CURRENT RELIABILITY STANDARDS

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

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, FINANCE SERVICES AND ENVIRONMENT, CLIMATE AND PARKS

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 Manitoba. 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) 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.

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

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

<table>
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<tr>
<th>OVERSIGHT</th>
<th>PROVINCIAL ORGANIZATION</th>
<th>RELEVANT US ORGANIZATION</th>
<th>US COMPARATOR</th>
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</thead>
<tbody>
<tr>
<td>Third Right of Appeal</td>
<td>Supreme Court</td>
<td>Not Applicable</td>
<td>US Court of Appeals</td>
</tr>
<tr>
<td>Establishment of Manitoba’s Compliance Monitoring and Enforcement Program</td>
<td>Lieutenant Governor in Council</td>
<td>Not Applicable</td>
<td>FERC</td>
</tr>
<tr>
<td>Performance Oversight of Compliance Monitoring and Enforcement Program</td>
<td>Not Applicable</td>
<td>MRO and NERC in their respective roles</td>
<td>MRO or NERC in their respective roles</td>
</tr>
<tr>
<td>Violation Prevention and Outreach (including education)</td>
<td>Not Applicable</td>
<td>MRO and NERC in their respective roles</td>
<td>MRO or NERC in their respective roles</td>
</tr>
</tbody>
</table>

### 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 affect 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 the 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 the 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 the 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.