

**RECEIVED**  
DEC 17 2010

Nova Scotia  
Utility and Review Board

December 17, 2010

Nancy McNeil  
Regulatory Affairs Officer/Clerk  
Nova Scotia Utility and Review Board  
1601 Lower Water Street, 3<sup>rd</sup> Floor  
PO Box 1692, Unit "M"  
Halifax, NS B3J 3S3

**Re: North American Electric Reliability Corporation – Reliability Standards;  
and Northeast Power Coordinating Council, Inc. – Regional Reliability  
Criteria – NERC-R-10/Matter No. M03324**

Dear Ms. McNeil:

On June 29, 2010, the Northeast Power Coordinating Council (NPCC) filed its Regional Reliability Criteria for approval by the Nova Scotia Utility Review Board (UARB). Specifically, NPCC requests UARB approval of 14 Reliability Criteria as contained in Exhibits A, B, and C of its application.

On June 30, 2010, the North American Electric Reliability Corporation (NERC) filed its Reliability Standards for approval by the UARB. NERC requested that the UARB approve all FERC approved Reliability Standards, including Reliability Standards that are currently mandatory and enforceable in the United States as well as those Reliability Standards which are approved by FERC but which are not expected to take effect until January, 2011. In addition, NERC requested that the UARB approve associated Violation Risk Factors (VRFs) and Violation Security Levels (VSLs) as set out in Exhibits F and G. VRFs assess the impact to reliability of violating a specific requirement. VSLs define the degree to which compliance with a requirement is not achieved.

On July 21, 2010, NERC made a supplemental filing with the UARB clarifying that it requests UARB approval of Exhibits C, E, F and G of its June 30, 2010 application. NSPI understands that Exhibits A, B, D, and H are provided as supporting information purposes but that NERC is not specifically seeking approval of these documents.

On July 29, 2010, the UARB issued a Notice of Filing and requested that interested parties file a notice of intervention by August 25, 2010. Nova Scotia Power Inc. (NSPI) has filed a Notice of Intervention.

NERC's and NPCC's filings request that the UARB make the Reliability Standards and the Regional Reliability Criteria mandatory and enforceable for users, owners and

operators of the bulk power system in Nova Scotia. NSPI has intervened as a user, and as the operator and owner of Nova Scotia's bulk power system.

At the Board's request, NSPI filed a timeline which was agreed to by NERC and NPCC for this proceeding. The UARB has accepted that timeline. The first deliverable is for NSPI to file its recommendations with respect to NERC's and NPCC's filings. NSPI is pleased to now provide in this correspondence its recommendations.

### **Background**

This matter has arisen as a result of the UARB having signed a Memorandum of Understanding with NERC dated December 22, 2006 wherein the UARB and NERC committed to a process for making NERC Reliability Standards mandatory, and assuring enforcement of those standards. Please refer to Attachment 1 for a copy of the MOU between the UARB and NERC.

NSPI, NERC and NPCC entered into an implementation Memorandum of Understanding effective May 11, 2010. Please refer to Attachment 2 for a copy of the MOU between NSPI, NERC and NPCC.

The approval of the Reliability Standards and Regional Reliability Criteria will not change NSPI's operating practices as NSPI already manages to compliance on all appropriate standards and criteria. NSPI has already been subject to three audits by NPCC of NERC Reliability Standards; one in 2006 (11 standards), one in 2007 (16 standards) and the third which was just completed in 2010, of 127 Reliability Standards.

NSPI's bulk power system consists of the 345 kV transmission system interconnecting Lakeside – Onslow – Hopewell – Woodbine and Memramcook, New Brunswick; the 230 kV transmission system interconnecting Brushy Hill – Onslow – Lingan and Point Aconi; and some selected 138 kV lines that have been identified as part of the bulk power system.

Please see Attachment 3 for a diagram of NSPI's Bulk Power System.

### **Process for Approval of Standards in the Future**

NSPI's comments in this recommendation are specific to the Reliability Criteria and Reliability Standards filed by NPCC and NERC on June 29, 2010 and June 30, 2010. From time to time, amendments or new Reliability Criteria are approved by NPCC and amendments or new Reliability Standards are approved by FERC. The implementation MOU between NSPI, NPCC and NERC recognizes that NPCC and NERC will bring these new Criteria and Standards before the UARB for approval from time to time. The MOU further recognizes that, as with this initial filing, the process for approval will

involve NSPI providing its recommendation with respect to such amendments or new Reliability Criteria or Reliability Standards.

The MOU between NERC and the UARB also recognizes this issue and states:

Development of Reliability Standards

NERC and the Board acknowledge the importance of the active participation of electricity sector participants from the Province in NERC's standards development process.

NERC commits to notify the Board of the major milestones in the development of each reliability standard.

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

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

NSPI recommends that the UARB implement this process for approval of future NPCC Reliability Criteria and NERC Reliability Standards, as contemplated by the UARB and NERC in their MOU, with one suggested change. The process contemplated by NERC and the UARB requires NERC to file its proposed Reliability Standard with the UARB upon the NERC registered ballot body and NERC Board of Trustees having approved a reliability standard. In the United States, there is an additional step before a NERC Reliability Standard becomes effective. That is the requirement of FERC approval.

NSPI proposes that the UARB not take any action on approving, or remanding, a reliability standard until such time as it is determined that FERC has approved the standard. The United States Federal Energy Regulatory Commission (FERC) does not

---

have jurisdiction in Nova Scotia and the UARB may determine it appropriate to remand a standard that the FERC has approved or approve a standard that the FERC has remanded. However, if the UARB approves a standard that the FERC has not yet approved, or a standard that the FERC ultimately remands, NSPI will face conflicting compliance requirements by virtue of the different requirements arising from the UARB having approved a standard that is not in place within the FERC's jurisdiction. There could also be a duplication of process whereby it might be necessary to re-consider the Nova Scotia approval after a remand by the FERC.

NSPI notes that while NERC did file the NERC Board of Trustees-approved but FERC approval-pending Standards with the UARB (Exhibit H), it has not sought UARB approval of those Standards as of yet. This approach is consistent with NSPI's recommendation for approval of standards on a go-forward basis.

NSPI suggests that on an application for approval of future standards, the UARB stay any process for approval of such new Reliability Standards until such time as the FERC has approved or remanded such standard in the United States, so that the UARB can be better informed about the effect on NSPI and its customers.

NSPI also suggests that the process for approval of new criteria or standards be an annual process which would avoid the potential for having numerous applications before the UARB in a given year. Reliability Standards or Criteria changes could be accumulated over a year and filed in a single efficient process annually.

## **2010 Audit**

NPCC performed a compliance audit on NSPI in two stages in 2010. The first stage was completed from August 9 to the 13, 2010 and was an audit of 43 Reliability Standards and 349 of their requirements/sub-requirements. Based on the information and documentation provided by NSPI, the audit team found NSPI to be compliant with 42 standards and 302 applicable requirements. The audit team determined that 1 standard and 47 various requirements/sub-requirements were not applicable to NSPI. The audit team identified no Possible Violations.

The second stage of the audit was completed October 5 to the 8, 2010 and was an audit of eight Critical Infrastructure Protection (CIP) standards and their 43 requirements/sub-requirements. Based on the information and documentation provided by NSPI, the audit team found NSPI to be compliant with eight CIP standards and their 42 requirements/sub-requirements. A possible violation was identified within CIP-004 R4 due to not revoking the access within the seven day requirement of one employee who had passed away within the audit period.

NPCC has not published the final audit report as of the time of writing.

---

## **Regulatory Implications in Nova Scotia**

As part of the interconnected North American bulk power system, NSPI is currently required to comply with NERC Reliability Standards and NPCC Reliability Criteria. NSPI has brought forward capital work order applications in the past where compliance with NERC is a justification for the project.

The 2010 ACE Plan included two items that were justified on the basis of NERC or NPCC compliance.

1. CI 38266 - 2010 Protection Upgrades

In 2008, NPCC approved new criteria (Criteria Document A-10) for determining whether a substation bus is categorized as bulk power. The criterion is used to identify substation busses that, if a fault was not successfully cleared by protection, the situation could result in disturbances outside the local operating area. Stations identified through this criterion are required to have fully redundant protection, control and communication schemes. The 79N- Hopewell substation busses met the criteria for a bulk power element and did not have fully redundant protection, control, and communication schemes in place.

2. CI 38182 - 2010 Backup Control Centre

NERC requires all Transmission Operators and Balancing Authorities have a back-up control strategy in place by Q1 of 2012.

NSPI's requirement for a Back-up Control Centre (BCC) originated from a business need to provide constant monitoring of the bulk power system and the emerging NERC standard (EOP-008-1). This standard requires a back-up plan that "includes monitoring, control, logging, and alarming sufficient for maintaining compliance with all reliability standards". NSPI's single point of failure (no redundancy) would have been at the Ragged Lake Control Centre (RAL). All communications and control for the bulk power system is through RAL. An industrial or natural disaster could limit or curtail NSPI in such a way where the only visibility on the grid would be individuals stationed at major substations and plants. In 2010, NSPI had a simple BCC in the Scotia Square basement, dependent on the infrastructure at RAL. The NERC requirements state that "backup capabilities should not depend on the primary control center for any functionality required to maintain compliance with Reliability Standards that depend on the primary control functionality".

With the NERC EOP-008 standard there is a requirement that a back-up plan be in place by Q1 of 2012.

Two items are expected to be brought forward in 2011 which are justified on the basis of NERC or NPCC compliance. In particular:

1. CI 40231 – 2011 Protections Upgrades at Lakeside

In 2008, NPCC approved new criteria (Criteria Document A-10) for determining whether a substation bus is categorized as bulk power. The criterion is used to identify substation busses that, if a fault was not successfully cleared by protection, the situation could result in disturbances outside the local operating area. Stations identified through this criterion are required to have fully redundant protection, control and communication schemes. The 103H-Lakeside substation bus has met the criteria for a bulk power element and currently does not have fully redundant protection, control, and communication schemes in place.

2. CI 40233 – 2011 Protections Upgrades at Tufts Cove

In 2008, NPCC approved new criteria (Criteria Document A-10) for determining whether a substation bus is categorized as bulk power. The criteria is used to identify substation busses that, if a fault was not successfully cleared by protection, the situation could result in disturbances outside the local operating area. Stations identified through this criterion are required to have fully redundant protection, control and communication schemes. The A-10 Criteria requires the 91H-Tufts Cove substation bus to be upgraded to satisfy the A-10 Criteria.

Assuming the UARB approves the NERC Reliability Standards and the NPCC Reliability Criteria, NSPI does not expect the process for capital projects justification to proceed differently than it does today. While the UARB may approve the Standards and Criteria as requested by NERC and NPCC as part of this proceeding, such approval would not constitute approval of any capital expenditures on the part of NSPI. Any capital expenditures necessary for compliance with the Standards or Criteria would require NSPI to follow ACE guidelines and process and put forward a capital work order application at the appropriate time, and would be subject to the regulatory rigor of UARB review.

**Emerging Issues**

There are two issues which are currently under consideration in North America which could have a material effect on reliability regulation in Nova Scotia; 1) the Bulk-Electric System definition and the 2) the ongoing expansion of CIP standards. NSPI's comments on each of these are offered for the UARB's consideration. No action is requested of the UARB at this time.

Bulk Electric System Definition

Within the NPCC, the definition of Bulk Electric System (BES) has been focused on system elements which could potentially affect system reliability in other jurisdictions. For Nova Scotia, this has been generally accepted to be the 345 kV and 230 kV system.

The FERC is proposing to standardize the definition of BES across North America by adoption of a 100 kV "bright-line" standard. As provided in its Final Rule, dated November 18, 2010, FERC advises that NERC should

maintain a bright-line threshold that includes all facilities operated at or above 100 kV except defined radial facilities, and establish an exemption process and criteria for excluding facilities that are not necessary for operating the interconnected transmission network.

Canadian members of the NPCC, including NSPI, oppose this change on the basis that it could lead to significant cost increases without providing material improvements to system reliability. If the bright-line approach is ultimately adopted by NERC, the Company may need to propose an alternative approach in Nova Scotia.

CIP Standard Expansion

Due in large part to concern with potential criminal attacks on the North American bulk power system, a major focus of reliability standard changes has been a shift towards increasingly stringent CIP Standards. These changes have the potential to increase the cost of service for NSPI.

For instance, CIP-002 defines the methodology for the identification of critical cyber assets to which the requirements of CIP-003 to CIP-009 standards apply. Proposed changes to CIP-002 could bring additional assets into scope for the application of CIP-003 to CIP-009 requirements, potentially driving costs for additional physical security, electronic security, and associated procedures and processes. A more stringent CIP-002 standard could not only identify more critical cyber assets but also more sites with critical cyber assets where cyber security measures would need to be implemented.

NSPI will continue to monitor these developments and where concerns are identified, alternatives to NERC and/or NPCC adopted measures may need to be considered.

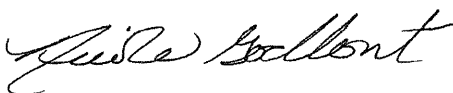
### **Recommendation**

NSPI recommends that the UARB approve the NERC Reliability Standards as requested in its application of June 30, 2010 and the NPCC Reliability Criteria as requested in its application of June 29, 2010.

NERC has also requested that the UARB approve Violation Risk Factors (VRFs) and Violations Security Levels (VSLs). It is not clear to NSPI what would be gained from UARB approval of VRFs and VSLs in Nova Scotia. NSPI understands that these documents intend to assess the impact to reliability of violating a specific request, and define the degree to which compliance with a requirement is not achieved, the purpose of which is to assist the UARB in understanding any recommendation which may be made by NERC or NPCC to the UARB during a potential enforcement proceeding in the event of a violation.

NSPI has no objection to NERC filing these types of documents with the UARB, nor to the UARB receiving these documents from NERC. Given that the UARB has the discretion to make its own findings with respect to assessments of impact of a violation or the degree to which compliance is or is not achieved, it does not appear, that a formal UARB approval of VRFs and VSLs is necessary. NSPI recommend that the UARB not approve the VRFs and VSLs.

Yours most respectfully,



Nicole Godbout  
Regulatory Counsel

c: S. Bruce Outhouse, Q.C.  
Davis Smith, NERC  
Margaret Mayora, NPCC  
David Cook, NERC  
Registered Intervenor  
J. René Gallant  
Eric Ferguson  
Sara Tingley

COPY

**Memorandum of Understanding  
between  
Nova Scotia Utility and Review Board  
and  
North American Electric Reliability Corporation**

**General Provisions**

This Memorandum of Understanding (MOU) between the Nova Scotia Utility and Review Board (Board) and the North American Electric Reliability Corporation (NERC) reflects the desire for a continuing and cooperative relationship in improving the reliability of the North American bulk power system and in the exchange of experience, information, and data related to that system.

The Board exercises general supervision over all electric utilities operating as public utilities within the Province, pursuant to the Nova Scotia Public Utilities Act. NERC is an organization, sponsored by all sectors of the electric utility industry, whose mission is to ensure that the bulk electric system in North America is reliable, adequate and secure. NERC develops reliability standards, monitors compliance with those standards, and periodically assesses the reliability of the bulk power system in North America.

Through this MOU, NERC recognizes the Board's regulatory authority over electric utilities operating in Nova Scotia, and the Board recognizes the role that NERC has with respect to the North American bulk power system.

This MOU sets forth the mutual expectations that the Board and NERC have with respect to making reliability standards developed by NERC mandatory within the Province, assuring enforcement of those standards, and providing for payment of a fair allocation of NERC's reasonable costs for carrying out its mission. This MOU is not intended to be an enforceable agreement or contract by or against either party, notwithstanding the occasional use of the term "agree" or the use of mandatory language such as "shall" or "will" in either the MOU or its appendices.

This MOU recognizes that the Board is a statutory body with specific legislative powers and authorities which cannot be delegated, and that those powers and authorities are subject to limitations and constraints, including limitations and constraints that flow from the Board's status as a quasi-judicial tribunal.

**Development of an Electric Reliability Organization**

The parties understand that NERC has been certified by the U.S. Federal Energy Regulatory Commission as the "electric reliability organization" (ERO) under U.S. legislation. NERC agrees to consult with the Board on a regular basis, including with respect to amendments to its bylaws, so that the organization takes

appropriate account of Canadian and provincial issues, reflecting the international nature of the North American bulk electric system.

### **Development of Reliability Standards**

NERC and the Board acknowledge the importance of the active participation of electricity sector participants from the Province in NERC's standards development process.

NERC commits to notify the Board of the major milestones in the development of each reliability standard.

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

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

### **Compliance**

The parties understand that, once the Board approves a reliability standard, compliance with the reliability standard will be mandatory in Nova Scotia. The Board may enforce approved reliability standards directly. The parties also understand that NERC, working through a designated regional entity, intends to conduct compliance activities with respect to its reliability standards. The Board agrees to receive compliance information and recommendations from NERC or the regional entity for use in enforcement proceedings, which proceedings shall be conducted under the Board's direction and control. NERC or the regional entity may recommend a particular penalty for any violation that NERC or the regional entity reports, but the Board will be responsible for determining whether any violation has occurred and, if so, what remedial measures or penalties should be imposed.

The parties will work together to establish a system for disclosure by NERC of violations and to provide for assessment and reporting by NERC of inter-region

reliability risks to or from entities outside of Nova Scotia where coordinated action is required to address those risks.

The parties agree that NERC will provide relevant information on issues related to reliability compliance including reports on:

- Compliance audits and spot checks
- Readiness evaluations
- Disturbance reports
- Reliability assessments and benchmarking information
- Reports by regional organizations, where applicable

### **ERO Funding**

NERC and the Board acknowledge that the costs associated with NERC and regional councils are currently included, directly or indirectly, in the rates of entities subject to the Board's jurisdiction. The parties agree on the importance of continuing a stable source of funding for NERC and associated regional entities. Therefore, the present method of funding should continue, with the opportunity for Board review of the costs as part of the rate cases of its jurisdictional entities.

NERC commits to a fair allocation of its reasonable costs to entities within the Province, based generally on relative share of net-energy-for-load. NERC will make an informational filing of its annual budget and funding requirement with the Board, contemporaneously with its filing in other jurisdictions.

### **Points of Contact**

The points of contact shall be for NERC:

David Cook  
Vice President & General Counsel  
116-390 Village Blvd.  
Princeton, New Jersey 08540  
(609) 452-8060

and for the Board:

Regulatory Affairs Clerk/Officer  
Nova Scotia Utility and Review Board  
3rd Floor  
1601 Lower Water Street  
Halifax, Nova Scotia B3J 3P6  
(902) 424-4448

These points of contact can be amended at any time by notification to the other party.

NERC agrees to include the Board contact on its email circulation list.

**Amendment and Termination of This Memorandum**

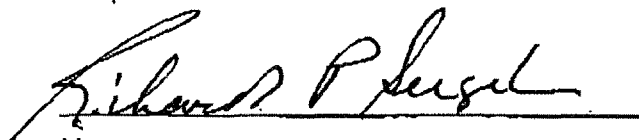
This MOU will continue until replaced or amended by the signatories or terminated by either signatory on 30 days notice.

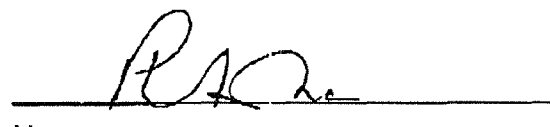
**Signatures**

Signed this 22 day of Dec., 2006:

North American Electric Reliability  
Corporation

Nova Scotia Utilities and Review Board

  
Name

  
Name

President & CEO

Title

CHAIR  
Title

May 9, 2010.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42

# MEMORANDUM OF UNDERSTANDING

BETWEEN

NOVA SCOTIA POWER INCORPORATED

AND

THE NORTHEAST POWER COORDINATING COUNCIL Inc

AND

THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

This Memorandum of Understanding ("MOU") between Nova Scotia Power Incorporated ("NSPI"), the Northeast Power Coordinating Council Inc. ("NPCC") and the North American Electric Reliability Corporation ("NERC"), supports the December 22, 2006 Memorandum of Understanding between the Nova Scotia Utility and Review Board ("NSUARB," "Board") and NERC. This MOU sets forth mutual understandings of the signatories in relation to the approval and implementation of mandatory NERC Reliability Standards and NPCC Regional Reliability Criteria in Nova Scotia and other related matters.

Nothing in this MOU limits the responsibility or authority of any signatory in carrying out its respective mandate.

## 1. General Matters

### **Interpretation**

References in this MOU to NERC Reliability Standards include the following:

- reliability standards that are developed and adopted by NERC and approved by industry, as well as amendments to or revisions of NERC reliability standards; and
- regional reliability standards that are developed by NPCC, approved by members and adopted by NERC, as well as amendments to or revisions of such reliability standards.

References in this MOU to NPCC Regional Reliability Criteria include any Reliability Criteria or Reliability Directories that are developed and adopted by NPCC and approved by NPCC Full Members, which Reliability Criteria or Reliability Directories are not subject to review, adoption or approval by NERC, as well as amendments to or revisions of such Reliability Criteria or Reliability Directories.

### **The Signatories**

NSPI is a public utility in Nova Scotia, pursuant to the Nova Scotia *Public Utilities Act*, R.S.N.S. 1989, c. 380, Public Utilities Act. NSPI is a member of the NERC registered ballot body and a Full Member of NPCC.

NERC is a self regulating not for profit corporation responsible for ensuring the reliability of the bulk power system in North America. In the United States, the Federal Energy Regulatory Commission ("FERC") delegates to NERC the authority to create and enforce compliance with reliability standards. On December 22, 2006, NERC signed a Memorandum of Understanding ("December 22, 2006 MOU")

May 9, 2010

1 with the NSUARB to agree, among other things, to commence a process for approval and implementation  
2 of NERC standards in Nova Scotia. A copy of the December 22, 2006 MOU is attached as Schedule 1.

3 NPCC is one of eight Regional Entities responsible for promoting and enhancing the reliability and  
4 efficient operation of the international, interconnected bulk power system in Northeastern North America.  
5 NPCC is delegated authority from NERC in the United States to enforce NERC Reliability Standards. In  
6 addition, consistent with the *Amended and Restated By-laws of Northeast Power Coordinating Council,*  
7 *Inc.*, NPCC has authority to enforce NPCC Regional Reliability Criteria. In Canada, NPCC has signed  
8 Memoranda of Understanding with applicable Canadian Provincial regulatory and/or governmental  
9 authorities to support the approval and application of mandatory Standards and Criteria in Canadian  
10 jurisdictions.

## 11 12 13 2. Development and Application of NERC Reliability Standards and NPCC Regional Reliability 14 Criteria

15  
16 In accordance with NSPI's designation as a Registered Entity, NSPI agrees to comply with NERC  
17 Reliability Standards and NPCC Regional Reliability Criteria.

18 Upon approval by the NSUARB, the NERC Reliability Standards and NPCC Regional Reliability Criteria  
19 will become mandatory in Nova Scotia.

20 NERC will prepare a consolidated filing for NSUARB approval which includes all approved NERC  
21 Reliability Standards. Concurrently, NPCC will prepare a consolidated filing for NSUARB approval  
22 which includes all NPCC Regional Reliability Criteria.

### 23 24 **Responsibilities and Timeline**

25 NERC and NPCC shall endeavour to file the NERC Reliability Standards and NPCC Regional Reliability  
26 Criteria, for approval, with the Board by no later than the end of Q2 2010. In this and subsequent filings,  
27 NERC and NPCC will advise the Board of the status of the Standards and Criteria at FERC and in other  
28 Canadian jurisdictions.

29 It is anticipated by the signatories that, as a first step, the NSUARB will direct NSPI to review and  
30 provide comment on the filings. In response NSPI will provide the Board with a recommendation that the  
31 NSUARB:

- 32 o Approve the NERC Reliability Standards or NPCC Regional Reliability Criteria as
- 33 mandatory;
- 34 o Request additional information;
- 35 o Remand;
- 36 o Adopt the NSUARB's own reliability standard on the issue;
- 37 o Dismiss as not relevant to Nova Scotia; or
- 38 o Other action as NSPI considers appropriate.

39  
40 As necessary NSPI will consult with NERC and NPCC in the development of its recommendation and  
41 will seek to develop consensus with NPCC in the development of its filing to the NSUARB.

May 9, 2010

1 NSPI will endeavor to file its recommendation by the end of 2010. NSPI will, in consultation with NERC  
2 and NPCC, propose a timeline for the NSUARB approval of the Standards and Criteria.

### 4 **Stakeholder Participation**

5 The signatories anticipate that the NSUARB will require notification to stakeholders of the NERC  
6 application and the NPCC application and will provide opportunity for review and comment on the  
7 applications by stakeholders. It is understood that the NSUARB has authority in its discretion to order  
8 stakeholder discovery on the applications and an oral hearing if it determines it to be appropriate.

9 The signatories acknowledge that if the NSUARB directs a formal discovery process and/or oral hearing,  
10 they will have responsibilities to respond to Information Requests posed by the NSUARB and/or  
11 stakeholders and a responsibility for appropriate representative(s) of their respective organizations to  
12 testify as witnesses if the NSUARB determines it appropriate to order an oral hearing. The signatories  
13 acknowledge that this process will require their compliance with NSUARB process timelines.

14 The signatories anticipate generally that their responsibilities to respond to the NSUARB and/or  
15 stakeholders would fall into the following general topics and assignments:

16 NERC – technical appropriateness of NERC Reliability Standards from a reliability standpoint;

17 NPCC – technical appropriateness of NPCC Regional Reliability Criteria from a reliability  
18 standpoint;

19 NSPI – Nova Scotia context, cost considerations.

### 21 **Notification and Approval of Amendments and/or Additions to NERC Reliability Standards** 22 **and NPCC Regional Reliability Criteria**

23 The signatories anticipate that there will be ongoing amendments and/or additions made to the NERC  
24 Reliability Standards and NPCC Regional Reliability Criteria by NERC and NPCC, respectively. These  
25 amendments and/or additions will require approval by the NSUARB before they will become mandatory  
26 in Nova Scotia.

27 The signatories will utilize a regular notification process that identifies to the NSUARB proposed  
28 amendments and/or additions to be made by NERC and NPCC to Reliability Standards and Regional  
29 Reliability Criteria, respectively.

30 NERC shall concurrently notify NSPI and the NSUARB of Reliability Standards adopted by NERC.  
31 NPCC shall concurrently notify the NSPI and the NSUARB of Regional Reliability Criteria adopted by  
32 NPCC.

33 Periodically, NERC and NPCC shall file all proposed amendments and/or additions to the Reliability  
34 Standards adopted by NERC and the Regional Reliability Criteria adopted by NPCC with the NSUARB  
35 for approval.

36 As is contemplated with the initial filing, NSPI will provide the NSUARB with a recommendation with  
37 respect to the Reliability Standards and NPCC Regional Reliability Criteria being proposed.

May 9, 2010

1  
2 **3. Compliance Aspects**

3  
4 **Compliance Accountability in Nova Scotia**

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

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

16  
17 **Investigations**

18 NERC and NPCC, in exercising their respective authority regarding compliance, may investigate alleged  
19 violations in Nova Scotia of Reliability Standards or NPCC Regional Reliability Criteria, as appropriate.

20 In order to promote effective and efficient enforcement of the NERC Reliability Standards and the NPCC  
21 Regional Reliability Criteria, NERC and NPCC will collaborate on, and coordinate their investigations  
22 while preserving their independent determination of the outcome of an investigation. The cooperation  
23 among NERC and NPCC, where applicable, will include the sharing of alleged violations and subsequent  
24 investigative information, the confidentiality of which will be protected according to NERC's and  
25 NPCC's existing policies and procedures.

26  
27 **Reporting Requirements**

28 NSPI will provide NPCC all information respecting reporting requirements contained in the CMEP for  
29 both NERC Reliability Standards and NPCC Regional Reliability Criteria. NSPI will be responsible for  
30 providing information to NPCC regarding its Regional Reliability Criteria, including all information  
31 respecting routine reporting, investigations, and event based disturbance reporting.

32  
33 **NERC Compliance Audits**

34 NSPI will be subject to compliance audits performed by NPCC related to NERC Reliability Standards  
35 and NPCC Regional Reliability Criteria.

36  
37 **NPCC Regional Reliability Criteria Compliance Audit**

38 NSPI will be subject to NPCC Regional Reliability Criteria compliance audits.

May 9, 2010

1  
2 **4. Amendment and Termination of this MOU**  
3

4 This MOU will continue until replaced or amended by the signatories, or terminated on 30 days notice  
5 given by any signatory to the others.  
6

7 **5. Points of Contact**  
8

9 For all purposes related to this MOU, the points of contact shall be as follows:  
10

11 For NERC:

12 David Cook  
13 Vice President & General Counsel  
14 North American Electric Reliability Corporation  
15 116-390 Village Blvd.  
16 Princeton, New Jersey 08540  
17 (609) 4522-8060  
18 [david.cook@nerc.net](mailto:david.cook@nerc.net)  
19

20 For NPCC:

21 Edward A. Schwerdt  
22 President & CEO  
23 Northeast Power Coordinating Council, Inc.  
24 1040 Avenue of the Americas, 10<sup>th</sup> Floor  
25 New York, NY 10018  
26 (212) 840-1070  
27 [eschwerdt@npcc.org](mailto:eschwerdt@npcc.org)  
28

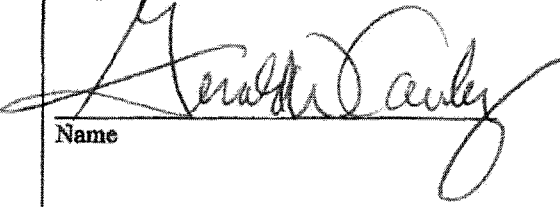
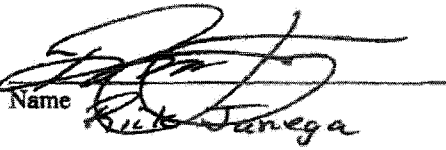
29 For NSPI:

30 Eric Ferguson  
31 Director Regulatory Affairs (Acting)  
32 Nova Scotia Power Incorporated  
33 1894 Barrington St., P.O. Box 910  
34 Halifax, Nova Scotia B3J 2W5  
35 (902) 428-6078  
36 [eric.ferguson@nspower.ca](mailto:eric.ferguson@nspower.ca)  
37  
38

39 These points of contact may be changed at any time by notification to the other signatories.  
40

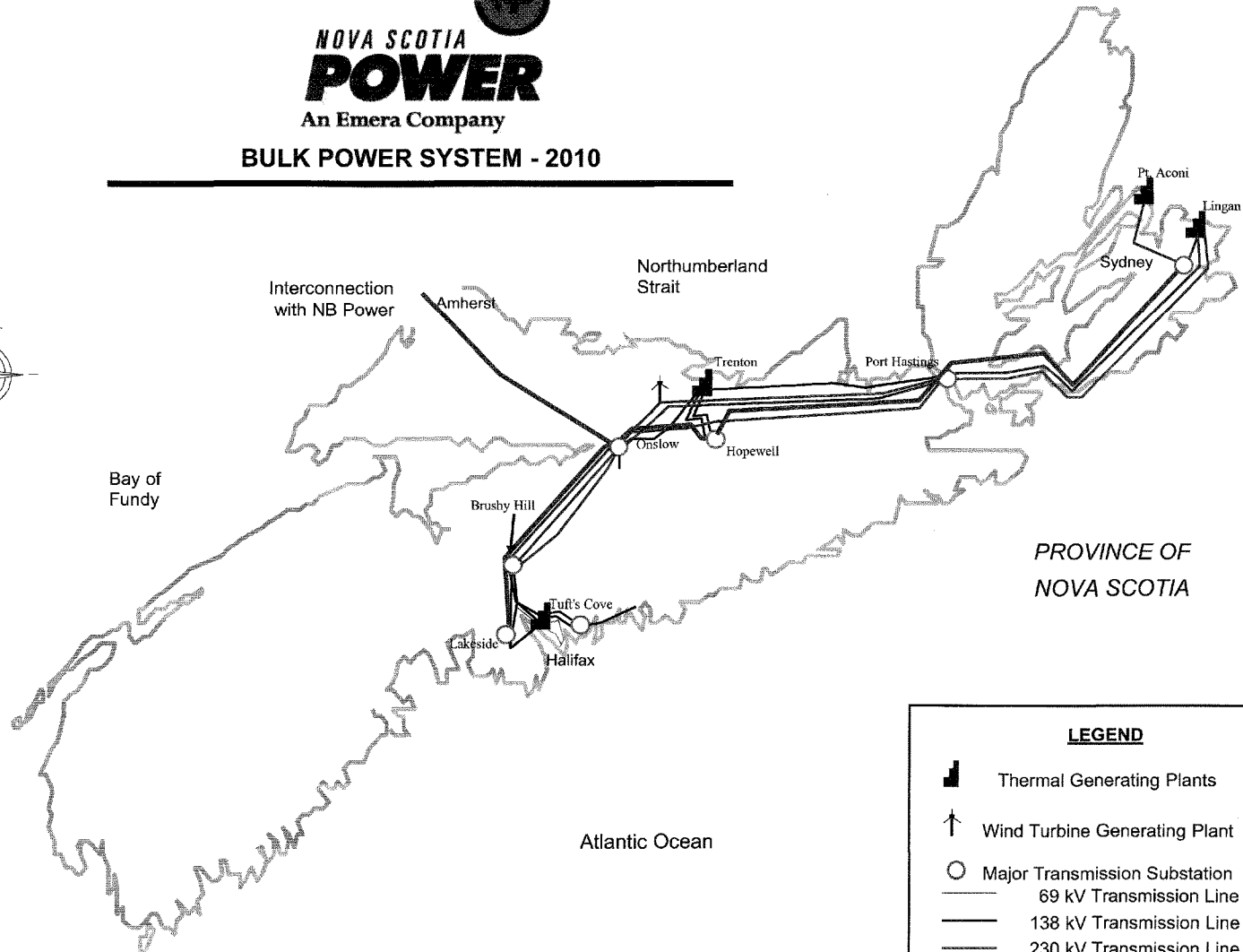
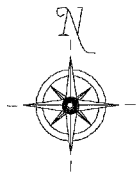
May 9, 2010

7. SignaturesSigned this 11<sup>th</sup> day of May, 2010:

|                                                                                                                                                                                                                                    |                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>North American Electric Reliability Corporation</p> <p></p> <p>Name _____</p> <p>President &amp; CEO</p> <p>Title _____</p>                    | <p>Northeast Power Coordinating Council, Inc.</p> <p></p> <p>Name _____</p> <p>President &amp; CEO</p> <p>Title _____</p> |
| <p>Nova Scotia Power Incorporated</p> <p></p> <p>Name _____</p> <p>Executive Vice-President &amp; Chief Operating Officer</p> <p>Title _____</p> |                                                                                                                                                                                                             |



## BULK POWER SYSTEM - 2010



PROVINCE OF  
NOVA SCOTIA

### LEGEND

- Thermal Generating Plants
- Wind Turbine Generating Plant
- Major Transmission Substation
- 69 kV Transmission Line
- 138 kV Transmission Line
- 230 kV Transmission Line
- 345 kV Transmission Line
- Line routing is not to scale*

Ragged Lake Control Centre  
2010-12-15