

AMENDED AND RESTATED  
MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE INDEPENDENT ELECTRICITY SYSTEM OPERATOR  
AND  
THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION  
AND  
THE NORTHEAST POWER COORDINATING COUNCIL, INC.

This Memorandum of Understanding, dated the 29<sup>th</sup> day of November, 2006 ("MOU") between the Independent Electricity System Operator ("IESO"), the North American Electric Reliability Corporation ("NERC"), and the Northeast Power Coordinating Council, Inc. ("NPCC") is contemplated in, and is entered into further to an application filed with the Ontario Energy Board ("OEB") on April 4, 2006 by the North American Electric Reliability Council, on behalf of its affiliate NERC, for recognition of NERC as the Electric Reliability Organization in Ontario ("ERO"), and to a Memorandum of Understanding between the OEB and NERC, dated the 25<sup>th</sup> day of October, 2006. This MOU sets forth mutual understandings of each of the signatories in relation to NERC's status as the ERO in Ontario and other related matters.

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

Whereas the Parties have agreed to certain amendments to this MOU to reflect, *inter alia*, that the IESO may appeal to the OEB an order, finding or remedial action made or taken by NERC or NPCC, and to restate this MOU with such amendments incorporated herein as of the fifth day of February, 2010 without affecting the effective date of this MOU, references to this MOU shall for all purposes be references to this MOU as amended and restated.

**1. General Matters**

**Interpretation**

References in this MOU to NERC reliability standards include the following:

- reliability standards that are developed and adopted by NERC, as well as amendments to or revisions of NERC reliability standards; and
- regional reliability standards that are developed by NPCC 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 that are developed and adopted by NPCC, which criteria are not subject to review, adoption or approval by NERC, as well as amendments to or revisions of such reliability criteria.

### **Acknowledgement of Status of the IESO**

The IESO is a not-for-profit corporation without share capital having statutory responsibility for developing and administering the wholesale electricity markets and directing the operation and maintaining the reliability of the integrated power system within the province of Ontario. The IESO was established on April 1, 1999 as the Independent Electricity Market Operator under the *Electricity Act, 1998* (Ontario) and was continued under its current name on January 1, 2005.

The IESO's responsibilities include a broad range of integrated operations, including planning, security assessment and scheduling, administration of the wholesale electricity market and ancillary services, and real time coordination of the power system. The IESO's statutory responsibilities include making and enforcing reliability standards, and making and enforcing Ontario market rules that govern the IESO-controlled grid and the wholesale electricity market, subject to regulatory oversight by the OEB. Responsibility for enforcing compliance is carried out by the Market Assessment and Compliance Division ("MACD") that operates at arm's length from other IESO business units and independently exercises the discretion accorded the IESO in the market rules to investigate and sanction both market and reliability based breaches.

The IESO is a member of NERC and NPCC.

It is acknowledged that there is an established reliability and compliance framework within Ontario, and that the IESO commits to carrying out a compliance enforcement program with regard to reliability on Ontario entities.

### **Acknowledgement of Status of NERC**

NERC is a corporation, sponsored by all sectors of the electric utility industry, whose mission is to improve the reliability of the bulk electricity system in North America.

NERC is a "standards authority" within the meaning of the *Electricity Act, 1998* (Ontario).

NERC has delegated certain functions respecting compliance enforcement with reliability standards to NPCC. However, NERC has retained overall accountability for compliance enforcement.

NERC has entered into a Memorandum of Understanding with the OEB that sets forth the mutual understanding of those signatories in relation to NERC's status as the ERO in Ontario.

It is acknowledged that the NERC Rules of Procedure have effect in Ontario subject to compatibility with the established reliability and compliance framework within Ontario.

### **Acknowledgement of Status of NPCC**

NPCC is a not-for-profit corporation in the State of New York having the purpose of enhancing the reliability of the international, interconnected bulk power systems in northeastern North America through the development of regional reliability standards which become effective upon approval by NERC and the applicable ERO governmental authorities, and compliance assessment and enforcement of continent-wide and regional reliability standards pursuant to the execution and implementation of a Regional Delegation Agreement with NERC. Under this MOU, NPCC has certain rights and

responsibilities regarding compliance assessment and enforcement of NERC reliability standards that are applicable to Ontario.

NPCC also has the purpose of promoting the reliable and efficient operation of the international, interconnected bulk power systems in northeastern North America through the establishment of regionally-specific criteria ("regional reliability criteria"), coordination of system planning, design and operations, assessment of reliability and monitoring and enforcement of compliance with such criteria.

NPCC is a "standards authority" within the meaning of the *Electricity Act, 1998* (Ontario).

It is acknowledged that NPCC has established a reliability and compliance framework for Reliability Standards through a Regional Delegation Agreement with NERC and for regionally-specific Reliability Criteria through the *NPCC Amended and Restated Bylaws* which will be utilized, consistent with this MOU, to carry out its responsibilities regarding compliance assessment and enforcement within Ontario.

### **General Commitment**

The signatories are committed to NERC and NPCC being international electric reliability organizations that are effective and that function in general accordance with the "Principles For An Electric Reliability Organization That Can Function On An International Basis" (Bilateral Electric Reliability Oversight Group, August 3, 2005) (the "Bilateral Principles").

## **2. Development and Application of Reliability Standards and Criteria**

### **Development of NERC Reliability Standards and NPCC Regional Reliability Criteria**

The signatories recognize the importance of the involvement of Ontario market participants (as that term is defined in the *Electricity Act, 1998* (Ontario)) and the IESO in the development of NERC reliability standards and NPCC regional reliability criteria. Under the *Electricity Act, 1998* (Ontario), the IESO's statutory objects include, *inter alia*, participating in "the development by any standards authority of standards and criteria relating to the reliability of transmission systems," and "to establish and enforce standards and criteria relating to the reliability of transmission systems."

The IESO will be involved directly in the development of, and will support and facilitate the involvement of Ontario entities in the development of, reliability standards and regional reliability criteria.

### **Application of NERC Reliability Standards**

NERC reliability standards have effect in Ontario under the authority of the Ontario market rules, subject to the provisions of the Ontario market rules and applicable legislation.

### **Application of NPCC Regional Reliability Criteria**

NPCC regional reliability criteria have effect in Ontario under the authority of the Ontario market rules, subject to the provisions of the Ontario market rules and applicable legislation.

### **Application of Ontario-specific Reliability Standards and Criteria**

The IESO has the authority under the Ontario market rules and the *Electricity Act, 1998* (Ontario) to develop and enforce Ontario-specific reliability standards and criteria.

It is the understanding of the signatories that IESO reliability standards and criteria will not be inconsistent with NERC reliability standards and NPCC regional reliability criteria, and will be no less stringent.

### **Notification of Reliability Standards**

NERC shall concurrently notify the IESO when NERC informs the OEB of reliability standards adopted or approved by NERC.

NPCC shall notify the IESO of regional reliability criteria adopted by NPCC.

The IESO will notify other Ontario entities of such standards and criteria in accordance with statutory requirements.

## **3. Compliance Aspects**

### **Compliance Accountability in Ontario**

The IESO will be the sole entity in Ontario accountable to NERC for compliance with NERC reliability standards applicable to Ontario for both the IESO and Ontario market participants. In respect of NERC compliance, the IESO will be subject to NERC's compliance monitoring and enforcement processes in accordance with the terms of this MOU. Accordingly, such compliance monitoring and enforcement will be through NPCC.

The IESO will also be the sole entity in Ontario accountable to NPCC for compliance with NPCC regional reliability criteria applicable to Ontario. In respect of NPCC compliance, the IESO will be subject to NPCC's compliance monitoring and enforcement processes in accordance with the terms of this MOU.

The IESO is also required under the Ontario market rules (and thus also by the terms of its licence issued by the OEB) to comply with applicable reliability standards and criteria.

In respect of all reliability standard requirements, the IESO is also subject to the compliance monitoring and enforcement processes developed and conducted by the IESO, in particular those processes conducted by MACD.

Ontario market participants will continue to be accountable to the IESO for complying with all applicable reliability standards and criteria as required by the Ontario market rules.

It is recognized that the IESO's role in this regard predates the establishment of NERC as the ERO.

Where the IESO has knowledge of, or determined, that an Ontario entity is subject to an agreement that has been accepted, approved or ordered by an Ontario governmental authority, or is otherwise subject to a function, rule, order, tariff, rate schedule, or legislative requirement, which is in conflict with a NERC reliability standard, NPCC regional reliability criterion or remedial action directive of NERC or NPCC, the IESO shall advise NERC and NPCC, as appropriate, of this conflict. Following such notification and pending resolution of the conflict, the IESO and the affected Ontario entity shall continue to follow the agreement, function, rule, order, tariff, rate schedule, or legislative requirement in question. NERC and NPCC, as applicable, will propose a resolution of the conflict, including revision of the reliability standard, regional reliability criterion, or remedial action directive, if appropriate, or a recommendation for revision of the item in conflict with the reliability standard or regional reliability criterion. The IESO will work with the appropriate standards authority to develop a resolution of the conflict. Pending resolution of the conflict, no compliance action shall be taken against the IESO unless otherwise ordered by the Ontario governmental authority.

Because compliance with reliability standards is the common objective of both the NERC/NPCC and the IESO compliance programs, and compliance with NPCC regionally-specific reliability criteria is the common objective of both NPCC and the IESO, it may, from time to time, be appropriate for a party to request to conduct or be subject to a compliance program peer review off/by another party. In addition, NPCC and NERC have the common objective of confirming to the registered entities outside of Ontario the rigor, thoroughness and reliability focus of the IESO compliance program. In the event of such a request, the parties acknowledge the need to agree upon an appropriate scope of such a review, and agree that acceptance of the request will not be unreasonably withheld. In conducting such a peer review, the parties agree and acknowledge that each party may employ a different compliance program, each of which is expected to accomplish the desired result of compliance with reliability standards and criteria. Peer review is not intended to promote a uniform compliance program practice, method or act to the exclusion of all others. Accordingly, any such peer review will acknowledge and detail the specific context, history and content of the compliance program under review. The parties agree that each party will have an opportunity to provide comment on the draft report of any peer review prior to the report being finalized and made public. The party releasing the peer review shall respond to any comments received from the other parties, if any, and shall provide reasons for not accepting any such comments in the peer review prior to releasing it.

### **Investigations**

Each of MACD, NERC, and NPCC, in exercising its respective authority regarding compliance, may investigate alleged violations in Ontario of reliability standards or regional reliability criteria, as appropriate.

In order to promote effective and efficient enforcement of the reliability standards and the regional reliability criteria, the signatories will collaborate on, and coordinate their investigations while preserving each signatory's independent determination of the outcome of an investigation. The cooperation among signatories will include the sharing of alleged violations and subsequent investigative information, the confidentiality of which will be protected according to each signatory's existing policies and procedures.

It is acknowledged that MACD, on request, may lead an investigation on behalf of the signatories.

### **Organization Registration with NERC and NPCC**

Ontario entities other than the IESO are not required to register with NERC or NPCC.

The IESO will notify Ontario entities of their responsibilities to the IESO respecting compliance with NERC reliability standards or NPCC regional reliability criteria. The IESO will base its determination of an Ontario entity's functional responsibility on the NERC reliability functional model. Subject to any applicable confidentiality conditions, the IESO will advise NERC or NPCC of, and endeavor to publicly post, the functional responsibilities of Ontario entities.

### **Certification by NERC**

The IESO will register and apply for certification by NPCC (including as necessary certification of staff) as specified in NERC Rules of Procedure or NERC reliability standards.

In the event a signatory determines that certification may be appropriate respecting functions conducted in Ontario by entities other than the IESO, the determining party will so notify the other signatories. The signatories will seek a resolution that meets NERC's requirements and respects the compliance framework within Ontario.

### **Reporting Requirements**

The signatories acknowledge that unless otherwise agreed the IESO, on behalf of Ontario, will provide NERC and NPCC all information respecting reporting requirements contained in the NERC reliability standards and NPCC regional reliability criteria, including all information respecting routine reporting, investigations, and event based disturbance reporting. If NERC or NPCC wishes to directly obtain information from an Ontario entity other than the IESO, it will notify and discuss its request with the IESO. The applicable signatories will seek a resolution that meets NERC and NPCC requirements and respects the compliance framework within Ontario.

### **Provision of Data Pursuant to a Request by an ERO Governmental Authority**

In any proposed or authorized request for data, pursuant to which NERC is seeking data solely to satisfy a request or order from an ERO governmental authority, NERC shall either: (1) limit the entities required to comply with the request for data to those entities over which the authority has jurisdiction; or (2) include in the request for data a statement indicating that provision of the requested data is voluntary for entities outside the jurisdiction of the applicable authority.

### **NERC Assessments of Compliance**

The IESO will be subject to NERC assessments of compliance with reliability standards, including audits, performed by NPCC.

In the event a signatory determines that a NERC compliance assessment may be appropriate for an Ontario entity other than the IESO, the determining party will notify the

other signatories. The signatories will seek a resolution that meets NERC's requirements and respects the compliance framework within Ontario.

### **NPCC Assessments of Compliance**

The IESO will be subject to NPCC assessments of compliance, including audits, respecting regional reliability criteria.

In the event the IESO or NPCC determines that an NPCC compliance assessment may be appropriate for an Ontario entity other than the IESO, the determining party will notify the other. The IESO and NPCC will seek a resolution that meets NPCC's requirements and respects the compliance framework within Ontario.

### **Rights of Compliance Hearing and Appeal**

The IESO, as the sole Ontario entity accountable to NERC for compliance with NERC reliability standards, and being subject to NERC's standards compliance monitoring and enforcement processes, will have a right of compliance hearing with NPCC and subsequent appeal with NERC, on behalf of Ontario, from a finding by NPCC of a violation of a NERC reliability standard or from the associated assessment of sanctions.

Similarly, the IESO, as the sole Ontario entity accountable to NPCC for compliance with NPCC regional reliability criteria, and being subject to NPCC's criteria compliance monitoring and enforcement processes, will have a right of hearing and appeal with NPCC, on behalf of Ontario, from a finding by NPCC of violations of a NPCC regional reliability criterion or from the associated assessment of sanctions.

Under the *Electricity Act, 1998* (Ontario), the IESO may appeal to the OEB an order, finding or remedial action made or taken by NERC or NPCC, if the IESO has commenced all other reviews and appeals available to it and such reviews and appeals have been finally determined. The OEB may stay the operation of an order, finding or remedial action made or taken by NERC or NPCC pending the OEB's determination of the appeal. The OEB, after considering the appeal, may make an order dismissing the appeal, or revoking or amending the order, finding or decision, or take any other remedial action that NERC or NPCC could have taken.

Ontario market participants have certain rights of appeal to the OEB regarding a determination of violation by MACD.

### **Disclosure of Violations of NERC Reliability Standards in Ontario**

Public disclosure by NERC or NPCC will be restricted to confirmed violations arising from NPCC's compliance monitoring and assessment process following all applicable appeals, and only the IESO shall be named.

Public disclosure in Ontario will be made in accordance with the practice of the IESO or of the OEB, as applicable. In the case of a confirmed violation made under the authority of the Ontario market rules, the name of the responsible entity is made public and provided to NPCC and NERC.

### **Disclosure of Violations of NPCC Regional Reliability Criteria in Ontario**

Public disclosure by NPCC will be restricted to confirmed violations arising from NPCC's compliance monitoring and assessment process following all applicable appeals, and only the IESO shall be named.

Public disclosure in Ontario will be made in accordance with the practice of the IESO or of the OEB, as applicable. In the case of a confirmed violation made under the authority of the Ontario market rules, the name of the responsible entity is made public and provided to NPCC.

### **Sanctions for Violations**

Ontario market participants and the IESO must comply with applicable NERC reliability standards and NPCC regional reliability criteria, as part of their market rule obligations, and thereby, licence conditions.

The signatories acknowledge that NERC and NPCC will not impose financial penalties on the IESO for violations within Ontario of NERC reliability standards or NPCC regional reliability criteria. NPCC, in its determination of a violation within Ontario, will identify the specific NERC reliability standard breached, identify the Violation Risk Factor (VRF) and Violation Severity Level (VSL) associated with this particular NERC reliability standard. NPCC in its determination of a violation within Ontario may identify the specific NPCC regional reliability criterion breached as well as the measure and level of non-compliance. Following the determination of a violation within Ontario, NERC or NPCC may issue a formal notification of the violation to the IESO Board of Directors, require additional compliance reporting, require the development of a mitigation plan by the IESO and/or subject the IESO to additional auditing. Because NERC and NPCC have no authority to impose financial penalties on Ontario entities, NERC and NPCC will not assess, nor will they disclose, the financial penalty that they would otherwise have recommended as applicable for the violation. MACD may request NERC or NPCC to determine what financial penalty they would have imposed and to provide it directly to MACD only, for the purposes of assisting in its own assessment.

MACD has the authority to impose financial penalties on Ontario entities including the IESO for non-compliance with the Ontario market rules, which includes non-compliance with NERC reliability standards and NPCC regional reliability criteria, in accordance with the provisions of the Ontario market rules. Additionally, the OEB has the authority to impose administrative penalties for violation of licence conditions in accordance with and subject to the limitations in and under the *Ontario Energy Board Act, 1998* (Ontario).

### **Remedial Action Directives**

The IESO will be subject to remedial action directives of NPCC or NERC to correct non-compliance with NERC reliability standards where non-compliance materially reduces or threatens the reliability of the bulk power system.

#### **4. Funding of NERC and NPCC**

The signatories acknowledge the intention that all or substantially all of the payments to NERC and NPCC respecting Ontario's share of the costs associated with reliability

standards and reliability criteria development and enforcement processes be made by the IESO.

NERC and NPCC will work with the IESO to establish Ontario's share of those costs through the applicable budget processes.

The signatories acknowledge that the IESO's annual proposed expenditures and revenue requirements are subject to review and approval by the OEB through a public process, and that there is no guarantee that any given expenditure or element of the IESO's revenue requirement will be approved in any given year.

**5. Amendment and Termination of this MOU**

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

6. **Points of Contact**

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

For NERC:

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

For NPCC

Edward A. Schwerdt  
President & CEO  
Northeast Power Coordinating Council, Inc.  
1040 Avenue of the Americas (6<sup>th</sup> Ave.) 10<sup>th</sup> Floor  
New York, NY 10018-3703  
(212) 840-1070  
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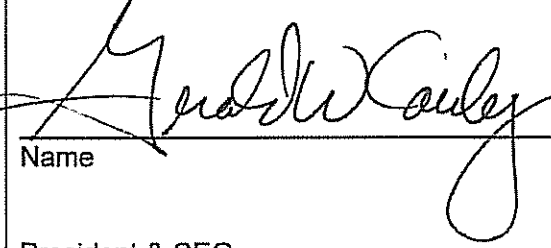

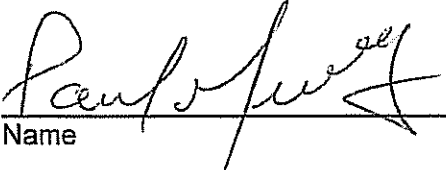
For IESO:

R. D. Roy Stewart  
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These points of contact may be changed at any time by notification to the other signatories.

7. Signatures

Signed this fifth day of February, 2010:

|   |   |
|---|---|
| <p>North American Electric Reliability Corporation</p> <p></p> <p>_____<br/>Name</p> <p>President &amp; CEO</p> <p>_____<br/>Title</p> | <p>Northeast Power Coordinating Council, Inc.</p> <p></p> <p>_____<br/>Name</p> <p>President &amp; CEO</p> <p>_____<br/>Title</p> |
|   | <p>Independent Electricity System Operator</p> <p></p> <p>_____<br/>Name</p> <p>President &amp; CEO</p> <p>_____<br/>Title</p>  |

