

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

**NERC Responds to Nova Scotia Power Inc.'s January 20, 2011
Interrogatories Regarding the June 30, 2010 Filing Concerning
the NERC Reliability Standards and NPCC Regional
Reliability Criteria (NSUARB NERC-R-10)**

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Nova Scotia
Utility and Review Board

North American Electric Reliability Corporation (NERC) Responds to Nova Scotia Power Inc.'s
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Reliability Standards and NPCC Regional Reliability Criteria (NSUARB NERC-R-10)

1 **Request IR-1: Please advise as to the status of the process for adoption of NERC standards in**
2 **each of the other Canadian provinces.**

3
4 **Response to IR-1:**

5
6 The status of the process for adoption of the NERC Reliability Standards in the Canadian
7 Provinces is included in the attached *Summary of Canadian Provincial Adoption of Reliability*
8 *Standards Framework.*

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1 **Request IR-2: Please describe the standard approval process for new NERC standards in the**
2 **United States.**

3
4 **Response to IR-2:**

5
6 In summary, in the United States, once a Reliability Standard or revision to a Reliability
7 Standard is approved by the ballot pool in accordance with the Standard Processes Manual it is
8 submitted for approval by the NERC Board of Trustees (Board). After receiving Board
9 approval, the Reliability Standard or revision to a Reliability Standard is submitted to the United
10 States Federal Energy Regulatory Commission (FERC) for final approval. The Reliability
11 Standard or revision to a Reliability Standard becomes effective in the United States only after
12 FERC approval and in accordance with the Effective Date section of the Reliability Standard, or
13 alternatively, as determined by FERC. Approval of any standard action requires: (1) a quorum,
14 which is established by at least 75% of the members of the ballot pool submitting a response
15 with an affirmative vote, a negative vote, or an abstention; and (2) a two-thirds majority of the
16 weighted segment votes cast shall be affirmative.

1 **Request IR-3: Please describe the standard approval process for new NERC standards in each**
2 **of the provinces in Canada which have adopted NERC standards.**

3
4 **Response to IR-3:**

5
6 The process for approving a NERC Reliability Standard in Canada is the same as the process in
7 the United States. In summary, once a Reliability Standard or revision to a Reliability Standard
8 is approved by the ballot pool in accordance with the Standard Processes Manual it is submitted
9 for approval by the Board. After receiving Board approval, the Reliability Standard or revision
10 to a Reliability Standard is submitted to each of the applicable Canadian regulatory authorities.

11
12 Details of the standard approval process once the referenced Reliability Standard is submitted to
13 each of the applicable Canadian regulatory authorities are found in the attached ***Summary of***
14 ***Canadian Provincial Adoption of Reliability Standards Framework.***

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1 **Request IR-4: *Aside from seeking the adoption of NERC standards in Canadian provinces,***
2 ***what other process initiatives is NERC pursuing in Canada? Please provide details of all such***
3 ***activities, and advise as to the status of these pursuits.***

4
5 **Response to IR-4:**

6
7 The mission and programs of NERC extend to the United States and Canada. NERC's primary
8 objective is to ensure that Reliability Standards are adopted as mandatory and that there is an
9 effective oversight and enforcement regime in all jurisdictions. Details of the standard approval
10 process and monitoring and enforcement regimes of each of the applicable Canadian regulatory
11 authorities are found in the attached ***Summary of Canadian Provincial Adoption of Reliability***
12 ***Standards Framework.***

13
14 For more information regarding NERC's Reliability Standards, Compliance, Assessment and
15 Trends, Event Analysis, and other program initiatives, please visit our website at:
16 <http://www.nerc.com/>.

1 **Request IR-5:** *From time to time NERC issues Compliance Notices which purport to direct*
2 *certain action to be taken by Registered Entities. These notices contain the following*
3 *provision:*

4
5 *This document is designed to convey compliance guidance from NERC's various*
6 *activities. It is not intended to establish new requirements under NERC's Reliability*
7 *Standards or to modify the requirements in any existing NERC Reliability Standards.*
8 *Compliance will continue to be determined based on language in the NERC Reliability*
9 *Standards as they may be amended from time to time. Implementation of this*
10 *compliance application notice is not a substitute for compliance with requirements in*
11 *NERC's Reliability Standards.*

12
13 *(a) Please advise as to the applicability of these Compliance Notices to Nova Scotia.*

14
15 *(b) Does NERC seek UARB approval of these Compliance Notices?*

16
17 *(c) Where a Compliance Notice may conflict with a UARB-approved Reliability Standard, does*
18 *NERC agree that the UARB-approved Reliability Standards take precedence?*

19
20 *(d) What is the recourse for failure to comply with a Compliance Notice?*

21
22 **Response to IR-5:**

23
24 (a) A Compliance Application Notice (CAN) provides compliance guidance with respect to
25 certain NERC activities as indicated in the above-referenced provision. This guidance
26 applies broadly. The target audience for each CAN is identified in the Primary Interest
27 Group section of the CAN.

28
29 (b) No. NERC does not seek regulatory approval of its CAN.

30
31 (c) A CAN is not intended to establish new requirements under NERC's Reliability
32 Standards or to modify the requirements in any existing NERC Reliability Standard.
33 Compliance will continue to be determined based on language in the NERC Reliability
34 Standards, as they may be amended from time to time.

35
36 (d) A CAN provides information in response to requests for compliance guidance. The
37 Reliability Standards as approved by the NSUARB will be mandatory and enforceable in
38 Nova Scotia. Compliance activities in Nova Scotia will be under the direction and
39 control of the NSUARB.

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1 **Request IR-6: *From time to time NERC issues NERC Alerts which contain Recommendations***
2 ***to Registered Entities. NERC Alerts require Registered Entities to acknowledge receipt and to***
3 ***respond to NERC on a prescribed timeline with their plans as to how they will address the***
4 ***Recommendations by a deadline set by NERC.***

5
6 ***(a) Please advise as to the applicability of these NERC Alerts in Nova Scotia.***

7
8 ***(b) Does NERC seek UARB approval of these NERC Alerts?***

9
10 ***(c) Where a Recommendation in a NERC Alert conflicts with a UARB-approved Reliability***
11 ***Standard, does NERC agree that the UARB-approved Reliability Standard takes precedence?***

12
13 ***(d) What is the recourse for failure to comply with a NERC Alert?***

14
15 **Response to IR-6:**

16
17 (a) NERC Alerts apply to users, owners, or operators of the bulk power system. When
18 NERC determines it is necessary to place the industry or segments of the industry on
19 formal notice of its findings, analyses, and recommendations, NERC will provide such
20 notification in the form of specific operations or equipment Advisories,
21 Recommendations or Essential Actions. This would apply to NERC registered entities in
22 Nova Scotia.

23
24 (b) NERC provides advance notice of such Alerts to FERC and other applicable
25 governmental authorities, but does not and is not required to seek approval before issuing
26 an Alert. Accordingly, NERC will not seek approval of its Alerts from the NSUARB.

27
28 (c) NERC Alerts do not conflict with approved Reliability Standards.

29
30 (d) The guidance contained in NERC Alerts is not enforceable.

1 **Request IR-7: *What role does NERC expect to play in an enforcement proceeding before the***
2 ***UARB?***

3
4 **Response to IR-7:**

5
6 According to the May 11, 2010, *Memorandum of Understanding between Nova Scotia Power*
7 *Incorporated and Northeast Power Coordinating Council Inc. and the North American Electric*
8 *Reliability Corporation*, page 4 of 6, lines 4 through 15:

9
10 **Compliance Accountability in Nova Scotia**

11
12 NSPI, as a Registered Entity, will be subject to NERC's Compliance Monitoring and
13 Enforcement Program ("CMEP") as implemented by NPCC. NPCC in its determination of a
14 NSPI violation may identify the specific NERC Reliability Standard violated as well as the
15 associated violation risk factor and violation severity level of the non-compliance. As
16 applicable, NPCC will review for acceptability from a reliability perspective any NSPI
17 mitigation plans to bring NSPI into compliance and may propose a non-monetary penalty, to the
18 Nova Scotia Utility and Review Board [Board]. NSPI can also make a submission to the Board
19 on the situation.

20
21 The parties understand that the Board will receive this information for use in enforcement
22 proceedings, which proceedings will be conducted under the Board's direction and control and
23 the Board will determine whether any violation has occurred and, if so, what remedial measures
24 or non-monetary penalties should be imposed.

25
26 According to the December 22, 2006, *Memorandum of Understanding between Nova Scotia*
27 *Utility and Review Board and North American Electric Reliability Corporation*, page 2:

28
29 The parties understand that, once the Board approved a reliability standard, compliance with the
30 Reliability Standard will be mandatory in Nova Scotia. The Board may enforce approved
31 Reliability Standards directly. The parties also understand that NERC, working through a
32 designated Regional Entity, intends to conduct compliance activities with respect to its
33 Reliability Standards. The Board agrees to receive compliance information and
34 recommendations from NERC or the Regional Entity for use in enforcement proceedings, which
35 proceedings shall be conducted under the Board's direction and control. NERC or the Regional
36 Entity may recommend a particular penalty for any violation that NERC or the Regional Entity
37 reports, but the Board will be responsible for determining whether any violation has occurred
38 and, if so, what remedial measures or penalties shall be imposed.

1 **Request IR-8: *What role does NERC expect NPCC to play in an enforcement proceeding***
2 ***before the UARB?***

3
4 **Response to IR-8:**

5
6 According to the May 11, 2010, *Memorandum of Understanding between Nova Scotia Power*
7 *Incorporated and Northeast Power Coordinating Council Inc. and the North American Electric*
8 *Reliability Corporation*, page 4 of 6, lines 4 through 15:

9
10 **Compliance Accountability in Nova Scotia**

11
12 NSPI, as a Registered Entity, will be subject to NERC's Compliance Monitoring and
13 Enforcement Program ("CMEP") as implemented by NPCC. NPCC in its determination of a
14 NSPI violation may identify the specific NERC Reliability Standard violated as well as the
15 associated violation risk factor and violation severity level of the non-compliance. As
16 applicable, NPCC will review for acceptability from a reliability perspective any NSPI
17 mitigation plans to bring NSPI into compliance and may propose a non-monetary penalty, to the
18 Nova Scotia Utility and Review Board [Board]. NSPI can also make a submission to the Board
19 on the situation.

20
21 The parties understand that the Board will receive this information for use in enforcement
22 proceedings, which proceedings will be conducted under the Board's direction and control and
23 the Board will determine whether any violation has occurred and, if so, what remedial measures
24 or non-monetary penalties should be imposed.

1 **Request IR-9: *Please advise as to what role NERC and NPCC each play in other jurisdictions***
2 ***in Canada in enforcement proceedings.***

3
4 **Response to IR-9:**

5
6 Information regarding the role NERC and NPCC each play in other jurisdictions in Canada in
7 enforcement proceedings is included in the attached ***Summary of Canadian /Provincial***
8 ***Adoption of Reliability Standards Framework.*** Additional information may be found on
9 NERC's website, Governance: Canada - Memorandums of Understanding.

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1 **Request IR-10:** *What role will NERC and NPCC have in an NSPI capital application*
2 *proceeding where a question as to the proper interpretation of a NERC Reliability Standard or*
3 *NPCC Regional Reliability Criteria are in dispute?*

4
5 **Response to IR-10:**

6
7 NERC does not anticipate having a direct role in an NSPI capital application proceeding. NERC
8 may provide information as requested.

1 **Request IR-11:** *If a less stringent interpretation is applied to a NERC standard in Nova Scotia*
2 *than what is applied in the United States, what is NERC's position with respect to NSPI's*
3 *compliance obligations?*

4
5 **Response to IR-11:**

6
7 The Reliability Standards as approved by the NSUARB will be mandatory and enforceable in
8 Nova Scotia. Compliance activities in Nova Scotia will be under the direction and control of the
9 NSUARB.

1 **Request IR-12: *What, if any, coordination activities are anticipated to be required with respect***
2 ***to NERC Reliability Standards and Regional Reliability Criteria among Canadian provinces?***

3
4 **Response to IR-12:**

5
6 NPCC and the other Regional Reliability Organizations develop Regional Reliability Criteria in
7 light of the NERC Reliability Standards. The Regional Reliability Criteria cannot be
8 inconsistent with the NERC Reliability Standards.

1 **Request IR-13:** *The New Brunswick System Operator serves as the Reliability Coordinator for*
2 *the Maritime Area under various NERC standards. NERC is seeking approval of these*
3 *standards in Nova Scotia. Is it NERC's expectation that the UARB would have jurisdiction*
4 *over the New Brunswick System Operator in respect of its Reliability Coordinator obligations*
5 *to Nova Scotia?*

6
7 **Response to IR-13:**

8
9 The New Brunswick System Operator (NBSO) serves as the Reliability Coordinator for the
10 Maritime Provinces of Nova Scotia, New Brunswick and Prince Edward Island in Canada and
11 northern Maine in the United States. No issue has yet arisen from the jurisdictional boundaries
12 since NBSO was so designated in October 2005. Due to sovereignty concerns, NERC would
13 expect that consultation with each relevant jurisdiction would be required on a case by case
14 basis.

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1 **Request IR-14: *What process does NERC propose for adoption of future Reliability Standards***
2 ***in Nova Scotia?***

3
4 **Response to IR-14:**

5
6 In summary, once a Reliability Standard or revision to a Reliability Standard is approved by the
7 ballot pool in accordance with the Standard Processes Manual it will be submitted for approval
8 by the Board. After receiving Board approval, the Reliability Standard or revision to a
9 Reliability Standard will be submitted to the NSUARB for final approval. The NSUARB shall
10 determine the appropriate process for considering and adopting or remanding a Reliability
11 Standard. The Reliability Standard or revision to a Reliability Standard will become effective in
12 Nova Scotia only after NSUARB approval and in accordance with the Effective Date section of
13 the Reliability Standard, or alternatively, as determined by the NSUARB.

14
15 According to the December 22, 2006, *Memorandum of Understanding between Nova Scotia*
16 *Utility and Review Board and North American Electric Reliability Corporation*, page 2:

17
18 Once the NERC registered ballot body and NERC board of trustees have approved a reliability
19 standard, NERC will file the proposed reliability standard with the Board, accompanied by a
20 request that the Board adopt the reliability standard. NERC will file its proposed reliability
21 standards contemporaneously in all relevant jurisdictions. NERC will notify the Board of the
22 actions of other jurisdictions regarding the proposed standards. NERC will immediately notify
23 the Board if any jurisdiction remands a proposed reliability standard and will work with
24 stakeholders and all relevant jurisdictions to resolve the issues raised.

25
26 Upon receiving a request from NERC to adopt a reliability standard or standards, the Board may,
27 following its own process which may include a public hearing, adopt some or all of the
28 standards. The Board may remand to NERC one or more reliability standards that it does not
29 approve with a request that NERC address the issues of concern to the Board. The parties
30 recognize that the Board may separately adopt such reliability standards or standards as it deems
31 necessary in the public interest.

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1 **Request IR-15: *What process does NERC propose for amendments to Reliability Standards in***
2 ***Nova Scotia?***

3
4 **Response to IR-15:**

5
6 An amendment to a Reliability Standard would follow the same process for approval, through
7 NERC processes and submission to the NSUARB for consideration and adoption, as a new
8 Reliability Standard.

9
10 In summary, once a Reliability Standard or revision to a Reliability Standard is approved by the
11 ballot pool in accordance with the Standard Processes Manual it will be submitted for approval
12 by the Board. After receiving Board approval, the Reliability Standard or revision to a
13 Reliability Standard will be submitted to the NSUARB for final approval. The Reliability
14 Standard or revision to a Reliability Standard will become effective in Nova Scotia only after
15 NSUARB approval and in accordance with the Effective Date section of the Reliability Standard,
16 or alternatively, as determined by the NSUARB.

1 **Request IR-16:** *At Section VI. Conclusion, NERC states, “NERC looks forward to working*
2 *with the Province of Nova Scotia to make its Reliability Standards mandatory and enforceable*
3 *in Nova Scotia. NERC also requests the Province to provide feedback on the adequacy of the*
4 *information provided with this filing and guidance on the appropriate information to be*
5 *included in future filings.” The Nova Scotia Utility and Review Board is an independent non-*
6 *government regulatory body. NSPI understands that references in NERC’s application to the*
7 *Province of Nova Scotia are intended to refer to the UARB. Please confirm that is correct.*

8
9 **Response to IR-16:**

10
11 Yes, that is correct.

The NERC logo consists of the letters "NERC" in a bold, sans-serif font. A thick horizontal line is positioned directly beneath the letters.

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NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

A Summary of Canadian Provincial Adoption of Reliability Standards Framework

A Summary of Canadian Provincial Adoption of Reliability Standards Framework

This document was prepared by the North American Electric Reliability Corporation (NERC) in consultation with the various Canadian and Provincial jurisdictions based on NERC's understanding of the corresponding regulatory and standards framework. These materials are prepared for informational purposes only without warranty of any kind. Please contact Ric Cameron [rcamero_@sympatico.ca] if you identify any issues with the information contained herein.

Revision History

Doc Number	Description	Created by	Revised by	Issued Date
LEG-CA-GOV v1	Conformed 12-22-2010 working version of document to NERC Template and issued document internally	Ric Cameron	Davis Smith	02-10-2011

Alberta:

The Alberta Transmission Regulation (Reg 288/2009 as amended) outlines the framework for Reliability Standards in Alberta. The North American Electric Reliability Corporation (NERC) Reliability Standards apply in Alberta to the extent they are adopted by the Alberta Electric System Operator (AESO) in accordance with the Alberta Transmission Regulation. The process requires the AESO to consult with market participants likely to be affected by the Reliability Standards, and make a recommendation to the Alberta Utilities Commission (Alberta Commission) to accept or reject them. The Alberta Commission must follow the recommendation of the AESO unless an interested person satisfies it, the recommendation is technically deficient, or not in the public interest.

The Minister of Energy signed a Ministerial Order on December 28, 2007 recognizing the NERC as the Electric Reliability Organization (ERO).

The Electricity Statutes Amendment Act 2009 brought Reliability Standards formally under the enforcement authorities of the Alberta Commission and the Market Surveillance Administrator (MSA). Specified penalties for violations of Reliability Standards were adopted by the Alberta Commission, effective November 2010.

The AESO established the AESO Reliability Committee (ARC) to serve as a forum for users, owners and operators of the transmission system in Alberta and to provide advice to the AESO respecting Reliability Standards, criteria, procedures, rules and processes regarding maintenance, security and reliability matters. The ARC working groups review NERC Reliability Standards for applicability in Alberta and determine the appropriate Alberta entities that need to comply with those Reliability Standards. Alberta does not use the NERC Functional Model classification, as a model was developed for Alberta market participants. Applicable Reliability Standards are reviewed through the AESO Rules Process and the AESO submits Reliability Standards to the Alberta Commission for approval or rejection. Currently, sixty-nine (69) NERC Reliability Standards have been approved or rejected, with some amendments to reflect the physical characteristics of the Alberta system or to ensure there are no conflicts with its market requirements. Some Reliability Standards have also been rejected as not being applicable to market participants in Alberta. The AESO has also established a compliance monitoring program which provides for the monitoring of market participants with applicable Alberta Reliability Standards.

The AESO Reliability Standards Work Plan (Work Plan) was revised in October 2010, based on stakeholder consultation that identified concerns with the pace and volume of Reliability Standards development and subsequent timelines for implementation being difficult to meet. The revised Work Plan reflects a risk-based prioritization approach.

Alberta entities, including the AESO, are not included on the NERC Compliance Registry. However, the AESO participates with NERC; the AESO negotiated a

Membership and Coordinating Operating Agreement (Agreement) with the Western Electricity Coordinating Council (WECC). This Agreement outlines processes and practices for the business relationship, including AESO's continued participation as a member of the WECC and the role of the WECC in monitoring the AESO with regard to Alberta-approved Reliability Standards. The WECC Board of Directors approved the Agreement in April 2008 and the Alberta Commission issued an Order in August 2008 that approved the Agreement as filed. The Agreement was executed by both parties in September 2008. An Amendment to the Agreement was executed in April 2010.

In addition, the WECC and the MSA entered into a Service Level Agreement in April 2010 which establishes a compliance monitoring program for the WECC to monitor the AESO for activities related to Alberta Reliability Standards applicable to the AESO.

A Memorandum of Understanding among the AESO, WECC and NERC was concluded in July 2010. It affirms the collective commitment to work to enhance reliability, within the Alberta structure of authorities, and outlines respective roles.

British Columbia:

The 2007 provincial Energy Plan committed British Columbia (BC) to “ensure that the province remains consistent with North American transmission reliability standards.”

With the implementation of the Utilities Commission Amendment Act (the Act) in May 2009, BC has the legal framework to make reliability standards mandatory and enforceable. The Act gives the BC Utilities Commission (BCUC) a clear authority (exclusive jurisdiction) for the adoption of Reliability Standards in BC. This is based on its determination as to “whether a reliability standard is in the public interest and should be adopted in BC.”

The Act defines “standard-making body” and recognizes NERC and WECC as such. It also provides for the possibility of a “prescribed standard-making body” that can be recognized through regulation.

Under the Act the British Columbia Transmission Corporation (BCTC – recently reintegrated into BC Hydro under the British Columbia Clean Energy Act 2010) must review each Reliability Standard established by a Reliability Standard-making body and report to the BCUC on the impacts and implications of the Reliability Standard on BC. Its review is to consider any possible adverse impacts of adoption of the Reliability Standard on the reliability of electric transmission in BC, the suitability of the Reliability Standard for the Province and the potential cost of adoption of the Reliability Standard and any matter ordered by the BCUC or prescribed by Minister’s regulation.

On receipt of a report the BCUC must make it available to the public in a reasonable manner and for a reasonable period of time and consider any comments it receives in

response. After this period of public notice the BCUC must adopt the Reliability Standard if it considers it necessary to maintain or achieve consistency in BC with other jurisdictions that have adopted the Reliability Standard, unless after a hearing it determines the Reliability Standard is not in the public interest. There is an authority for the BCUC to rescind an adopted Reliability Standard or adopt one previously rejected if after a hearing this is determined to be in the public interest. At this time there is no specific remand provision in the Act.

Standards are mandatory for “prescribed” owners, operators, and direct users of the bulk power system, generators and distributors, *etc.* as established by Ministerial regulation.

The process now is for BC Hydro to launch its review of a Reliability Standard once the NERC Reliability Standards adoption process is complete. In effect this means once the Reliability Standard has been approved and made mandatory in the United States. This would avoid problems of having to potentially rescind a Reliability Standard if it is subsequently remanded in the NERC process.

In June 2009, the BCUC approved 103 NERC and WECC Reliability Standards for application in BC. Under the BCUC order, subject entities were given until December 31, 2009 to submit a “mitigation plan” detailing where they are currently in compliance, or how they intend to come into compliance. Some changes have been made or contemplated in the dates on which the latter two requirements are to be met, based on stakeholder approaches to the BCUC. The NERC Functional Model and NERC Glossary of Terms Used in Reliability Standards were also adopted.

In late February 2010 BCTC (now BC Hydro) filed the Mandatory Reliability Standards (MRS) Assessment Report 2. This report covers 1 new and 22 revised Reliability Standards being presented to the BCUC for consideration with a recommendation for adoption. The MRS Assessment Report has been recently approved by the BCUC and the new and revised Reliability Standards adopted, but the NERC Functional Model has been rescinded.

The Act gives the BCUC authority to make orders providing for the administration of adopted Reliability Standards. WECC has been established as Administrator for the Compliance Monitoring and Enforcement Program (CMEP) as approved by the BCUC. This gives WECC a role in functional registration of BC registered entities and in monitoring compliance with mandatory Reliability Standards, but not in enforcement. In its initial Reliability Standards filing with the BCUC, BCTC noted that “the legislation does not contemplate an ongoing role for NERC in the enforcement of reliability standards adopted by the Commission.” A sanction power that involves possible filing of charges is contained in S.106 of the Act covering Offences and Penalties. A legislative amendment is being considered that would improve the BCUC’s compliance and enforcement powers by giving it the ability to levy a broader range of administrative penalties for non-compliance.

On November 25, 2010, BCUC approved its Implementation Plan for purposes of the monitoring of compliance with adopted British Columbia Reliability Standards.

BC does not have a Memorandum of Understanding (MOU) with NERC, nor is one actively contemplated. The Province considers membership in WECC to be a cornerstone of its reliability regime. BC Hydro is a member of both WECC and NERC and BCUC maintains a close working relationship with WECC and NERC.

Manitoba:

Manitoba Hydro is currently required to comply with NERC Reliability Standards through its membership in the Midwest Reliability Organization (MRO) and its membership in NERC, subject to exceptions based on provincial law. Pursuant to the requirements of *The Manitoba Hydro Act*, in 2004 Manitoba Hydro's membership in the MRO, and its obligation to adopt Reliability Standards, was approved by the Province of Manitoba through an Order in Council subject to the exception that MRO and/or NERC Reliability Standards are not binding on Manitoba Hydro to the extent suspended, disallowed or remanded by the Lieutenant Governor in Council. Currently all NERC/MRO Reliability Standards apply to Manitoba Hydro. Reliability Standards are effective either on a specific date, or on a date subject to regulatory approvals (which for Manitoba Hydro is the NERC Board Approval Date). In Manitoba, the effective date and the enforcement dates are the same.

Effective June 1, 2008, an agreement is in place between Manitoba Hydro, NERC and MRO until such time as a new legislative regime may be enacted. It provides for a comprehensive compliance monitoring and enforcement regime within which the Public Utilities Board (PUB) will be responsible for determining violations of Reliability Standards and imposing sanctions, upon recommendation by MRO and/or NERC. This currently requires the MRO and Manitoba Hydro to jointly ask the Government of Manitoba to convene a review by PUB under existing legislation. The Government has passed an Order in Council to provide the PUB with this authority. This agreement is being revised to reflect the new legislation in the Province.

On June 11, 2009, the Manitoba Hydro Amendment and Public Utilities Board Amendment Act (Electricity Reliability) was passed by the Legislature and received Royal Assent. It has yet to be proclaimed into law, which will be delayed until necessary regulations are prepared. The legislation sets the basis for adoption of mandatory and enforceable Reliability Standards in Manitoba (roles for the Lieutenant Governor in Council as well as the PUB), and provides the legal backstop for the arrangements in the NERC/MRO/Manitoba Hydro Agreement when the required regulations are brought forward by the government. For example, it is regulation that will set the process for adopting Reliability Standards. It also provides definitions for "reliability standard," "standards body" and "compliance body," the latter of which can be designated by regulation. The legislation gives the PUB authority to make determinations of non-compliance and to impose sanctions as well as a possible role in how fees related to the

costs of the reliability regime are allocated in the Province. It is expected the regulations will be brought forward in the spring of 2011.

National Energy Board:

The National Energy Board (NEB) has statutory responsibility for authorizing the construction and operation of international power lines (IPL) and designated inter-provincial power lines and approving electric exports across the international border, as provided in the National Energy Board Act and the National Energy Board Electricity Regulations. The NEB has certain authority under its current legislative framework to take enforcement measures in the case of non-compliance to the conditions of a permit or a certificate that was issued for an IPL, but the NEB does not have authority to levy any financial penalty. The NEB currently has no formal authority to approve NERC Reliability Standards with regard to the applicable IPLs, nor does it have the authority to remand such Reliability Standards back to NERC.

The NEB and NERC entered into an MOU in 2006. That MOU recognizes NERC as the ERO and commits the signatories to work together to promote a reliable bulk electric system and to provide information relating to the development and approval of and compliance with Reliability Standards.

The NEB is currently pursuing the implementation of mandatory Reliability Standards on IPLs through its regulation-making authorities.

New Brunswick:

The Electricity Act in New Brunswick established the New Brunswick System Operator (NBSO) on October 1, 2004. NBSO is responsible to direct the operation of the transmission grid, to maintain the adequacy and reliability of the integrated electricity system, to undertake and coordinate power system planning, and to facilitate the operation of a competitive electricity market. The Electricity Act also empowered the Public Utilities Board, which has since been replaced by the Energy and Utilities Board (EUB), as the licensing authority, financial regulator of the Transmission Tariff, and monitoring authority of the electricity sector.

NERC Reliability Standards are currently adopted in the wholesale rules that are developed and administered by the NBSO by means of a market rule obligation imposed on various market participants to comply with all applicable Reliability Standards. Compliance with the market rules (and thus with NERC Reliability Standards) is a condition of license of each market participant and of NBSO. NERC Reliability Standards therefore currently have effect in New Brunswick under the market rules, subject to the provisions of the market rules and of applicable legislation.

While NERC Reliability Standards are mandatory and enforceable in New Brunswick, such Reliability Standards are only relatively recently subject to formal approval by

NBSO for application in New Brunswick. The process of establishing a mechanism for Reliability Standards approval, enforcement and possible remand through the market rules is contained in New Brunswick Market Procedure 08. The referenced procedure provides that when a NERC Reliability Standard is approved by NERC Board of Trustees, or a Northeast Power Coordinating Council, Inc. (NPCC) Criterion is approved by the NPCC Board of Directors, the NBSO will initiate the adoption process for New Brunswick. The NBSO will review the content and implementation plan for a Reliability Standard and develop a schedule to adopt the Reliability Standard as an amendment to this Market Procedure. The NBSO will post the proposed Reliability Standard, implementation plan and adoption date on the NBSO Website for a thirty (30) day review period before the Reliability Standard comes into effect unless the NBSO deems the amendment to be urgent and files with the EUB to adopt the Reliability Standard in less than thirty (30) days. During the review period interested parties may seek additional information or clarification from the NBSO on the proposed amendments or may apply to the EUB for a formal review of the proposed Reliability Standard.

An application made to the EUB for a formal review of a Reliability Standard does not stay the coming into effect of the Reliability Standard on the adoption date unless otherwise directed by the EUB. The EUB has authority under the Electricity Act to revoke the adoption of a Reliability Standard and remand it back to the NBSO for further consideration.

NERC has MOUs with New Brunswick (Province and NBSO) that detail the roles and responsibilities of the parties including recognizing NERC as a “standards authority” under the Electricity Act in New Brunswick.

In terms of assuring compliance with NERC Reliability Standards NBSO will be the sole New Brunswick entity accountable to NERC for compliance with NERC Reliability Standards by it or by market participants and will be subject to NERC’s Standards processes and compliance monitoring and enforcement processes, which will be monitored by the NPCC. It will however register, monitor and assess and enforce compliance of market participants in New Brunswick. NBSO has the authority to impose financial penalties for non-compliance with the market rules, in accordance with the provisions of the market rules. The EUB also has the authority to impose administrative penalties for violation of license conditions in accordance with and subject to the limitations in the Electricity Act in New Brunswick.

NERC or NPCC may not make findings of or impose sanctions for compliance violations but could make recommendations to the EUB that has this authority, including possibly a recommendation for financial penalties. Public disclosure of information relating to Registered Entity violations will be restricted to Confirmed Violations. The NBSO will publicly post the name of the responsible registered entity and the report for the Confirmed Violation.

Nova Scotia:

The Nova Scotia Utility and Review Board (NSUARB) exercises general supervision over all electric utilities operating as public utilities within the Province of Nova Scotia, pursuant to the Nova Scotia Public Utilities Act. In terms of reliability, electric utilities are required to provide service that is safe and adequate and in compliance with the NSUARB approved rates and regulations.

The NSUARB and NERC concluded an MOU in December 2006. Pursuant to the MOU, NERC commits to filing proposed Reliability Standards with the NSUARB and will immediately notify the NSUARB if any other jurisdiction remands a proposed Reliability Standard. The MOU provides that the NSUARB may adopt a proposed Reliability Standard or may remand a proposed Reliability Standard. The MOU further provides that, once a Reliability Standard is approved by the NSUARB, compliance will be mandatory in Nova Scotia. The MOU recognizes that NERC will conduct compliance activities related to Reliability Standards and will provide compliance information and advice to the NSUARB, which is responsible for determining if any violation has occurred and what if any remedial measures or penalties should be imposed.

In addition, Nova Scotia Power, Inc. (NSPI) is a member of NPCC. Pursuant to the Bylaws of NPCC, NSPI is bound by NERC's Reliability Standards. An agreement between NERC, NPCC, NSUARB and NSPI that outlines the responsibilities of each in Reliability Standards in the Province has been signed.

NERC has provided a list of Reliability Standards currently in effect to the NSUARB. The NSUARB has posted for public comment its proposal that Reliability Standards be adopted and made mandatory for subject registered entities (currently only NSPI). While a final process for Reliability Standards consideration and approval has not been established it is expected this will happen in mid 2011.

Ontario:

The Electricity Act, 1998 (Ontario) established the Independent Electricity System Operator (IESO). The IESO is responsible for managing Ontario's bulk electric system and operating the wholesale electricity market. The Electricity Act also established the Ontario Power Authority, which is responsible for ensuring an adequate, long-term supply of electricity in Ontario.

NERC Reliability Standards are referenced generically in the wholesale market rules that are developed and administered by the IESO by means of a market rule obligation imposed on various market participants to comply with all applicable Reliability Standards. Compliance with the market rules (and thus with NERC Reliability Standards) is a condition of license from the Ontario Energy Board (Board) for each market participant and the IESO. NERC Reliability Standards therefore currently have

effect in Ontario under the market rules, subject to the provisions of the market rules and of applicable legislation.

On May 14, 2008, Schedule G of the Budget Measures and Interim Appropriation Act, 2008 (Bill 44), which amends the Electricity Act, 1998 became law in Ontario. Bill 44 provides a process whereby the Board can initiate a review, remand, and revoke the application of NERC Reliability Standards in Ontario. Only standards approved by the NERC Board of Trustees on or after May 14, 2008 are subject to provisions of the new law.

Pursuant to the Act the IESO must post notice within seven (7) days after notice is provided by NERC of a new or amended NERC Reliability Standard. This starts the Reliability Standards review timelines provided in the Electricity Act (or future regulations). Any person may apply to the Board for a review of a newly approved NERC Reliability Standard within twenty-one (21) days after posting by the IESO. On its own motion the Board may also initiate a review of the Reliability Standard, within the same twenty-one (21) days, or later if a longer time period is provided by regulation.

The Board may initiate a review of the standard within 120 days as permitted by regulation. If the Board finds upon completion of its review, that the Reliability Standard is inconsistent with the purposes of the Electricity Act or unjustly discriminates against or in favour of a market participant or class of market participants, the Board shall make an order cancelling the operation of the NERC Reliability Standard in Ontario and sending it back to NERC for further consideration. The Board may also make the same order if it is necessary to do so in order to coordinate with other jurisdictions in North America that implement NERC Reliability Standards. Unless a NERC Reliability Standard is otherwise ordered stayed or remanded by the Board the Reliability Standard will come into effect upon its effective date through the authority of the IESO's Market rules as mandatory and enforceable in Ontario. Initiation of a review of a Reliability Standard by the Board does not stay its operation pending completion of the review unless the Board orders otherwise.

Under the new legislation, the IESO has the right to appeal to the Board an order, finding, or remedial action made or taken by NERC. The Board may make an order revoking or amending such NERC actions or may make any other order, finding, or decision or take any other remedial action that NERC could have made or taken. The IESO must first complete the NERC compliance appeals process.

In terms of assuring compliance with NERC Reliability Standards, the IESO has the authority to impose financial penalties for non-compliance with the market rules, in accordance with the provisions of the market rules. The Board also has the authority to impose administrative penalties for violation of license conditions in accordance with and subject to the limitations in and under the Ontario Energy Board Act, 1998 (Ontario). The IESO is the sole Ontario entity accountable to NERC for compliance with NERC

Reliability Standards by it or by market participants and is subject to NERC's Reliability Standards CMEP processes up to but not including financial penalties.

The provincial government recognized NERC as the ERO on November 28, 2006. Further, the IESO, NPCC and NERC entered into a MOU, documenting the obligations of the parties respecting the Ontario reliability framework. This MOU complements an earlier MOU between the Board and NERC. The 2006 MOU between the IESO and NERC was updated early in 2010 to reflect the recent changes to the Electricity Act, 1998. Specifically, the legislation has affected the application, notification, and compliance aspects pertaining to NERC Reliability Standards in Ontario. As Ontario's energy regulator, the Board will oversee NERC's activities, and the IESO will remain accountable for Ontario's compliance with NERC and NPCC Reliability Standards and criteria.

Ontario passed a Green Energy Act in Spring 2009. There are amendments to many existing statutes, including the Electricity Act 1998. Sections on reliability are impacted with the Electricity Act being amended to provide an authority for the IESO to make rules "establishing and enforcing standards and criteria relating to the reliability of electricity service or the IESO-controlled grid, including standards and criteria relating to electricity supply generated from sources connected to a distribution system that alone or in aggregate could impact the reliability of electricity service or the IESO-controlled grid" and allowing direction to be provided market participants in order to maintain reliability. This will have to operate in the process for establishing market rules that now exists.

Québec:

On December 13, 2006, the Québec Government adopted legislation "An Act Respecting the Implementation of the Québec Energy Strategy and Amending Various Legislative Provisions" (Bill 52) which gave the Régie de l'énergie du Québec (the Régie) jurisdiction regarding mandatory Reliability Standards in the Province of Québec. The Régie is responsible for ensuring that electric power transmission in Québec is carried out according to the Reliability Standards that it adopts. Bill 52 allows the Régie, with Government approval, to enter into an agreement with a body that proves it has the expertise to establish or monitor the application of electric power transmission Reliability Standards in order to:

1. develop electric power transmission Reliability Standards for Québec;
2. carry out inspections or investigations as part of plans to monitor compliance with the Reliability Standards; and/or
3. provide the Régie with opinions or recommendations.

This agreement must also set out the method of establishing remuneration and the terms of payment for achieving its objects. A first agreement was concluded between the Régie, NERC and NPCC in May 2009. It covers all aspects of the Québec reliability regime except for the CMEP which will be the subject of a second agreement.

A consultation was launched in July 2009 with the posting of the “Québec Rules of Procedure for Compliance Services (QROP)” and the “Québec Compliance and Monitoring Enforcement Program (QCMEP).” The two documents describe the role of NERC working with the NPCC in the CMEP within Québec and allow assurance that similar enforcement programs are undertaken across all regions in North America and that Québec registered entities receive comparable treatment. As of December 2010, comments received during the consultation process from a number of interveners have led to a new version of these documents which have to be finalized.

In May 2010, Québec passed legislation to provide the Régie with clear authority for mandatory electric Reliability Standards and to give the formal authority for their enforcement. This amendment was to provide the Régie with the authority to order measures to be taken at once when non-compliance with a Reliability Standard is seriously compromising the reliability of the electric power transmission system.

In August 2007, the Régie designated the CME (Direction – Contrôle des mouvements d'énergie (System Control unit, now Direction Contrôle et Exploitation du réseau (CER)) of Hydro-Québec TransÉnergie) as the Reliability Coordinator (RC) for Québec.

Per legislation, the RC for Québec must:

1. Carry out any duties devolved to it under a Reliability Standard adopted by the Régie and issue operating directives;
2. File with the Régie the Reliability Standards proposed by a recognized reliability body with which the Régie has entered into an agreement and any variant or other Reliability Standard that the RC considers necessary;
3. File an evaluation of the relevance and impact of the Reliability Standards filed;
4. Submit to the Régie, for approval, a Register identifying the registered entities that are subject to the Reliability Standards adopted by the Régie.

The Régie has jurisdiction to adopt Reliability Standards that the RC considers essential to ensure Québec control area reliability. The Reliability Standards that the RC files with the Régie are NERC Reliability Standards and only apply to the registered entities in the Register of registered entities subject to NERC Reliability Standards.

With respect to the adoption of Reliability Standards, the Régie may request the RC to modify a Reliability Standard filed or submit a new one, on the conditions it sets, adopt Reliability Standards and set the date of their coming into force. The RC must submit to the Régie guidelines describing criteria to be taken into account in determining sanctions for non-compliance with Reliability Standards. Based on recommendations from NERC and NPCC, the Régie is responsible for determining if the registered entity has failed to comply with a Reliability Standard, and impose, if appropriate, a sanction that may not exceed \$500,000CAN a day.

On June 2, 2009, the CME, now CER, filed an application seeking the adoption of ninety-five (95) Reliability Standards applicable in Québec. No Reliability Standards specific to Québec were filed. A public hearing was held on October 7 and October 14, 2010.

The final CER filing is seeking:

1. The adoption of 95 Reliability Standards and corresponding risk factors applicable in Québec;
2. The approval of a Registry of Entities;
3. The approval of a Registry of Facilities;
4. The approval of a Glossary of Terms;
5. The taking act of the Reliability Standards Application Matrix; and
6. The approval of Sanctions Guidelines in a later phase (Spring 2011).

The Reliability Standards filed in English are rigorously identical to NERC's Reliability Standards. The French version is therefore a translation of NERC's Reliability Standards.

Upcoming actions for 2011 are:

- A decision by the Régie on the first five items of CER filing listed above;
- Finalization of the QCMEP and QROP documents;
- Conclusion of a second agreement on the CMEP; and
- Hearings and approval of Sanction Guidelines.

Saskatchewan:

Prior to 2004, SaskPower generally followed accepted industry practice. In 2004, following the 2003 eastern seaboard blackout, SaskPower committed itself formally to adopt NERC Reliability Standards. SaskPower joined MRO, and has been approved as a NERC certified control area, and achieved NERC approval as the Saskatchewan RC.

While reliability legislation remains a possibility, given the lack of a quasi-judicial regulator and the small size of the Saskatchewan jurisdiction, the current approach is to utilize the current Power Corporation Act's unambiguous Authorities to set and enforce Reliability Standards for the electric system. To accomplish this, a distinct reliability "Oversight Authority" and compliance program not linked with operations has been established within SaskPower to manage the Province's reliability framework.

A MOU (and respective processes) – developed by MRO, SaskPower, and NERC was concluded in March 2009. The MOU recognizes NERC and MRO as Saskatchewan's EROs and to the degree practicable will utilize NERC and MRO almost in an audit role. Saskatchewan retains all formal authorities. No penalties are imagined at this point, however, as the program is extended to entities within Saskatchewan the potential use of methods of enforcement will be considered.

The Saskatchewan oversight authority has been established, with very specific authorities within a managed system framework, to enforce compliance and drive mitigation plans within the Province. The Saskatchewan oversight authority, in all cases, will make formal findings, approve and where required order appropriate mitigation plans, and manage the remand, set aside, and variance procedures. The Oversight Authority may utilize MRO, NERC, or other resources to complete certain of these reviews. The Oversight Authority is expected to be involved at the front end and throughout the entire compliance procedure. It is understood that NERC and MRO intend to conduct monitoring activities, including compliance audits in Saskatchewan with respect to the state of Reliability Standards in the Province of Saskatchewan.

A determination is being made as to which Reliability Standards will be referenced as applicable to Saskatchewan, and for which ones it will be establishing a review, or will undertake to remand, set aside or initiate some variance/modification. Any Reliability Standard that has been approved by the NERC Board of Trustees but remains unimplemented (through the Federal Energy Regulatory Commission (FERC) or other jurisdiction either remanding them or some other form of non implementation) will be reviewed in a formal fashion before they become applicable.

Typically, NERC Board of Trustees approved Reliability Standards shall be viewed as being automatically adopted in Saskatchewan, unless: (1) a particular Reliability Standard has been remanded by any jurisdiction (in which case the Reliability Standard will not be applicable); or (2) as result of a Saskatchewan Authority review initiated within 120 days of receiving notice of NERC's adoption of a Reliability Standard (requested in writing by any entity within Saskatchewan, or upon the initiative of the Saskatchewan Authority), a Reliability Standard may be remanded back to NERC or set aside by the Saskatchewan Authority (thus also not being applicable) or a variance has been duly requested by SaskPower through the NERC rules and therefore, the Reliability Standard is set aside for Saskatchewan or a defined geography within Saskatchewan, or; the Saskatchewan Authority chooses to set aside a Reliability Standard for other reasons at any time.

Once implemented, the full-managed system established will include the three functions:

1. Oversight (including the remand, set aside, and finding authorities);
2. Reliability Standards development (including the coordination of assessment, communication, internal education and, development of mitigation plans), and;
3. Compliance and enforcement (the management of an internal and external bulk power system auditing, empowered to make the Saskatchewan formal findings of compliance and non compliance (either of its own volition or through external recommendations, *i.e.* NERC/MRO) and to order and enforce mitigation plans to be implemented.).

The creation of these functions represents (and is considered equivalent to) a full regulatory framework by the Province.