance with the UCA and the *Administrative Penalties Regulation, BC Reg. 316/2012, OIC 731/2012*.

WESTERN ELECTRICITY COORDINATING COUNCIL

The BCUC engages the Western Electricity Coordinating Council (WECC) as the BCUC's Administrator for the BC MRS Program. Through the Administration Agreement, the BCUC grants WECC authority to act as the BCUC's Administrator in the assessment of registration criteria and administration of approved reliability standards in BC. WECC's authority is limited to actions and obligations specified in the BCUC's Rules of Procedure for Reliability Standards in BC, as well as the Registration Manual and Compliance Monitoring Program, or as otherwise ordered by the BCUC.

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

BC Hydro is a provincially owned crown corporation and the largest electric utility in BC. BC Hydro delivers electricity to its customers through a network of over 75,000 kilometers of transmission and distribution lines and its system connects with other transmission systems in Alberta and Washington State. BC

Hydro’s responsibilities in the MRS Program are outlined in the UCA and MRS Regulation. Specifically, BC Hydro evaluates MRS for suitability in BC according to certain criteria stated in accordance with the UCA and the *Mandatory Reliability Standards Regulation* (MRS Regulation), *BC Reg. 32/2009, MO39*. In consultation with stakeholders, BC Hydro assesses reliability standards approved by FERC and reports to the BCUC on their suitability for adoption in BC.

The following table identifies the provincial organizations responsible for each of the functions that underpin the framework for monitoring and enforcing compliance with reliability standards in the province, and the U.S. organizations that support this framework. It also identifies the U.S. organizations that are involved in standards development, monitoring and enforcing compliance with reliability standards in the U.S.

FUNCTIONS ¹		PROVINCIAL ORGANIZATION	RELEVANT US ORGANIZATION	US COMPARATOR
STANDARDS MAKING ²	Standards Approval	BCUC ⁽¹⁾	Not Applicable	FERC
	Standards Development	Not applicable	NERC and WECC	NERC and WECC
	Entity Registration	BCUC ⁽²⁾	WECC ⁽²⁾	NERC and WECC in their respective roles
COMPLIANCE MONITORING	Compliance Monitoring and Violation Detection	BCUC ⁽³⁾	WECC ⁽³⁾	NERC or WECC in their respective roles, FERC
ENFORCEMENT PROCESSES	Execution of Investigations (4)	BCUC ⁽⁵⁾	WECC ⁽⁵⁾	WECC or NERC in their respective roles, FERC
	Violation Determination and Imposes Administrative Penalties	BCUC ⁽⁶⁾	WECC recommends NOAVs to BCUC	WECC , NERC, or FERC
VIOLATION PREVENTION AND OUTREACH	Violation Prevention, Outreach, including Education (7)	BCUC to a limited extent	WECC	WECC, or NERC in their respective roles, FERC

¹ This table is intended to illustrate *who has authority over these various processes vs. who has authority for their execution.*

² Reliability standards include NERC and WECC reliability standards approved by FERC.

FUNCTIONS ¹		PROVINCIAL ORGANIZATION	RELEVANT US ORGANIZATION	US COMPARATOR
APPEALS	First Right of Appeal	BCUC	Not applicable	NERC Board of Trustees Compliance Committee (BOT CC)
	Second Right of Appeal	Supreme Court or Court of Appeal ⁽⁸⁾	Not applicable	FERC
	Third Right of Appeal	Not applicable	Not applicable	US Court of Appeals
OVERSIGHT	Approval of BC's Rules of Procedure	BCUC	Not applicable	FERC
	Approval of BC's Compliance Monitoring Program and Implementation Plan	BCUC	Not applicable	FERC for approval of the CMEP and NERC for approval of a Regional Entity's Implementation Plan
	Performance Oversight of CMP	BCUC	Not applicable	WECC, or NERC BOT CC in their respective roles

TABLE DEFINITIONS

PROVINCIAL ORGANIZATION

The BC organization accountable and responsible for performing the function according to provincial legislation for matters concerning entities in BC.

RELEVANT US ORGANIZATION

The US organization assisting the BCUC in administrative matters related to the function described, in accordance with the approved Administrative Agreement (Order G-123-09, Oct. 15, 2009).

US COMPARATOR

The US organization that is responsible for performing the functions according to US law.

TABLE NOTES

(1) STANDARDS APPROVAL

Pursuant to section 125.2(2) of the *Utilities Commission Act (UCA)* the British Columbia Utilities Commission (BCUC) has exclusive jurisdiction to determine whether a “reliability standard” as defined in the UCA, is in the public interest and should be adopted in BC. To provide the necessary information required for determinations and in accordance with the UCA, the British Columbia Hydro and Power Authority (BC Hydro) submits a Mandatory Reliability Standard (MRS) Assessment Report to the BCUC assessing the new and revised reliability standards adopted in the US by the Federal Energy Regulatory Commission (FERC) within the annual assessment period (December 1 to November 30). The Assessment Report is developed in consultation with Registered Entities in the BC MRS Program. Further, in consultation with stakeholders regarding the estimated time required for the entities to implement and come into compliance with the reliability standards, BC Hydro suggests BC effective dates for each of the reliability standards assessed. After a public comment process, the BCUC adopts reliability standards in the Assessment Report to maintain or achieve consistency with other regions, unless the BCUC determines otherwise after a hearing.

(2) ENTITY REGISTRATION

Entities subject to adopted Mandatory Reliability Standards are required to register with the BCUC. The Western Electricity Coordinating Council (WECC) in its role as the BCUC’s Administrator for the BC MRS Program reviews registration materials provided by all applicable Entities and makes recommendations to the BCUC.

(3) COMPLIANCE MONITORING

The Rules of Procedure for Reliability Standards in BC include the Compliance Monitoring Program and describe the procedures for monitoring and enforcement of adopted reliability standards. The processes include among other things Audits, Self-Certifications, Spot-Checks, Self-Reports, and Periodic Data Submittals. An annual Implementation Plan, recommended by WECC and approved by the BCUC, identifies the Actively Monitored Standards List and schedules for the procedures listed above for the upcoming year. WECC assists the BCUC with the compliance monitoring activities for BC entities in accordance to the annual Implementation Plan approved by the BCUC.

(4) EXECUTION OF INVESTIGATIONS

The BCUC may execute investigations and may direct WECC to execute investigations.

(5) INVESTIGATIONS

As the BCUC’s Administrator, WECC may conduct investigations at the direction of the BCUC.

(6) VIOLATION DETERMINATION AND SANCTION IMPOSITION

The BCUC makes violation determinations for all BC entities and pursuant to Bill 30 – 2012, the Energy and Mines Statutes Amendment Act – 2012, has the authority to impose administrative penalties and set financial limits for confirmed violation of a reliability standard. Penalty maximums are outlined in the Administrative Penalties Regulation.

(7) VIOLATION PREVENTION AND OUTREACH

The BCUC communicates openly with entities and endeavours to foster a culture of compliance with the BC MRS Program. The BCUC has offered educational workshops to entities from time to time and relies on WECC for entity outreach on technical matters. In addition to alerts and other publications issued by NERC and/or WECC to help inform entities and prevent violations, the BCUC may issue similar notices for this purpose. WECC considers prevention of recurrence when reviewing mitigation plans before recommending them for acceptance by the BCUC.

(8) APPEALS TO BCUC DETERMINATIONS

There are two (2) avenues of recourse for enforcement decisions made by the BCUC: first through the BCUC's Application/Request for Reconsideration and, subsequently, through an appeal to the BC Supreme Court or BC Court of Appeal.

(9) PUBLIC DISCLOSURE

Possible and Alleged Violations are confidential unless the BCUC determines they are Confirmed Violations and the BCUC considers that disclosure would not relate to a cyber-security incident or otherwise jeopardize the security of the Bulk Power System.

▶ Manitoba – US Comparator

Standard-Making and Enforcement Functions

Prepared by: ▶ Manitoba Hydro ▶ October 22, 2019

CURRENT RELIABILITY STANDARDS

Below is a link to current NERC and MRO reliability standards adopted in Manitoba:

<http://web2.gov.mb.ca/laws/regs/current/pdf-regs.php?reg=25/2012>

Below is a link to current Manitoba Hydro reliability standards that are binding in Manitoba:

https://www.hydro.mb.ca/regulatory_affairs/electric/nerc_rules_of_procedure

KEY ORGANIZATIONS IN MANITOBA'S ELECTRICITY SECTOR

LEGISLATIVE FRAMEWORK: GOVERNMENT OF MANITOBA, CROWN SERVICES AND SUSTAINABLE DEVELOPMENT

On April 1, 2012, mandatory adherence to electric reliability standards became a legal obligation of all users, owners, and operators of the Bulk Power System within the Province of Manitoba¹. Reliability standards that are developed by NERC or MRO and adopted for enforcement within the province, and an associated compliance monitoring and enforcement program for such standards, are implemented through regulations which the Crown Services Department, supported by the Climate and Green Plan Implementation Office under Sustainable Development Department, is responsible to periodically update and submit for approval by the Lieutenant Governor in Council.

STANDARDS DEVELOPMENT: NERC, MRO AND MANITOBA HYDRO

The Manitoba Hydro Act allows the Lieutenant Governor in Council to adopt standards developed by certain organizations through regulations. The Manitoba Reliability Standards Regulation authorizes the adoption of NERC and MRO standards. The Act also establishes Manitoba Hydro's authority to develop reliability standards.

COMPLIANCE MONITORING AUTHORITY: NERC AND MRO

NERC and MRO are authorized to monitor compliance with reliability standards that have been adopted in Manitoba by regulation and are responsible for carrying out their duties using the compliance monitoring and enforcement program under the Reliability Standards Regulation. A Memorandum of Understanding between Manitoba Hydro, NERC, and MRO authorizes MRO to monitor compliance with Manitoba Hydro developed reliability standards.

REGULATORY OVERSIGHT AND ENFORCEMENT OF NERC/MRO STANDARDS ADOPTED BY THE RELIABILITY STANDARDS REGULATION: THE MANITOBA PUBLIC UTILITIES BOARD (PUB)

The PUB is an independent regulator which has three broad areas of authority related to electric reliability (for those standards that have been adopted under the regulation): 1) review of reliability standards; 2)

¹ *The Manitoba Hydro Amendment and Public Utilities Board Amendment Act (Electricity Reliability)*

determining if a person has violated a reliability standard and establishing penalties and/or sanctions; 3) the resolution of disputes related to registration, the applicability of a standard, the NERC Rules of Procedure and the compliance monitoring and enforcement program.

Upon application of a person required to adhere to a reliability standard adopted through the Manitoba Reliability Standards Regulation, the PUB may review the standard or amendment and confirm it or reject it in whole or in part and remand it to the standards body for further consideration.

When NERC or MRO considers there has been a possible violation of an electricity reliability standard adopted through the Manitoba Reliability Standards Regulation and that a financial penalty or other sanction is warranted, it submits a recommendation to the PUB to make a determination of a violation along with a recommendation for penalties and or sanctions. In order for a possible violation to be confirmed, the PUB must make a finding and order the imposition of any associated penalties and/or sanctions. If a possible violation presents a minimal to moderate risk to the Bulk Power System and MRO does not consider a financial penalty or sanction to be warranted, a Compliance Exception or Self-Logging (for minimal risk) process can be implemented under certain circumstances identified in the Manitoba CMEP. If the Compliance Exception or Self-Logging process is used, MRO may accept a remediation plan to address the possible violation and there would be no recommendation to PUB to determine whether a violation has occurred.

PARALLEL COMPLIANCE ENFORCEMENT: THE CANADA ENERGY REGULATOR (CER)

The CER has jurisdiction over the construction and operation of International Power Lines (IPLs). The CER has imposed mandatory reliability standards on IPL owners under its jurisdiction, which includes the Bulk Power System transmission interconnections between Manitoba and the United States. In addition to other enforcement tools, the CER can assess monetary penalties for non-compliance with mandatory reliability standards under its Administrative Monetary Penalties (Canada Energy Regulator) Regulations. The CER has a separate process outside of the compliance monitoring and enforcement program used in the Province of Manitoba but does take provincial enforcement actions into consideration when it decides what action it will take.

Because the CER's process is parallel, it has not been included in the attached reliability roles and functions overview table.

MIDCONTINENT INDEPENDENT SYSTEM OPERATOR (MISO)

Manitoba Hydro has contracted with MISO to provide Reliability Coordination services. MISO is a FERC approved Independent System Operator and Regional Transmission Organization headquartered in Carmel, Indiana. MISO provides, among other things, enhanced operating and monitoring of the regional electric grid, which includes Manitoba Hydro's facilities, and as such has responsibility to adhere to electric reliability standards. MISO is a U.S. based organization and as such adheres to Federal U.S. reliability standards and those of the various Regional Entities where it operates.

The following table identifies the provincial organizations responsible for each of the functions that underpin the framework for monitoring and enforcing compliance with adopted NERC and MRO reliability standards in the province, and the U.S. organizations that support this framework. It also identifies the U.S. organizations that are involved in standards development, monitoring and enforcing compliance with NERC and MRO reliability standards in the U.S.

FUNCTIONS		PROVINCIAL ORGANIZATION	RELEVANT US ORGANIZATION	US COMPARATOR
STANDARDS MAKING	Standards Adoption ⁽¹⁾	Government of Manitoba submitted through its Crown Service Department, supported by the Climate and Green Plan Implementation Office, Sustainable Development Department	Not Applicable	FERC
	Standards Development	Manitoba Hydro	NERC, MRO (for adopted NERC and MRO standards)	NERC, MRO
	Entity Registration ⁽²⁾	Not Applicable	MRO	NERC and MRO in their respective roles
COMPLIANCE MONITORING ⁽³⁾	Compliance Monitoring and Violation Detection ⁽⁴⁾	Not Applicable	NERC and MRO in their respective roles	NERC or MRO in their respective roles, FERC
ENFORCEMENT PROCESSES ⁽⁵⁾	Execution of Investigations ⁽⁶⁾	Not Applicable	NERC and MRO in their respective roles	NERC or MRO in their respective roles, FERC
	Violation Determination and Penalty/Sanction Imposition	PUB (for adopted NERC and MRO standards)	Not Applicable	NERC or MRO in their respective roles, FERC
APPEALS ⁽⁷⁾	First Right of Appeal	PUB (for adopted NERC and MRO standards)	MRO	NERC
	Second Right of Appeal	Manitoba Court of Appeal	Not Applicable	FERC

FUNCTIONS		PROVINCIAL ORGANIZATION	RELEVANT US ORGANIZATION	US COMPARATOR
	Third Right of Appeal	Supreme Court	Not Applicable	US Court of Appeals
OVERSIGHT	Establishment of Manitoba's Compliance Monitoring	Lieutenant Governor in Council	Not Applicable	FERC
	Performance Oversight of Compliance Monitoring and Enforcement Program	Not Applicable	MRO and NERC in their respective roles	MRO or NERC in their respective roles
	Violation Prevention and Outreach (including education)	Not Applicable	MRO and NERC in their respective roles	MRO or NERC in their respective roles

TABLE DEFINITIONS

PROVINCIAL ORGANIZATION

The Manitoba organization accountable and responsible for performing the electric reliability related function according to provincial legislation.

RELEVANT US ORGANIZATION

The US organization that is responsible for performing the electric reliability function according to provincial legislation.

US COMPARATOR

The US organization that is responsible for performing the functions according to US law.

TABLE NOTES

(1) STANDARDS ADOPTION

A Reliability Standards Regulation enacted under The Manitoba Hydro Act sets forth the NERC/MRO standards that have been adopted within the province for mandatory compliance and enforcement. This set is provided by the Climate and Green Plan Implementation Office and needs to be approved for adoption by The Lieutenant Governor in Council (The Provincial Cabinet). The set of NERC/MRO standards

recommended for adoption are those that have been approved by NERC's Board and by FERC, and have undergone a consultation process within the Province and met provincial criteria for adoption. Unless adopted under the Reliability Standards Regulation, a NERC/MRO standard has no effect in Manitoba.

Upon application, the PUB may review any proposed or adopted NERC/MRO reliability standard or amendment and confirm or reject the standard in whole or in part and remand it to NERC for further consideration. Upon remand that standard or part of a standard has no effect in Manitoba until the PUB orders otherwise.

(2) ENTITY REGISTRATION

MRO determines which users, owners, and operators of the Bulk Power System in Manitoba are subject to compliance with reliability standards through their registration processes. The Bulk Power System in Manitoba is broadly defined to encompass the electrical generation facilities, transmission facilities, interconnections with neighbouring systems and associated equipment that are generally operated at voltages of 100 kilovolts or higher excluding radial transmission facilities serving load with only one transmission source.

(3) COMPLIANCE MONITORING

The Registered Entities in Manitoba as determined by MRO are accountable for compliance with NERC/MRO reliability standards that are adopted within the province.

(4) COMPLIANCE MONITORING AND VIOLATION DETECTION

The Reliability Standards Regulation establishes the NERC procedures in effect in Manitoba and the compliance monitoring and enforcement program for Manitoba.

(5) ENFORCEMENT PROCESSES

MRO or NERC makes recommendations to PUB for the determination that a reliability requirement from an adopted NERC/MRO reliability standard has been violated by a Registered Entity. MRO also makes recommendations to PUB regarding the imposition of associated penalties and/or sanctions with respect to adopted NERC/MRO reliability standards.

Only the PUB can determine if a person in Manitoba has violated an adopted NERC/MRO reliability standard and only the PUB can impose a penalty and/or sanction. The PUB does so by issuing legally binding Orders. All findings by PUB related to electricity reliability proceedings are made public through the issuance of Orders; this includes the name of the registered entity; the reliability standard(s) and requirements(s); whether the PUB agrees with MRO's findings and recommendations; and any penalties or sanctions imposed.

(6) EXECUTIONS OF INVESTIGATIONS

NERC and/or MRO conducts investigations, audits, spot checks and self- certification, of the Registered Entities in Manitoba in accordance with the CMEP as specified in the Reliability Standards Regulation. Self-reports, exception reporting, periodic data submittals and complaints are also used as monitoring mechanisms.

(7) APPEALS OF PUB DETERMINATIONS

There are two avenues of recourse for enforcement decisions made by the PUB with respect to adopted NERC/MRO reliability standards: first through the PUB's appeal process and, subsequently, through the Manitoba Court of Appeal.

▶ New Brunswick – US Comparator

Standard-Making and Enforcement Functions

Prepared by: ▶ New Brunswick Energy and Utilities Board ▶ October 11, 2019

CURRENT RELIABILITY STANDARDS

Below is a link to the reliability standards currently in effect in New Brunswick:

www.nbeub.ca/index.php/en/electricity/reliability-compliance/new-brunswick-approved-reliability-standards

KEY ORGANIZATIONS IN NEW BRUNSWICK'S ELECTRICITY SECTOR

DEPARTMENT OF ENERGY AND MINES

The New Brunswick Department of Energy and Mines is responsible for setting the policy and legislative framework for New Brunswick's electricity system. The Department administers the Electricity Act and Reliability Standards Regulation which establishes the authority and requirements for the adoption and enforcement of electric reliability standards in New Brunswick.

NEW BRUNSWICK ENERGY AND UTILITIES BOARD

The New Brunswick Energy and Utilities Board (NBEUB) is an independent, quasi-judicial board that regulates New Brunswick's electricity sector. The NBEUB has the responsibility under the Electricity Act to adopt and enforce reliability standards in New Brunswick. The NBEUB implements the Reliability Standards Regulation which addresses the adoption of standards, determination of the bulk power system, compliance registrations and compliance monitoring and enforcement processes.

NEW BRUNSWICK POWER CORPORATION

The New Brunswick Power Corporation (NBPC) is a Crown corporation and the province's vertically integrated electric utility. In addition to its responsibility to comply with reliability standards applicable to its functions, NBPC is also responsible under the Electricity Act to make filings to the EUB to update reliability standards, maintain a list of bulk power system elements and to make recommendations on compliance registrations.

The following table identifies the provincial organizations responsible for each of the functions that underpin the framework for monitoring and enforcing compliance with reliability standards in the province, and the U.S. organizations that support this framework. It also identifies the U.S. organizations that are involved in standards development, monitoring and enforcing compliance with reliability standards in the U.S.

FUNCTIONS ¹		PROVINCIAL ORGANIZATION	RELEVANT US ORGANIZATION	US COMPARATOR
STANDARDS MAKING ²	Standards Approval	NBEUB ⁽¹⁾	Not Applicable	FERC
	Standards Development	Not Applicable	NERC	NERC NPCC
	Entity Registration	NBEUB ^(2,3)	NPCC Recommendations to NBEUB ⁽⁴⁾	NERC NPCC
COMPLIANCE MONITORING	Compliance Monitoring and Violation Detection	NBEUB	NPCC ⁽⁵⁾	FERC NERC NPCC
ENFORCEMENT PROCESSES	Execution of Investigations	NBEUB	NPCC ⁽⁶⁾	FERC NERC NPCC
	Violation Determination and Sanction Imposition	NBEUB	NPCC recommendations to NBEUB ⁽⁷⁾	FERC NERC
VIOLATION PREVENTION AND OUTREACH	Violation Prevention, Outreach, including education	N/A	NERC/ NPCC	FERC NERC NPCC
APPEALS	First Right of Appeal	NBEUB Review or Hearing	Not Applicable	NPCC Hearing Body
	Second Right of Appeal	NBEUB Appeal ⁽⁸⁾	Not Applicable	NERC Board of Trustees Compliance Committee (BOT CC)
	Third Right of Appeal	A person aggrieved by an order of the NBEUB can make an application for judicial review to The Court of Appeal of New Brunswick.	Not Applicable	FERC
OVERSIGHT	Approval of New Brunswick's "rules of procedure"	Lieutenant Governor in Council ⁽⁹⁾	Not Applicable	FERC

FUNCTIONS ¹		PROVINCIAL ORGANIZATION	RELEVANT US ORGANIZATION	US COMPARATOR
	Approval of New Brunswick's Compliance Monitoring and Enforcement Implementation Plan	NBEUB	NPCC Recommendations to EUB ⁽¹⁰⁾	NERC NPCC
	Performance Oversight of CMEP	NBEUB	Not Applicable	NERC BOT CC

TABLE DEFINITIONS

PROVINCIAL ORGANIZATION

The New Brunswick organization accountable and responsible for performing the function according to provincial legislation.

RELEVANT US ORGANIZATION

The US organization responsible for performing the function according to an executed agreement for the provision of services.

US COMPARATOR

The US organization that is responsible for performing the functions according to US law.

TABLE NOTES

(1) STANDARDS APPROVAL

Authority- Pursuant to Section 119 of the *Electricity Act* and the *Reliability Standards Regulation*, the NBEUB may approve NERC reliability standards that have been approved by FERC and filed by NBPC, with or without NB amendments.

NERC Standards Filing- NBPC files standards with the NBEUB for approval within 60 days of the FERC approval effective date.

Standard Review- NBPC reviews NERC standards and files with an accompanying NB Appendix to describe the specific application of the standard in NB.

Public Process- the NBEUB notifies NERC, NPCC and NB Registered Entities when NBPC files an application for approval and the filed materials are publically available on the NBEUB website for a 60-day comment period.

Approval/Remand – NBEUB approves the application as filed unless there are substantive revisions to the FERC approved version, or if there are substantive comments received during the review period, in which case the NBEUB may hold a hearing and may determine to approve, not approve or remand the proposed reliability standard back to NBPC.

(2) BULK POWER SYSTEM

The NB BPS is determined according to the FERC approved definition of the bulk electric system, as it appears in the “NERC Glossary of Terms Used in Reliability Standards”. NBPC is required to file updates to the BPS and may submit requests for BPS exceptions to the NBEUB for approval.

(3) ENTITY REGISTRATION

The NBEUB maintains a NB Compliance Registry identifying those owners, users and operators of the BPS who must comply with approved reliability standards. The NB registry is based on the NERC functional model and registry criteria. NBPC is required to make recommendations to the NBEUB to maintain the compliance registry.

(4) NPCC RECOMMENDATIONS FOR ENTITY REGISTRATIONS

NPCC provides recommendations to the NBEUB for entity registrations under the provisions of a service agreement the NBEUB has executed with NPCC.

(5) COMPLIANCE MONITORING

The NBEUB implements a compliance monitoring system for reliability standards that is based on the requirements of the NERC compliance program. The NB program is documented as the New Brunswick Compliance Monitoring and Enforcement Program (NB CMEP) – Schedule A to the Reliability Standards Regulation. As a recognized compliance body under the regulations, NPCC assists the NBEUB with compliance monitoring activities according to a service agreement the NBEUB has executed with NPCC.

(6) INVESTIGATIONS

The NBEUB is responsible for compliance investigations in New Brunswick. NPCC assists the NBEUB with compliance investigations in NB according to a service agreement the NBEUB has executed with NPCC. The NBEUB may also request NERC to assist with compliance investigations.

(7) VIOLATION DETERMINATION AND SANCTION IMPOSITION

The NBEUB is responsible for the determination of violations, enforcement action and imposition of fines and penalties. Under a service agreement the NBEUB has executed with NPCC, NPCC makes

recommendations on enforcement matters to the NBEUB including recommendations on dismissals, find fix track actions, mitigation plans, settlement agreements and penalties and sanctions. The NBEUB may request that NPCC include a NERC review and comments on NPCC enforcement recommendations to the NBEUB.

(8) APPEALS TO NBEUB

A person may appeal to the NBEUB a decision from a review or compliance hearing relating to contested violations, mitigation plans and penalties and sanctions.

(9) NB "RULES OF PROCEDURE"

NB does not adopt a separate rules of procedure document, compliance program requirements (including the NB CMEP), are incorporated into provincial regulations that require LGIC approval to modify.

(10) NB ANNUAL IMPLEMENTATION PLAN

The NB AIP is based on the NERC and NPCC implementation plans and may include NB specific requirements. Under a service agreement the NBEUB has executed with NPCC, NPCC makes recommendations to the NBEUB for a NB AIP.

▶ Nova Scotia – US Comparator

Standard-Making and Enforcement Functions

Prepared by: ▶ Nova Scotia Utility and Review Board ▶ October 11, 2019

CURRENT RELIABILITY STANDARDS

KEY ORGANIZATIONS IN NOVA SCOTIA'S ELECTRICITY SECTOR

DEPARTMENT OF FINANCE

The Minister for this Department is responsible for the Nova Scotia Utility and Review Board (“NSUARB” or “Board”) Act which is the legislation that establishes the governance, structure and mandate of the NSUARB.

DEPARTMENT OF ENERGY

The Nova Scotia Department of Energy (“Department”) is responsible for setting the policy and legislative framework for Nova Scotia’s electricity system. The Department develops solutions and advises on all aspects of energy policy for Nova Scotia, including electricity, natural gas and oil.

NOVA SCOTIA UTILITY AND REVIEW BOARD

The NSUARB is an independent, quasi-judicial body which has both regulatory and adjudicative jurisdiction flowing from the Utility and Review Board Act. It reports to the Legislature through the Minister of Finance. Pursuant to the Public Utilities Act, the Board exercises general supervision over all electric utilities operating as public utilities within the Province. This jurisdiction includes setting rates, tolls and charges; regulations for provision of service; approval of capital expenditures in excess of \$250,000 and any other matter the Board feels is necessary to properly exercise its mandate. The Board has the authority to stay or revoke the operation of a reliability standard in Nova Scotia and refer it back to NERC or the NPCC for further consideration.

NOVA SCOTIA POWER

Nova Scotia Power Incorporated (“NSPI”) is a vertically integrated, privately owned utility serving 95% of customers in Nova Scotia. NSPI owns the majority of transmission and distribution assets in the province as well as a significant portion of the generation. NSPI is a regulated utility under the Public Utilities Act and is subject to supervision by the NSUARB. NSPI is responsible for planning for and maintaining a reliable electricity service to all loads in the province. NSPI is responsible for reviewing and implementing NERC standards under the supervision of the NSUARB.

NOVA SCOTIA POWER SYSTEM OPERATOR

The system operator is financially part of Nova Scotia Power, but operationally and functionally separated from other parts of NSPI and must adhere to a UARB approved Code of Conduct to ensure its independence from NSPI’s other business units. The system operator bears responsibility for, and manages the wholesale electricity market and oversees the reliable daily operation of the provincial electricity grid.

The following table identifies the provincial organizations responsible for each of the functions that underpin the framework for monitoring and enforcing compliance with reliability standards in the province, and the U.S. organizations that support this framework. It also identifies the U.S. organizations that are involved in standards development, monitoring and enforcing compliance with reliability standards in the U.S.

FUNCTIONS ¹		PROVINCIAL ORGANIZATION	RELEVANT US ORGANIZATION	US COMPARATOR
STANDARDS MAKING ²	Standards Development	Not Applicable	NERC	NERC
	Standards Approval	NSUARB, NSPI ⁽¹⁾	Not Applicable	FERC
	Entity Registration	NSPI-SO ^(2,3)	NPCC Recommendations to NSPI-SO ⁽⁴⁾	NERC
COMPLIANCE MONITORING	Compliance Monitoring and Violation Detection	NSUARB	NERC and NPCC ⁽⁵⁾	NERC / NPCC and FERC
ENFORCEMENT PROCESSES	Execution of Investigations	NSUARB	NERC and NPCC ⁽⁶⁾	NERC/ NPCC and FERC
	Violation Determination and Sanction Imposition	NSUARB	Recommendations to NSUARB only ⁽⁷⁾	NERC, FERC
VIOLATION PREVENTION AND OUTREACH	Violation Prevention, Outreach, including education	N/A (10)	NERC/ NPCC	NERC / NPCC and FERC
APPEALS	First Right of Appeal	NSUARB Review or Hearing	Not Applicable	NPCC Hearing Body
	Second Right of Appeal	NSUARB Appeal ⁽⁸⁾	Not Applicable	NERC BOT CC
	Third Right of Appeal	An order of the NSUARB can be appealed to The Nova Scotia Court of Appeal.	Not Applicable	FERC

¹ This table is intended to illustrate *who has authority over these various processes vs. who has authority for their execution*

² Reliability standards include FERC-approved NERC reliability standards and FERC-approved regional reliability standards

FUNCTIONS ¹		PROVINCIAL ORGANIZATION	RELEVANT US ORGANIZATION	US COMPARATOR
OVERSIGHT	Approval of Nova Scotia's Compliance Monitoring and Enforcement Implementation Plan	NSUARB	NERC ⁽⁹⁾	NERC/NPCC
	Performance Oversight of CMEP	NSUARB	Not Applicable	NERC BOT CC

TABLE DEFINITIONS

PROVINCIAL ORGANIZATION

Nova Scotia's organization accountable and responsible for performing the function according to provincial legislation.

RELEVANT US ORGANIZATION

The US organization responsible for performing the function according to an executed agreement for the provision of services.

US COMPARATOR

The US organization that is responsible for performing the functions according to US law.

TABLE NOTES

(1) STANDARDS APPROVAL

NERC submits standards to NSUARB and NSPI for approval. Each organization may approve, modify, remand or dismiss the standard as not applicable, though final approval authority rests with the NSUARB. The NSUARB has a quarterly review process allowing the submission, by NERC, of standards already approved by FERC.

(2) BULK ELECTRIC SYSTEM

The FERC approved definition of the bulk electric system, as modified on May 6th, 2014, was adopted for Nova Scotia by Board Order dated April 6, 2017.

(3) ENTITY REGISTRATION

NPCC as the regional Entity maintains the list of all market participants of the BES who must comply with approved reliability standards. The registry is based on the NERC functional model and registry criteria.

(4) NPCC RECOMMENDATIONS FOR ENTITY REGISTRATIONS

NPCC provides recommendations and may also identify organizations that may be candidates for registration and assign them to the Compliance Registry.

(5) COMPLIANCE MONITORING

As per MOU with NERC, compliance is mandatory in Nova Scotia. The NSUARB will monitor compliance and accept compliance information and recommendations from NERC.

(6) INVESTIGATIONS

The NSUARB is responsible for compliance investigations in Nova Scotia. NERC may assist the NSUARB with compliance investigations by providing: Compliance reports and spot checks, Readiness evaluations, disturbance reports, etc.

(7) VIOLATION DETERMINATION AND SANCTION IMPOSITION

NERC, NPCC and NSUARB may all suggest compliance violation; proceedings shall be conducted under the Board's direction and control. NERC may recommend a particular penalty for any violation, but the NSUARB will be responsible for determining if a violation occurred and what penalties, if any, should be imposed.

(8) APPEALS TO NSUARB

Any person may appeal to the NSUARB a decision from a review or compliance hearing. Further appeals may proceed to a court of law.

(9) COMPLIANCE MONITORING AND ENFORCEMENT PLAN

Approval for the compliance and monitoring plan is by MOU between NERC and NSUARB on 22nd of Dec, 2006 and later through MOU between NERC, NPCC and NSPI on 20th of April, 2010. NSPI is subject to NERC's CMEP as implemented by NPCC.

(10) VIOLATION PREVENTION

Compliance is mandatory in Nova Scotia.

▶ Ontario – US Comparator

Standard-Making and Enforcement Functions

Prepared by: ▶ Market Assessment and Compliance Division, IESO ▶ October 10, 2019

CURRENT RELIABILITY STANDARDS

For a list of reliability standards currently in effect in Ontario, please visit the IESO's website¹.

KEY ORGANIZATIONS IN ONTARIO'S ELECTRICITY SECTOR

ONTARIO MINISTRY OF ENERGY

The Ontario Ministry of Energy ("Ministry") is responsible for setting the policy and legislative framework for Ontario's electricity system. The Ministry develops solutions and advises on all aspects of energy policy for Ontario, including electricity, natural gas and oil. It also has legislative responsibility for the Ontario Energy Board ("OEB") and Independent Electricity System Operator ("IESO").

ONTARIO ENERGY BOARD

The Ontario Energy Board ("OEB") is an independent, quasi-judicial tribunal that regulates the province's electricity and natural gas sectors in the public interest. Its mandate is prescribed in legislation – primarily the Ontario Energy Board Act, 1998 and the Electricity Act, 1998 (the "Act") – and associated regulations. Part of the OEB's mandate is to protect the interests of consumers with respect to prices and the reliability and quality of electricity service. The OEB is the Governmental Authority for Ontario as defined by NERC. The OEB also has the legislative authority to stay or revoke the operation of a reliability standard in Ontario and refer it back to NERC or the NPCC for further consideration.

INDEPENDENT ELECTRICITY SYSTEM OPERATOR AND THE MARKET ASSESSMENT AND COMPLIANCE DIVISION

The Independent Electricity System Operator ("IESO") is a not-for-profit corporate entity established under the Act that manages the wholesale electricity market and oversees the reliable operation of the provincial electricity grid. The IESO evaluates Ontario's current and short-term electricity needs as well as the adequacy and reliability of the integrated power system. The IESO is also responsible for establishing and enforcing reliability standards and participating in developing standards made by standards authorities². The IESO is subject to the OEB's oversight authority.

The Act also authorizes the IESO to make and enforce rules ("Market Rules") that govern the operation of Ontario's electricity system. The IESO's compliance and enforcement activities have been delegated to an independent business unit called the Market Assessment and Compliance Division ("MACD") through a

¹ <http://www.ieso.ca/Sector-Participants/System-Reliability/Enforcement-Dates>

² "Standards authority," as defined by the Act, means the North American Electric Reliability Corporation (NERC) and "any other agency or body designated by regulation that approves standards or criteria applicable both in and outside Ontario relating to the reliability of transmission systems." Ontario Regulation 214/08 has designated the Northeast Power Coordinating Council (NPCC) a standards authority in Ontario.

letter of delegation from the IESO's President and CEO to MACD's Director. As such, MACD makes all determinations and exercises all authorities accorded the IESO in the Market Rules concerning monitoring, investigation and the enforcement of rules and standards concerning the wholesale electricity system and market. MACD establishes and executes processes, procedures and programs for monitoring, investigating and imposing sanctions (including financial penalties) against Ontario market participants and the IESO.

The following table identifies the provincial organizations responsible for each of the functions that underpin the framework for monitoring and enforcing compliance with reliability standards in the province, and the U.S. organizations that support this framework. It also identifies the U.S. organizations that are involved in standards development, monitoring and enforcing compliance with reliability standards in the U.S.

FUNCTIONS		PROVINCIAL ORGANIZATION	RELEVANT US ORGANIZATION	US COMPARATOR
STANDARDS MAKING ³	Standards Development	Not Applicable ⁽¹⁾	NERC	NERC
	Standards Approval	OEB ⁽²⁾	Not Applicable	FERC
	Entity Registration	IESO ⁽³⁾	Not Applicable	NERC
COMPLIANCE MONITORING	Compliance Monitoring and Violation Detection	MACD ⁽⁴⁾	NPCC ⁽⁵⁾	NERC and NPCC
ENFORCEMENT PROCESSES	Execution of Investigations	MACD ⁽⁶⁾	NERC and NPCC ⁽⁶⁾	NERC and NPCC
	Violation Determination and Sanction Imposition	MACD ^(7, 8)	NERC and NPCC ⁽⁹⁾	FERC
APPEALS	First Hearing	Dispute Resolution Panel ⁽¹⁰⁾	NPCC ⁽¹¹⁾	NPCC Hearing Body
	Right of Appeal	OEB ⁽¹⁰⁾	NERC ⁽¹¹⁾	NERC Board of Trustees
	Further Right of Appeal	An order of the OEB can be appealed to Divisional Court on a matter of law or jurisdiction (OEB Act s. 33)	Not applicable ⁽¹¹⁾	FERC Board of Commissioners
OVERSIGHT	Approval of Ontario's Rules of Procedure	IESO Board and right of appeal to OEB	Not applicable	FERC
	Approval of Ontario's Compliance Monitoring and Enforcement Implementation Plan (CMEP)	MACD	Not applicable	NERC and NPCC
	Performance Oversight of CMEP	MACD ⁽¹²⁾	NERC and NPCC ⁽¹²⁾	NERC Board of Trustees Compliance Committee
	Case Review of Regional Entity Findings	Not applicable	Not applicable	NERC
	Violation Prevention and Outreach (including education)	MACD ⁽¹³⁾	NERC and NPCC ⁽¹³⁾	NERC and NPCC

TABLE DEFINITIONS

PROVINCIAL ORGANIZATION

The Ontario organization accountable and responsible for performing the function according to provincial legislation, or through delegation, for matters concerning Ontario entities.

RELEVANT US ORGANIZATION

The US organization responsible for performing the function according to an executed Memorandum of Understanding for matters concerning Ontario entities.

US COMPARATOR

The US organization that is responsible for performing the functions according to US law.

TABLE NOTES

(1) STANDARDS MAKING

The IESO has the authority under the Electricity Act to establish and enforce criteria and standards relating to the reliability of the Ontario integrated power system.

(2) STANDARDS APPROVAL

Generally, unless a NERC reliability standard is otherwise stayed or remanded (by the OEB) back to NERC, the standard will become effective in Ontario when it is declared in force in the United States, unless the standard has been developed in response to a regulatory directive that has not been approved by the NERC ballot body.

(3) ENTITY REGISTRATION

The IESO registers entities that intend to participate in the IESO-administered markets and connect physical facilities to the IESO-controlled grid. The IESO also establishes criteria⁴ by which certain market participants that own or operate elements of the Bulk Electric System, as defined by NERC, become subject to compliance with NERC reliability standards and NPCC directories.

(4) MACD MONITORING

MACD establishes procedures for monitoring Ontario market participants through the Ontario Reliability Compliance Program (ORCP), which includes audits and spot checks and is equivalent to the NERC-NPCC

⁴ See Market Manual 11.1 “Applicability Criteria for Compliance with NERC Reliability Standards and NPCC Criteria” on the IESO website

CMEP. The ORCP's implementation plan is published on the IESO website as part of the annual Compliance Monitoring Plan.

(5) NERC AND NPCC MONITORING

NPCC conducts audits, spot checks and self-certifications of the IESO in accordance with the NERC-NPCC Monitoring Program.

(6) INVESTIGATIONS

MACD investigates potential breaches of market rules and reliability standards across all Ontario market participants, including the IESO. In addition, NPCC may also conduct its own compliance investigations of the IESO.

(7) MACD VIOLATION DETERMINATION AND SANCTION IMPOSITION

MACD makes violation and sanction determinations for all Ontario entities and the IESO. Sanctions include, among other things, orders to:

- a) do "such things as may be necessary" to comply with the Market Rules;
- b) cease the act, activity or practice constituting the violation;
- c) impose record-keeping or reporting requirements on a market participant;
- d) issue a non-compliance letter and
- e) impose financial penalties.

The maximum financial penalty amount is \$1,000,000 per occurrence for each breach at issue.

(8) PUBLIC DISCLOSURE

When MACD makes a determination of a reliability standard violation or reliability-related market rule violation, the name of the responsible entity is made public on the IESO website. The level of detail disclosed for any violation varies according to what MACD deems necessary. NERC or NPCC do not disclose violations by Canadian entities. MACD sanctions are posted at:

<http://www.ieso.ca/Pages/Participate/Market-Oversight/Sanctions.aspx>

(9) NERC AND NPCC VIOLATION DETERMINATION AND SANCTION IMPOSITION

After determining that the IESO has violated a reliability standard, NERC and NPCC may impose non-financial sanctions. These sanctions may include additional reporting, development of a mitigation plan, additional auditing, and in the case of material threats to reliability, remedial action directives.

(10) APPEALS OF MACD DETERMINATIONS

An enforcement decision made by MACD can be contested through the IESO's Dispute Resolution Panel (DRP) process, which is composed of negotiation, mediation and arbitration stages. The award of a DRP

arbitrator can then be appealed to the OEB if it includes a financial penalty above \$10,000 or otherwise denies authorization for, or terminates, suspends or restricts, the relevant market participant's right to participate in the Ontario market.

(11) APPEALS OF NERC AND NPCC DETERMINATIONS

The IESO is the sole Ontario entity accountable to NERC or NPCC for compliance with NERC standards. If the IESO faces a violation determination or sanction by NERC or NPCC, it has a right to a compliance hearing with NPCC and a subsequent appeal to NERC. The IESO can also appeal any final NERC or NPCC order to the OEB.

(12) PEER REVIEW

MACD, NERC and NPCC can initiate a peer review of each other's compliance program with a mutually-agreed-upon scope of review.

(13) PREVENTION AND OUTREACH

Each of NERC, NPCC, MACD and IESO are involved in reliability standards compliance education and awareness activities to help prevent violations of reliability standards in Ontario.

Québec - US Comparator: Standard-Making and Enforcement Functions

Reliability Standards Currently in Effect

A list of Québec's reliability standards and their status is available at the following link:

<http://www.regie-energie.qc.ca/en/audiences/NormesFiabiliteTransportElectricite/NormesFiabilite.html>

Key Organizations in Québec's Electricity Sector

Ministère de l'Énergie et des Ressources naturelles

The Ministère de l'Énergie et des Ressources naturelles (the Ministry) is responsible, among other things, for setting the policy and legislative framework for Québec's electricity system. The Ministry develops solutions and advises on all aspects of energy policy for Québec, including electricity, natural gas and petroleum resources.

Régie de l'énergie

In exercising its functions, the Régie de l'énergie (the Régie) reconciles the public interest, consumer protection and the fair treatment of the province's electric power carrier and of distributors. Pursuant to its Enabling legislation, the *Act respecting the Régie de l'énergie* (the Act), it has the authority to establish, monitor and enforce a mandatory regime of reliability standards for electric power transmission in Québec.

The Régie has jurisdiction to adopt, and sets the dates of their coming into force, of reliability standards that the Reliability Coordinator (the RC) for Québec files with the Régie. These reliability standards are proposed to the RC by NERC or NPCC. The Régie may request the RC for Québec to modify a standard filed or submit a new one, on the conditions it sets.

Since April 1, 2015, Québec has a mandatory regime in place which is deployed in accordance with the *Québec Reliability Standards Compliance Monitoring and Enforcement Program (QCMEP)*.

The Régie makes all determinations and exercises all authorities as regards monitoring, investigation and enforcement of reliability standards, including the imposition of financial penalties and sanctions, while taking into consideration the recommendations of NPCC and NERC.

In fact, with regard to the process of reliability standards compliance monitoring, two separate agreements were concluded with NERC and NPCC, both of whom it has recognized, through an agreement signed in 2009, as experts in the development and monitoring of electric power transmission reliability standards. A second agreement, signed in September 2014, details the mandate granted by the Régie to NPCC and NERC with respect to the implementation of the QCMEP.

Direction principale - Contrôle des mouvements d'énergie et exploitation du réseau d'Hydro-Québec (DPCMÉER)

Pursuant to the Act, DPCMÉER was designated by the Régie as the RC for Québec in May 2021. Under that function, the RC is responsible for ensuring power system reliability as defined by NERC and NPCC standards. It files with the Régie NERC or NPCC reliability standards applicable to the Québec Interconnection, as well as any variant or other standard it deems necessary. It also files a register identifying the entities that are subject to the reliability standards adopted by the Régie.

Functions ¹		Provincial Organization	Relevant US Organization	US Comparator
Standards Making²	Standards Development	DPCMÉER (RC)	NERC	NERC
	Standards Adoption	The Régie (1)	Not Applicable	FERC
Entity Registration		The Régie / RC (2)	Not Applicable	NERC
Compliance Monitoring	Compliance Monitoring and Violation Detection	The Régie (3, 4)	NPCC (5)	NERC, NPCC, FERC
	Execution of Investigations	The Régie (6)	NPCC or NERC (6)	NERC, NPCC, FERC
Enforcement Processes	Violation Determination and Sanction Imposition	The Régie (7, 8, 9)	Not Applicable	NERC, FERC
Appeals	Revision of a decision	The Régie (10)	Not applicable	NPCC Hearing Body
	Judicial Review	Québec Superior Court (11)	Not applicable	NERC Board of Trustees Compliance Committee (BOT CC)
	Further Right of Appeal	Court of Appeal of Québec (12)	Not applicable	FERC
Oversight	Approval of Québec's Rules of Procedure	The Régie (13)	Not applicable	FERC
	Approval of the Québec Reliability Standards Compliance Monitoring and Enforcement Program (QCMEP) and the Annual QCMEP Implementation Plan (Québec Implementation Plan)	The Régie (14)	Not applicable	NERC, NPCC
	Performance Oversight of QCMEP	The Régie (15)	NERC and NPCC (15)	NERC BOT CC
	Violation Prevention and Outreach (including education)	The Régie (16)	NERC and NPCC (16)	NERC, NPCC, FERC

¹ This table is intended to illustrate who has authority over these various processes vs. who has authority for their execution.

² Reliability standards include FERC-approved NERC reliability standards, FERC-approved regional reliability standards and locally developed reliability standards as proposed by the RC for Québec.

Table Definitions:

Provincial Organization: the Québec organization accountable and responsible for performing the function according to provincial legislation or through designation for matters concerning Québec registered entities.

Relevant US Organization: the US organization that is responsible for performing the function according to an agreement for matters concerning Québec registered entities.

US Comparator: the US organization that is responsible for performing the functions according to US law.

Notes:

1. Standards Adoption:

Authority – Pursuant to section 85.7 of the Act, the Régie adopts the reliability standards and sets the dates of their coming into force.

NERC Standards Filing – For information purposes, NERC files Board approved standards with the Régie. Generally, when a NERC reliability standard is approved by FERC, the standard will be filed by the RC (DPCMÉER) with the Régie for adoption. The RC can as well file any variant of these standards or other standards it considers necessary.

Standards Review – The Régie may hold public hearing on the standards before their adoption. NERC/NPCC can make observations/recommendations to the Régie pursuant to their signed agreement.

Public Process – The RC posts the standards on their website for public comments from the registered entities before filing them to the Régie for their adoption.

Adoption/Remand – The Régie may request that the RC modifies a filed reliability standard or submit a new one, on the conditions it sets. Thus a reliability standard that has been filed with the Régie by the RC will not be remanded to NERC.

2. **Entity Registration:** Section 85.3 of the Act lists the entity characteristics to which the reliability standards applies. Pursuant to the Act (Section 85.13) the RC must file with the Régie, for approval, a register identifying the entities that are subject to the reliability standards adopted by the Régie.
3. **Compliance Accountability:** All Québec registered entities are accountable to the Régie for compliance with the reliability standards it adopts.
4. **Monitoring:** The Régie establishes processes for monitoring Québec registered entities through the QCMEP; the latter is analogous to the NERC CMEP.

5. **Monitoring:** NPCC monitors compliance to the reliability standards by conducting audits, self-certification, spot checks and other means in accordance with the QCMEP.
6. **Investigations:** The Régie may request or authorize NPCC or NERC to lead a compliance investigation.
7. **Violation Determination and Sanction Imposition:** The Régie imposes a sanction to any Québec registered entity, if the Régie determines that a failure to comply (violation) with a Reliability Standard has occurred. Sanctions are imposed according to the *Sanction Guide for the Enforcement of the Reliability Standards in Effect in Québec*. The penalties are grouped into two distinct categories: financial and non-financial. The maximum financial penalty amount is \$500 000 per occurrence per day.
8. **Enforcement Measure:** The Régie may impose a mitigation plan, a remedial action for non-compliance seriously compromising the reliability of electric power transmission or conditions for carrying on certain activities.
9. **Public Disclosure:** In the event that a reliability standard violation is determined by the Régie, the name of the entity accountable for this violation is made public on the Régie's website. The level of detail disclosed for any violation varies according to the Régie's determination.
10. **Revision of a Decision:** Section 37 of the Act provides the conditions for a revision or revocation of a decision rendered by the Régie.
11. **Judicial Review:** Section 40 of the Act provides that "no appeal lies from a decision of the Régie." As decisions rendered by the Régie cannot be appealed, the only available recourse is a judicial review to the Superior Court of Québec. However, section 41 of the Act provides for a relatively tight privy clause.
12. **Further Right of Appeal:** A Superior Court decision on judicial review can be appealed to the Québec Court of Appeal and ultimately, by permission, to the Supreme Court of Canada.
13. **Québec's Rules of Procedure:** Québec's Rules of procedure are integrated into the second agreement and the QCMEP.
14. **Québec Reliability Standards Compliance Monitoring and Enforcement Program (QCMEP) and the QCMEP Annual Implementation Plan (Québec Implementation Plan):** Each year, the Régie approves the Québec Implementation Plan, which is the annual operating plan carried out by NPCC while performing its responsibilities and duties, as described in the QCMEP. The NPCC monitors and assesses Registered Entities' compliance with the reliability standards. The Québec Implementation Plan includes, among other things, the Annual Compliance Audit Plan and the Periodic Data Submittal Schedule.

15. **Performance Oversight:** NPCC provides the Régie and NERC with the *QCMEP Annual Implementation Report* regarding, among other things, the effectiveness of the QCMEP. Upon request from the Régie, NERC will conduct an audit of NPCC.

16. **Prevention and Outreach:** In addition to alerts and other publications issued by NERC and/or NPCC to help Québec registered entities prevent violations, the Régie may also issue similar notices for this purpose in an effort to clarify Québec's mandatory reliability standards regime, the requirements of the QCMEP and reliability standards development.