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BY NEB ELECTRONIC DOCUMENT SUBMISSION

March 6, 2013

Secretary of the Board
National Energy Board of Canada
444 Seventh Avenue SW
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Hydro One Networks Inc. Declaration of Reliability Standards Applicable to International Power Lines and Request for an Exemption from Compliance with Certain Reliability Standards under the National Energy Board General Order MO-036-2012, Amending Order AO-004-EPE-113 and Amending Order AO-005-EPE-59

Hydro One Networks Inc. ("Hydro One") supports the adoption by the National Energy Board ("NEB" or the "Board") of reliability standards that provide for safe and reliable operation of International Power Liness ("IPLs"). Further, Hydro One continues to operate and maintain its facilities that are covered by NEB certificates and permits to the current reliability standards as defined by the North American Electric Reliability Corporation ("NERC"), Northeast Power Coordinating Council ("NPCC") and Ontario's Independent Electricity System Operator ("IESO").

As required by section 6 of the NEB General Order MO-036-2012, Amending Order AO-004-EPE-113 and Amending Order AO-005-EPE-59 (collectively "the Reliability Standards Orders"), issued by the NEB on December 6, 2012, Hydro One is submitting a declaration pertaining to its recordkeeping with respect to reliability standards currently applicable to IPLs. In addition, pursuant to section 4 of the Reliability Standards Orders, Hydro One is requesting the Board to exempt Hydro One from compliance with certain reliability standards under the Reliability Standards Orders.

Sincerely,

ORIGINAL SIGNED BY ODED HUBERT

Oded Hubert

C: Brian Rivard, Manager, Regulatory Affairs and Sector Policy Analysis, Independent Electricity System Operator

1. Introduction

Hydro One Networks Inc.'s ("**Hydro One**") transmission system operates at 500 kV, 230 kV and 115 kV. Our transmission system forms an integrated transmission grid that can be divided into two components based on function. The integrated network, or bulk system, operates primarily at 500 kV or 230 kV over relatively long distances and links major areas of generation to transmission stations and larger area load centres. The area supply system operates at 230 kV or 115 kV and links the bulk system to local generators and loads, such as local distribution companies, industrial customers and our own retail distribution operations. Our transmission system is interconnected with the North American eastern system that is comprised of virtually all of the electric utilities east of the Continental Divide. Hydro One owns and operates 12 international power lines ("**IPL**") at 345 kV, 230 kV, 115 kV and 69 kV[i] levels with New York (7), Michigan (4) and Minnesota (1).

The Ontario Energy Board (the "**OEB**") is the principal regulator of the Province of Ontario's electricity industry. It is an independent adjudicative tribunal that regulates Ontario's electricity sector in the public interest, and ensures an adequate level of consumer protection in the energy market. The OEB licenses all participants in the electricity sector, including the Independent Electricity System Operator (the "**IESO**"), generators, transmitters (including Hydro One Networks Inc.), distributors, wholesalers and retailers. The OEB's mandate and authority primarily comes from the *Ontario Energy Board Act, 1998*, S.O. 1998, Chapter 15, Schedule B (the "**OEB Act**"), the *Electricity Act, 1998*, S.O. 1998, Chapter 15, Schedule B (the "**Electricity Act**").

The IESO is the system controller of the Ontario electricity system. Pursuant to Section 5 of the Electricity Act, the objects of the IESO include, entering into agreements with transmitters giving the IESO authority to direct the operation of their transmission systems, directing the operation and maintaining the reliability of the IESO-Controlled Grid[ii] and the participation in the development by any standard authority of standards and criteria relating to the reliability of transmission systems. Pursuant to Section 32 of the Electricity Act, the IESO may make rules governing the IESO-controlled Grid and rules establishing and enforcing standards and criteria relating to the reliability of electricity service or the IESO-controlled Grid. The rules made by the IESO pursuant to Section 32 of the Electricity Act are known as the Market Rules[iii].

By virtue of Section 57 of the OEB Act, the IESO requires a licence from the OEB to direct the operation of transmission systems in the Province of Ontario and Hydro One requires a transmission licence to transmit electricity in the Province of Ontario. Pursuant to the terms of the transmission licence issued to Hydro One, Hydro One is obligated to comply with all applicable Market Rules and is also required to enter into an agreement, an Operating Agreement, with the IESO providing for the direction of the IESO of the operation of Hydro One's transmission system[iv].

The OEB has recognized the North American Reliability Corporation ("**NERC**") as the Electric Reliability Organization ("**ERO**"). The OEB and NERC signed a Memorandum of Understanding ("**MOU**") to that effect in October, 2006. In November 2006, a MOU was made among the IESO, NERC and the Northeast Power Coordinating Council ("**NPCC**"), assigning the IESO the role of being the sole entity in the Province of Ontario in charge of NERC Standards Compliance.

Table 1 below contains a list of National Energy Board ("**NEB**" or the "**Board**") Certificates and Permits included in General Order MO-036-2012, Amending Order AO-004-EPE-113 and Amending Order AO-005-EPE-59 (collectively, the "**Reliability Standards Orders**"), issued by the NEB on December 6, 2012.

Table 1 - NEB Certificates and Permits listed in the Reliability Standards Orders

Province	Owner/Operator	Certificate/Permit No.	Line Parameters (kV)
Ontario	Hydro One Networks Inc.	EC-III-6	345
Ontario	Hydro One Networks Inc.	EC-III-13	345
Ontario	Hydro One Networks Inc.	EC-III-20	230
Ontario	Hydro One Networks Inc.	EC-18	230
Ontario	Hydro One Networks Inc.	EC-11	230
Ontario	Hydro One Networks Inc.	EC-13	230
Ontario	Hydro One Networks Inc.	EC-12	230
Ontario	Hydro One Networks Inc.	EC-16	230
Ontario	Hydro One Networks Inc.	EC-14	69
Ontario	Hydro One Networks Inc.	EC-15	69
Ontario	Hydro One Networks Inc.	EC-17	115
Ontario	Hydro One Networks Inc.	EC-17	69
Ontario	Hydro One Networks Inc.	EPE-59	115
Ontario	Hydro One Networks Inc.	EPE-113	115

Hydro One has registered with NERC as Transmission Owner ("**TO**"), Transmission Operator ("**TOP**"), Transmission Planner ("**TP**"), Load Serving Entity ("**LSE**") and Distribution Provider ("**DP**"). Note that, as both of the IESO and Hydro One are registered as TOP and TP, they share compliance responsibilities for certain standards within the reliability standards and compliance framework in the Province of Ontario.

2. Declaration

Hydro One is obligated under its transmission licence to comply with the Market Rules. Pursuant to Chapter 5 (Power System Reliability) of the Market Rules, Hydro One is required to carry out its obligations under this chapter in accordance with all applicable reliability standards[v]. As such, Hydro One is required to comply with the reliability standards established by NERC and NPCC. Unless the OEB initiates a review, NERC standards are in force in Ontario when the reliability standards are declared in force in the United States (as opposed to when they are established, developed or adopted by NERC) or, for NPCC reliability criteria, when declared in force by NPCC. Hydro One therefore complies with all standards and obligations on the date that they become enforceable in the US, subject to the necessary approvals[vi] and any implementation plans issued by standards authorities with respect to those standards and obligations.

In accordance with Section 6 of the Reliability Standards Orders, Hydro One is declaring in Table 2 (attached to this document) its adherence to the mandatory NERC and NPCC reliability standards, subject to the exemptions requested below (in section 3 of this document).

The Applicability of mandatory reliability standards with respect to Hydro One's IPLs is as listed in Table 2. Where a "Yes" appears in Column 1 of Table 2, it means that the particular reliability standard applies to Hydro One's IPLs and either Hydro One or the IESO, or both are obligated to comply with it and where a "No" appears in Column 1 of Table 2, it means that the particular reliability standard does not apply to Hydro One's IPLs.

3. Exemptions

Pursuant to Section 4(1) of each of the following Orders for Electricity Reliability Standards issued by the National Energy Board (the "**Board**") on December 6, 2012: Order MO-036-2012, Amending Order AO-005-EPE59 and Amending Order AO-004-EPE-113 (collectively, the "**Reliability Standards Orders")**, the Board may exempt holders of a certificate or a permit from compliance with a reliability standard or any other related obligation under those Reliability Standards Orders if the Board is satisfied that:

(a) the reliability standard or any related obligation does not properly apply to the international power line for which the certificate or permit was issued;

(b) An entity, other than the holder of a certificate or a permit, is responsible under the laws of a province for operating or maintaining the international power line for which the certificate or permit was issued in compliance with that reliability standard or obligation instead of the holder of the certificate or permit.

Hydro One therefore requests that the Board exempt Hydro One from compliance with the obligations under the Reliability Standards Orders that pertain to any reliability standard or any other related obligation listed below under sections 3.1 through 3.6 (Exemption Type A to F):

Under Section 4(1)a, Hydro One seeks exemptions for standards that do not apply to IPLs owned by Hydro One and operated in the Province of Ontario:

3.1 Exemption Type A: Standards that do not apply to IPLs

It is Hydro One's assessment, that the owner of an IPL would, generally be expected to be accountable for the standards and obligations that arise directly from the ownership of that asset. These standards and obligations generally correspond to those that are assigned, under the NERC functional model, to Transmission Owners and Transmission Operators. Compliance with those standards and obligations that do not relate solely to the ownership, operation and maintenance of those assets, but rather to the operation of those assets as part of an integrated power system, do not pertain to the IPL itself.

This group (Type A) includes reliability standards that do not properly apply to the IPLs owned and operated by Hydro One under its Board issued certificate and permits. They address system wide considerations such as load balancing, frequency response, time error correction, dispatch, resource management and coordination, among others, and/or they have been assigned, in the Province of Ontario, to other entities than TO and TOP. As such, Hydro One seeks exemptions from compliance with the following thirty-two standards:

1	BAL-001-0.1a	Real Power Balancing Control Performance
2	BAL-002-1	Disturbance Control Performance
3	BAL-003-0.1b	Frequency Response and Bias
4	BAL-004-0	Time Error Correction
5	BAL-006-2	Inadvertent Interchange
6	EOP-002-3.1	Capacity and Energy Emergencies
7	EOP-003-1	Load Shedding Plans
8	EOP-006-1	Reliability Coordination – System Restoration
9	EOP-009-0	Documentation of Blackstart Generating Unit Test Results
10	FAC-013-1	Establish and Communicate Transfer Capabilities
11	IRO-002-2	Reliability Coordination – Facilities
12	INT-003-2	Reliability Coordination – Wide-Area View
13	IRO-008-1	Reliability Coordinator Operational Analyses and Real-time Assessments
14	IRO-009-1	Reliability Coordinator Actions to Operate within IROLs
15	IRO-010-1a	Reliability Coordinator Data Specification and Collection
16	IRO-014-1	Procedures, Processes, or Plans to Support Coordination between Reliability Coordinators
17	IRO-015-1	Notifications and Information Exchange between Reliability Coordinators

18	IRO-016-1	Coordination of Real-time Activities between Reliability Coordinators
19	MOD-016-1.1	Documentation of Data Reporting Requirements for Actual and Forecast Demands, Net Energy for Load, and Controllable Demand-Side Management
20	MOD-017-0.1	Aggregated Actual and Forecast Demands and Net Energy for Load
21	MOD-018-0	Treatment of Non-member Demand Data and How Uncertainties are Addressed in the Forecasts of Demand and Net Energy for Load
22	MOD-019-0.1	Reporting of Interruptible Demands and Direct Control Load Management
23	MOD-020-0	Providing Interruptible Demands and Direct Control Load Management Data to System Operators and Reliability Coordinators
24	MOD-021-1	Documentation of the Accounting Methodology for the effects of Demand-Side Management in Demand and Energy Forecasts
25	NUC-001-2	Nuclear Plant Interface Coordination
26	PER-004-2	Reliability Coordination – Staffing
27	VAR-002-1.1b	Generator Operation for Maintaining Network Voltage Schedules
28	NPCC Directory # 5	Reserve
29	NPCC Directory # 9	Verification of Generator Gross and Net Real Power Capability
30	NPCC Directory # 10	Verification of Generator Gross and Net Reactive Power Capability
31	NPCC Criteria A-01	Criteria for Review and Approval of Documents
32	NPCC Criteria A-10	Classification of Bulk Power System Elements

Note: All standards included in the table above are a reference to a NERC standard unless indicated otherwise.

3.2 Exemption Type B: Standards that would generally apply to IPLs but are not in use under the Ontario market design

This group comprises reliability standards that would in general apply to IPLs, though not necessarily to Hydro One's functional registration but, given the Province of Ontario market design characteristics, are not currently in use. As such, Hydro One seeks exemptions from compliance with those standards and obligations given this reason. These fifteen standards are:

1	INT-001-3	Interchange Information
2	INT-003-3	Interchange Transaction Implementation
3	INT-004-2	Dynamic Interchange Transaction Modifications
4	INT-005-3	Interchange Authority Distributes Arranged Interchange
5	INT-006-3	Response to Interchange Authority
6	INT-007-1	Interchange Confirmation
7	INT-008-3	Interchange Authority Distributes Status

8	INT-009-1	Implementation of Interchange
9	INT-010-1	Interchange Coordination Exemptions
10	IRO-006-5	Reliability Coordination – Transmission Loading Relief (TLR)
11	IRO-6-EAST-1	Transmission Loading Relief Procedure for Eastern Interconnection
12	MOD-004-1	Capacity Benefit Margin
13	MOD-028-1	Area Interchange Methodology
14	MOD-030-2	Flowgate Methodology
15	NPCC Directory # 6	Reserve Sharing Groups

Note: All standards included in the table above are a reference to a NERC standard unless indicated otherwise.

3.3 Exemption Type C: Standards that would generally apply to IPLs but do not apply in the Province of Ontario for technical reasons

This group comprises reliability standards that address specific technical facilities and equipment that, depending on their location, could impact IPLs. However, their use in the Ontario system is not intended to affect (or be affected by) the operation of IPLs. These standards typically address Under-frequency and Under-voltage Load shedding schemes. Under-frequency Load Shedding in Ontario is used at facilities that supply specific loads in the system. Under-voltage Load Shedding schemes are used only for local purposes that are not part of the Bulk Electric System. Hydro One seeks exemption from compliance with the following eleven standards:

1	PRC-007-0	Assuring Consistency of Entity Underfrequency Load Shedding Programs with Regional Reliability Organization's Underfrequency Load Shedding Program Requirements
2	PRC-008-0	Implementation and Documentation of Underfrequency Load Shedding Equipment Maintenance Program
3	PRC-009-0	Analysis and Documentation of Underfrequency Load Shedding Performance Following an Underfrequency Event
4	PRC-010-0	Technical Assessment of the Design and Effectiveness of Undervoltage Load Shedding Program
5	PRC-011-0	Undervoltage Load Shedding System Maintenance and Testing
6	PRC-015-0	Special Protection System Data and Documentation
7	PRC-016-0.1	Special Protection System Misoperations
8	PRC-017-0	Special Protection System Maintenance and Testing
9	PRC-021-1	Under-Voltage Load Shedding Program Data
10	PRC-022-1	Under-Voltage Load Shedding Program Performance
11	NPCC Directory # 7	Special Protection Systems

Note: All standards included in the table above are a reference to a NERC standard unless indicated otherwise.

3.4 Exemption Type F: 69 kV IPLs

NERC and NPCC Reliability Standards currently do not apply to 69 kV IPLs. They also will not apply under the new Bulk Electric System ("BES") definition unless they are

deemed to be part of the BES through the exception process. As such, Hydro One requests that the Board exempt Hydro One, as the IPL owner, from compliance with the obligations under the Reliability Standards Orders for its three 69 kV IPLs (Certificate No. EC-14, EC-15 and EC-17).

Under Section 4(1)b, Hydro One seeks exemptions for standards that do apply to IPLs but where Hydro One does not have sole responsibility for compliance:

Table 2 indicates, for those standards and obligations that in Hydro One's assessment apply to IPLs, whether

- that reliability standard or obligation is solely the responsibility of Hydro One (the IPL Owner),
- solely the responsibility of the IESO or,
- includes responsibilities assigned to Hydro One and the IESO (where the requirements under that standard are allocated between the two entities, and no single entity has sole accountability for compliance with the entire standard or obligation).

As such Hydro One maintains that, even for some standards that do apply to IPLs, Hydro One as the holder of the certificate / permit for the IPL cannot comply with that standard or obligation, because it has not been assigned the corresponding accountabilities within the reliability standards and compliance framework in the Province of Ontario. Hence, those standards and obligations are outside of Hydro One's authority. Hydro One therefore seeks exemptions from compliance with all standards and obligations in the table below denoting standards and obligations that fall outside of its authority because another entity is accountable for compliance with them.

3.5. Exemption Type D: Standards that apply to IPLs but compliance obligations for TOP and/or TP functions are fully assigned to the IESO

As indicated above, both Hydro One and the IESO are registered with NERC as TOP and TP, with each having each specific compliance roles and responsibilities with the applicable reliability standards. Within the reliability standards and compliance framework in the Province of Ontario, the IESO has full designated TOP/TP compliance responsibility for the following ten standards:

1	BAL-005-0.2b	Automatic Generation Control
2	FAC-010-2.1	System Operating Limits Methodology for the Planning Horizon
3	FAC-011-2	System Operating Limits Methodology for the Operations Horizon
4	FAC-014-2	Establish and Communicate System Operating Limits
5	MOD-001-1a	Available Transmission System Capability

6	MOD-008-1	Transmission Reliability Margin Calculation Methodology
7	MOD-029-1a	Rated System Path Methodology
8	TOP-004-2	Transmission Operations
9	TOP-005-2a	Operational Reliability Information
10	TOP-007-0	Reporting System Operating Limit (SOL) and Interconnection Reliability Operating Limit (IROL) Violations

3.6. Exemption Type E: Standards that apply to IPLs and compliance obligations for TOP and/or TP functions are shared between Hydro One and the IESO.

As indicated above, both Hydro One and the IESO are each registered with NERC as TOP and TP, having each specific compliance roles and responsibilities with the applicable reliability standards. Within the Ontario reliability standards framework, compliance responsibility with the following standards is shared among Hydro One and the IESO. Hydro One seeks an exemption from compliance with the portions of the following nineteen standards below that, within the Reliability Standards framework in the Province of Ontario, compliance obligations reside solely with the IESO:

1	COM-001-1.1	Telecommunications
2	COM-002-2	Communications and Coordination
3	EOP-001-0.1b	Emergency Operations Planning
4	EOP-004-1	Disturbance Reporting
5	EOP-005-1	System Restoration Plans
6	EOP-008-0	Plans for Loss of Control Centre Functionality
7	TOP-001-1a	Reliability Responsibilities and Authorities
8	TOP-002-2.1b	Normal Operations Planning
9	TOP-003-1	Planned Outage Coordination
10	TOP-006-2	Monitoring System Conditions
11	TOP-008-1	Response to Transmission Limit Violations
12	TPL-001-0.1	System Performance Under Normal (No Contingency) Conditions (Category A)
13	TPL-002-0b	System Performance Following Loss of a Single Bulk Electric System Element (Category B)
14	TPL-003-0a	System Performance Following Loss of Two or More Bulk Electric System Elements (Category C)
15	TPL-004-0	System Performance Following Extreme Events Resulting in the Loss of Two or More Bulk Electric System Elements (Category D)
16	VAR-001-2	Voltage and Reactive Control
17	NPCC Directory # 1	Design and Operation of the Bulk Power System
18	NPCC Directory # 2	Emergency Operations
19	NPCC Directory # 8	System Restoration

Note: All standards included in the table above are a reference to a NERC standard unless indicated otherwise.

Hydro One therefore seeks, as part of this submission, exemption from compliance with 87 standards and obligations corresponding to sections 4(1)(a) and 4(1)(b) of the Reliability Standards Orders. In addition, Hydro One requests exemptions from compliance with the obligations under the Reliability Standards Orders for its three 69 kV IPLs (Certificate No. EC-14, EC-15 and EC-17).

4. Reporting

Hydro One supports the adoption of reliability standards that provide for safe and reliable operation of IPLs. Further, Hydro One continues to operate and maintain its facilities that are covered by the NEB certificates and permits to the current reliability standards as defined by NERC, NPCC and the IESO. Hydro One has also taken many steps over the years to create and maintain a culture of compliance in order to place an emphasis on reliability excellence.

Hydro One's policy and practice is to report all known instances of non-compliance with reliability requirements to the IESO, and in accordance with Section 10 of the Reliability Standards Orders, Hydro One intends to report any such instances, where the non-compliance applies to IPLs, to the NEB as well.

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[i] 69 kV IPLs - Please see section 3.4 of this document for more information.

[ii] The IESO-controlled Grid means the transmission systems which, pursuant to agreements, the IESO has the authority to direct (see Section 2 of the *Electricity Act*).

[iii] The Market Rules are publicly available on the IESO website (at www.ieso.ca/imoweb/manuals/marketdocs.asp).

[iv] Sections 4.2 and 6.1 of the Transmission Licence ET-2003-0035 issued to Hydro One by the OEB on December 3, 2003 which is valid until December 2, 2023. The Transmission Licence is publicly available on the OEB website (ww.ontarioenergyboard.ca).

[v] See Section 3.4.2 of Chapter 5 of the Market Rules and definitions of "reliability standards" and "standards authority" in Chapter 11 of the Market Rules..

[vi] See Sections 1.2.6, 1.2.6.1, 1.2.6.2 and 1.2.7 of Chapter 5 of the Market Rules.

Table 2 - Applicability of Mandatory Reliability Standards (as of March 1, 2013) to International Power Lines

Std. Group	Std. Number	Standard Document Title	COLUMN 1 - Applicable to Hydro One' s IPLs	Exclusion Category	Comment	Responsible Entity for TOP compliance wrt IPLs
NERC Standards						
BAL	BAL-001-0.1a	Real Power Balancing Control Performance	No	A		
	BAL-002-1	Disturbance Control Performance	No	A		
	BAL-003-0.1b	Frequency Response and Bias	No	A		
	BAL-004-0	Time Error Correction	No	A		
	BAL-005-0.2b	Automatic Generation Control	Yes	D	Full compliance responsibility with TOP requirements lies with the IESO	IESO
	BAL-006-2	Inadvertent Interchange	No	A		
CIP	CIP-001-2a	Sabotage Reporting	Yes		The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	CIP-002-3	Cyber Security - Critical Cyber Asset Identification	Yes		The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	CIP-003-3	Cyber Security - Security Management Controls	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	CIP-004-3	Cyber Security - Personnel & Training	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	CIP-005-3a	Cyber Security — Electronic Security Perimeter(s)	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	CIP-006-3c	Cyber Security — Physical Security of Critical Cyber Assets	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	CIP-007-3	Cyber Security - Systems Security Management	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	CIP-008-3	Cyber Security - Incident Reporting and Response Planning	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	CIP-009-3	Cyber Security - Recovery Plans for Critical Cyber Assets	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One

Table 2 - Applicability of Mandatory Reliability Standards (as of March 1, 2013) to International Power Lines

Std. Group	Std. Number	Standard Document Title	COLUMN 1 - Applicable to Hydro One' s IPLs	Exclusion Category	Comment	Responsible Entity for TOP compliance wrt IPLs
COM	COM-001-1.1	Telecommunications	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	COM-002-2	Communications and Coordination	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
EOP	EOP-001-0.1b	Emergency Operations Planning	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	EOP-002-3.1	Capacity and Energy Emergencies	No	A		
	EOP-003-1	Load Shedding Plans	No	A		
	EOP-004-1	Disturbance Reporting	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	EOP-005-1	System Restoration Plans	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	EOP-006-1	Reliability Coordination - System Restoration	No	A		
	EOP-008-0	Plans for Loss of Control Center Functionality	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	EOP-009-0	Documentation of Blackstart Generating Unit Test Results	No	A		

Table 2 - Applicability of Mandatory Reliability Standards (as of March 1, 2013) to International Power Lines

Std. Group	Std. Number	Standard Document Title	COLUMN 1 - Applicable to Hydro One' s IPLs	Exclusion Category	Comment	Responsible Entity for TOP compliance wrt IPLs
FAC	FAC-001-0	Facility Connection Requirements	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	FAC-002-1	Coordination of Plans For New Generation, Transmission, and End-User Facilities	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	FAC-003-1	Transmission Vegetation Management Program	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	FAC-008-3	Facility Ratings	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	FAC-010-2.1	System Operating Limits Methodology for the Planning Horizon	Yes	D	Full compliance responsibility with TOP requirements lies with the IESO	IESO
	FAC-011-2	System Operating Limits Methodology for the Operations Horizon	Yes	D	Full compliance responsibility with TOP requirements lies with the IESO	IESO
	FAC-013-1	Establish and Communicate Transfer Capabilities	No	A		
	FAC-014-2	Establish and Communicate System Operating Limits	Yes	D	Full compliance responsibility with TOP requirements lies with the IESO	IESO

Table 2 - Applicability of Mandatory Reliability Standards (as of March 1, 2013) to International Power Lines

Std. Group	Std. Number	Standard Document Title	COLUMN 1 - Applicable to Hydro One' s IPLs	Exclusion Category	Comment	Responsible Entity for TOP compliance wrt IPLs
INT	INT-001-3	Interchange Information	No	B		
	INT-003-3	Interchange Transaction Implementation	No	B		
	INT-004-2	Dynamic Interchange Transaction Modifications	No	B		
	INT-005-3	Interchange Authority Distributes Arranged Interchange	No	B		
	INT-006-3	Response to Interchange Authority	No	B		
	INT-007-1	Interchange Confirmation	No	B		
	INT-008-3	Interchange Authority Distributes Status	No	B		
	INT-009-1	Implementation of Interchange	No	B		
	INT-010-1	Interchange Coordination Exemptions	No	B		

Table 2 - Applicability of Mandatory Reliability Standards (as of March 1, 2013) to International Power Lines

Std. Group	Std. Number	Standard Document Title	COLUMN 1 - Applicable to Hydro One' s IPLs	Exclusion Category	Comment	Responsible Entity for TOP compliance wrt IPLs
IRO	IRO-001-1.1	Reliability Coordination - Responsibilities and Authorities	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	IRO-002-2	Reliability Coordination - Facilities	No	A		
	IRO-003-2	Reliability Coordination - Wide-Area View	No	A		
	IRO-004-2	Reliability Coordination - Operations Planning	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	IRO-005-3.1a	Reliability Coordination — Current Day Operations	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	IRO-006-5	Reliability Coordination - Transmission Loading Relief (TLR)	No	B		
	IRO-006-EAST-1	Transmission Loading Relief Procedure for the Eastern Interconnection	No	B		
	IRO-008-1	Reliability Coordinator Operational Analyses and Real-time Assessments	No	A		
	IRO-009-1	Reliability Coordinator Actions to Operate Within IROLs	No	A		
	IRO-010-1a	Reliability Coordinator Data Specification and Collection	No	A		
	IRO-014-1	Procedures, Processes, or Plans to Support Coordination Between Reliability Coordinators	No	A		
	IRO-015-1	Notifications and Information Exchange Between Reliability Coordinators	No	A		
	IRO-016-1	Coordination of Real-time Activities Between Reliability Coordinators	No	A		

Table 2 - Applicability of Mandatory Reliability Standards (as of March 1, 2013) to International Power Lines

Std. Group	Std. Number	Standard Document Title	COLUMN 1 - Applicable to Hydro One' s IPLs	Exclusion Category	Comment	Responsible Entity for TOP compliance wrt IPLs
MOD	MOD-001-1a	Available Transmission System Capability	Yes	D	Full compliance responsibility with TOP requirements lies with the IESO	IESO
	MOD-004-1	Capacity Benefit Margin	No	B		
	MOD-008-1	Transmission Reliability Margin Calculation Methodology	Yes	D	Full compliance responsibility with TOP requirements lies with the IESO	IESO
	MOD-010-0	Steady-State Data for Modeling and Simulation of the Interconnected Transmission System	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	MOD-012-0	Dynamics Data for Modeling and Simulation of the Interconnected Transmission System	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	MOD-016-1.1	Documentation of Data Reporting Requirements for Actual and Forecast Demands, Net Energy for Load, and Controllable Demand-Side Management	No	A		
	MOD-017-0.1	Aggregated Actual and Forecast Demands and Net Energy for Load	No	A		
	MOD-018-0	Treatment of Nonmember Demand Data and How Uncertainties are Addressed in the Forecasts of Demand and Net Energy for Load	No	A		
	MOD-019-0.1	Reporting of Interruptible Demands and Direct Control Load Management	No	A		
	MOD-020-0	Providing Interruptible Demands and Direct Control Load Management Data to System Operators and Reliability Coordinators	No	A		
	MOD-021-1	Documentation of the Accounting Methodology for the Effects of Demand-Side Management in Demand and Energy Forecasts	No	A		
	MOD-028-1	Area Interchange Methodology	No	B		
	MOD-029-1a	Rated System Path Methodology	Yes	D	Full compliance responsibility with TOP requirements lies with the IESO	IESO
	MOD-030-2	Flowgate Methodology	No	B		

Table 2 - Applicability of Mandatory Reliability Standards (as of March 1, 2013) to International Power Lines

Std. Group	Std. Number	Standard Document Title	COLUMN 1 - Applicable to Hydro One' s IPLs	Exclusion Category	Comment	Responsible Entity for TOP compliance wrt IPLs
NUC	NUC-001-2	Nuclear Plant Interface Coordination	No	A		
PER	PER-001-0.2	Operating Personnel Responsibility and Authority	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	PER-002-0	Operating Personnel Training	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	PER-003-1	Operating Personnel Credentials	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	PER-004-2	Reliability Coordination - Staffing	No	A		
	PER-005-1	System Personnel Training	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
PRC	PRC-001-1	System Protection Coordination	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	PRC-002-NPCC-1	Disturbance Monitoring	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	PRC-004-2a	Analysis and Mitigation of Transmission and Generation Protection System Misoperations	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	PRC-005-1b	Transmission and Generation Protection System Maintenance and Testing	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	PRC-007-0	Assuring Consistency of Entity Underfrequency Load Shedding Programs with Regional Reliability Organization’s Underfrequency Load Shedding Program Requirements	No	C		

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Std. Group	Std. Number	Standard Document Title	COLUMN 1 - Applicable to Hydro One' s IPLs	Exclusion Category	Comment	Responsible Entity for TOP compliance wrt IPLs
PRC	PRC-008-0	Implementation and Documentation of Underfrequency Load Shedding Equipment Maintenance Program	No	C		
	PRC-009-0	Analysis and Documentation of Underfrequency Load Shedding Performance Following an Underfrequency Event	No	C		
	PRC-010-0	Technical Assessment of the Design and Effectiveness of Undervoltage Load Shedding Program	No	C		
	PRC-011-0	Undervoltage Load Shedding System Maintenance and Testing	No	C		
	PRC-015-0	Special Protection System Data and Documentation	No	C		
	PRC-016-0.1	Special Protection System Misoperations	No	C		
	PRC-017-0	Special Protection System Maintenance and Testing	No	C		
	PRC-018-1	Disturbance Monitoring Equipment Installation and Data Reporting	Yes			Hydro One
	PRC-021-1	Under-Voltage Load Shedding Program Data	No	C		
	PRC-022-1	Under-Voltage Load Shedding Program Performance	No	C		
	PRC-023-2	Transmission Relay Loadability	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One

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Std. Group	Std. Number	Standard Document Title	COLUMN 1 - Applicable to Hydro One' s IPLs	Exclusion Category	Comment	Responsible Entity for TOP compliance wrt IPLs
TOP	TOP-001-1a	Reliability Responsibilities and Authorities	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	TOP-002-2.1b	Normal Operations Planning	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	TOP-003-1	Planned Outage Coordination	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	TOP-004-2	Transmission Operations	Yes	D	Full compliance responsibility with TOP requirements lies with the IESO	IESO
	TOP-005-2a	Operational Reliability Information	Yes	D	Full compliance responsibility with TOP requirements lies with the IESO	IESO
	TOP-006-2	Monitoring System Conditions	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	TOP-007-0	Reporting System Operating Limit (SOL) and Interconnection Reliability Operating Limit (IROL) Violations	Yes	D	Full compliance responsibility with TOP requirements lies with the IESO	IESO
	TOP-008-1	Response to Transmission Limit Violations	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
TPL	TPL-001-0.1	System Performance Under Normal (No Contingency) Conditions (Category A)	Yes	E	IESO and Hydro One share compliance responsibility for TP applicable requirements	Both
	TPL-002-0b	System Performance Following Loss of a Single Bulk Electric System Element (Category B)	Yes	E	IESO and Hydro One share compliance responsibility for TP applicable requirements	Both
	TPL-003-0a	System Performance Following Loss of Two or More Bulk Electric System Elements (Category C)	Yes	E	IESO and Hydro One share compliance responsibility for TP applicable requirements	Both
	TPL-004-0	System Performance Following Extreme Events Resulting in the Loss of Two or More Bulk Electric System Elements (Category D`	Yes	E	IESO and Hydro One share compliance responsibility for TP applicable requirements	Both

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Std. Group	Std. Number	Standard Document Title	COLUMN 1 - Applicable to Hydro One' s IPLs	Exclusion Category	Comment	Responsible Entity for TOP compliance wrt IPLs
VAR	VAR-001-2	Voltage and Reactive Control	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	VAR-002-1.1b	Generator Operation for Maintaining Network Voltage Schedules	No	A		
NPCC Standards						
NPCC Directories	Directory 1	Design and Operation of the Bulk Power System	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	Directory 2	Emergency Operations	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	Directory 3	Maintenance Criteria for Bulk Power System Protection	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	Directory 4	Bulk Power System Protection Criteria	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One
	Directory 5	Reserve	No	A		
	Directory 6	Reserve Sharing Groups	No	B		
	Directory 7	Special Protection Systems	No	C		
	Directory 8	System Restoration	Yes	E	The IESO and Hydro One share compliance responsibility for TOP applicable requirements	Both
	Directory 9	Verification of Generator Gross and Net Real Power Capability	No	A		
	Directory 10	Verification of Generator Gross and Net Reactive Power Capability	No	A		

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Std. Group	Std. Number	Standard Document Title	COLUMN 1 - Applicable to Hydro One' s IPLs	Exclusion Category	Comment	Responsible Entity for TOP compliance wrt IPLs
NPCC Criteria	Criteria A-01	Criteria for Review and Approval of Documents	No	A		
	Criteria A-10	Classification of Bulk Power System Elements	No	A		
	Criteria A-15	Disturbance Monitoring Equipment Criteria	Yes		Full compliance responsibility with TO and TOP requirements for IPLs lies with Hydro One	Hydro One