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Via NEB Website

January 30, 2017

Sherri Young
Secretary of the Board
National Energy Board
Electricity Reliability
Suite 210
517 - 10th Avenue SW
Calgary, Alberta T2R 0A8

Dear Ms. Young:

RE: National Energy Board (NEB)
British Columbia Hydro and Power Authority (BC Hydro)
Compliance with NEB Order MO-036-2012, Order for Electricity Reliability Standards
File OF-Fac-ElecGen-Rel-IPL 05

BC Hydro is writing to the NEB in compliance with Order MO-036-2012 (**Order**) to provide its declaration that it is maintaining the record required under subsection 6(1) of the Order and to provide a copy of the record.

BC Hydro holds authorizations, in the form of International Power Line (**IPL**) Certificates, for NEB regulated IPLs that BC Hydro owns and operates for exporting electricity to the United States (**U.S.**). These authorizations are identified in the Order Appendix as Certificate Nos. EC-III-12, EC-III-04 and EC-III-10 for IPLs designated as 5L51, 5L52 and 2L112 respectively.

BC Hydro declares that it is maintaining a record in the form of Attachment 1 that lists:

(a) The identity of the provincial authority or standards development authority whose reliability standards the holder of the certificate is complying with for the purposes of sections 3 and 5 of the Order;

(b) The names and reference numbers of the reliability standards that are applicable to the IPLs listed above for which BC Hydro is the certificate holder; and

(c) The reasons why BC Hydro is complying with those reliability standards.

BC Hydro proposes that reliability standards applicable to IPLs are those that meet the following criteria (**Criteria**):

1. They are mandatory within a provincial authority framework; and
2. They are applicable to Transmission Owner (**TO**), Transmission Operator (**TOP**), Transmission Planner (**TP**) and Transmission Service Provider (**TSP**) reliability standard functional registrations within that provincial authority framework.

The British Columbia Utilities Commission (**BCUC**) has exclusive authority within British Columbia (**B.C.**), pursuant to section 125.2 of the B.C. *Utilities Commission Act*, to adopt and enforce reliability standards that are developed by the North American Electric Reliability Corporation (**NERC**), Western Electricity Coordinating Council (**WECC**), or other prescribed standard making body. If the BCUC determines that a reliability standard is required to maintain or achieve consistency between B.C. and other jurisdictions that have adopted the reliability standard, these same standards must be adopted in B.C. In order to reject a standard, the BCUC must determine that the standard is not in the public interest in B.C. Further, the BCUC cannot amend any reliability standard developed by the above standard making bodies nor can it, without the approval of the Provincial Government, set a standard or rule pertaining to a matter addressed by a reliability standard that has been assessed. The BCUC generally conducts this standards assessment annually. As a result of this assessment and approval process, there is normally a delay from the date a standard is approved in the U.S. to the date on which it is adopted in B.C.

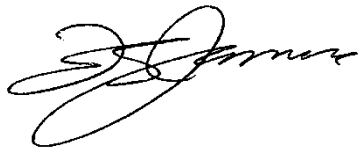
On January 28, 2016 BC Hydro provided to the NEB its record of the names and reference numbers of the reliability standards that were effective in B.C. as of January 30, 2016 and applicable to the IPLs. Attachment 1 outlines the changes to the applicable reliability standards since the January 30, 2016 list was filed. The reliability standards listed in Attachment 1 are approved by the BCUC and effective in B.C. as of January 30, 2017.

BC Hydro is complying with the reliability standards listed in Attachment 1 for the following reasons:

1. The identified reliability standard has been determined by the BCUC to be required to maintain or achieve consistency between B.C. and other jurisdictions that have adopted the reliability standard and has been adopted by the BCUC as a mandatory reliability standard in B.C. under the British Columbia Mandatory Reliability Standard Program (**B.C. MRS Program**);
2. The identified reliability standard applies to one or more of the TO, TOP, TP and TSP functional registrations under the B.C. MRS Program and therefore is applicable to the IPLs for which BC Hydro is the certificate holder; and
3. BC Hydro is registered for each of the TO, TOP, TP and TSP functions under the B.C. MRS Program and is therefore required to comply with each of the reliability standards for the IPLs for which BC Hydro is the certificate holder.

For further information, please contact Geoff Higgins at 604-623-4121 or by email at bchydroregulatorygroup@bchydro.com.

Yours sincerely,



Fred James
Chief Regulatory Officer

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Enclosure (1)

Copy to:

BCUC
Attention: Laurel Ross
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Teck Cominco Metals Ltd.
Attention: Peter Rozee
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BC Hydro
Power smart

BC Hydro Compliance with NEB Order MO-036-2012 for Electricity Reliability Standards

Attachment 1

BC Hydro's IPLs (International Power Lines) Standards List Adopted as of January 30, 2017

Introduction

NEB Order MO-036-2012 - Directive 6 (1)

6(1)	**The holder of a certificate shall maintain a record, in the form of a spreadsheet, that contains:**	**NEB Certificate Holder: BC Hydro Certificates No: EC-III-12, EC-III-04 and EC-III-10.**
(a)	**The identity of the provincial authority or standards development authority whose reliability standards the holder of the certificate is complying with for the purposes of sections 3 and 5;**	**BCUC has authority under the B.C. *Utilities Commission Act* to adopt and enforce reliability standards developed by NERC and WECC.**
(b)	**The names and any reference numbers of the reliability standards applicable to the IPL; and**	**The reliability standard reference numbers that are applicable to the IPL regulated by the certificates referenced above are as listed in Table 1 below.**
(c)	**The reasons why the holder is complying with those reliability standards.**	**The certificate holder is complying with the standards listed in Table 1 because the identified version of the reliability standard is mandatory in B.C. and applies to one or more of the following reliability standard functional registrations:** **The Certificate holder is registered as TO, TOP, TP and TSP with the BCUC.**

BC Hydro's IPLs Standards List

Table 1: Names and Reference Numbers of Reliability Standards Applicable to BC Hydro IPLs (as of January 30, 2017)

Reference Number	Reliability Standard Name	BCUC Order Adopting	Applies to			
			TO	TOP	TP	TSP
BAL	**Resource and Demand Balancing**					
BAL-005-0.2b[1]	Automatic Generation Control	R-41-13		X		
CIP	**Critical Infrastructure Protection**					
CIP-002-3[2]	Critical Cyber Asset Identification	G-162-11	X	X		X
CIP-002-5.1[3]	Cyber Security – BES Cyber System Categorization	R-38-15	X	X		
CIP-003-3[4]	Security Management Controls	G-162-11	X	X		X
CIP-004-3a	Personnel & Training	R-32-14	X	X		X
CIP-005-3a[5]	Electronic Security Perimeter(s)	R-1-13	X	X		X
CIP-006-3c	Physical Security of Critical Cyber Assets	G-162-11	X	X		X
CIP-007-3a[6]	Systems Security Management	R-32-14	X	X		X
CIP-008-3	Incident Reporting and Response Planning	G-162-11	X	X		X
CIP-009-3	Recovery Plans for Critical Cyber Assets	G-162-11	X	X		X
COM	**Communications**					
COM-001-1.1	Telecommunications	G-167-10		X		
COM-002-2	Communications and Coordination	G-67-09		X		
EOP	**Emergency Preparedness and Operations**					
EOP-001-2.1b	Emergency Operations Planning	R-32-14		X		
EOP-003-1	Load Shedding Plans	G-67-09		X		
EOP-004-2	Event Reporting	R-32-14	X	X		
EOP-005-2[7]	System Restoration and Blackstart Resources	R-32-14	X	X		

1 R2 retired on January 21, 2014.
2 CIP-002-3 will be superseded by CIP-002-5.1.
3 Preceded by CIP-002-3. CIP-002-5.1 will be effective on October 1, 2018 and BC Hydro transitioned to CIP-002-5.1 on December 16, 2016.
4 R1.2, R3, R3.1, R3.2, R3.3, and R4.2 retired on.
5 R2.6 retired on January 21, 2014.
6 R7.3 retired on January 21, 2014.

Reference Number	Reliability Standard Name	BCUC Order Adopting	Applies to			
			TO	TOP	TP	TSP
EOP-008-1	Loss of Control Center Functionality	R-32-14		X		
EOP-010-1[8]	Geomagnetic Disturbance Operations	R-38-15		X		
FAC	**Facilities Design, Connections, and Maintenance**					
~~FAC-001-1~~[9]	~~Facility Connection Requirements~~	~~R-32-14~~	~~X~~			
FAC-001-2[10]	Facility Interconnection Requirements	R-38-15	X			
FAC-002-2	Facility Interconnection Studies	R-38-15	X		X	
FAC-003-3	Transmission Vegetation Management	R-32-14	X			
FAC-008-3[11]	Facility Ratings	R-32-14	X			
FAC-014-2	Establish and Communicate System Operating Limits	G-167-0		X	X	
FAC-501-WECC-1	Transmission Maintenance	R-1-13	X			
INT	**Interchange Scheduling and Coordination**					
INT-006-4	Evaluation of Interchange Transactions	R-38-15				X
IRO	**Interconnection Reliability Operations and Coordination**					
IRO-001-1.1	Reliability Coordination — Responsibilities and Authorities	G-167-10		X		X
IRO-004-2	Reliability Coordination — Operations Planning	R-1-13		X		X
IRO-005-3.1a[12]	Reliability Coordination — Current Day Operations	R-32-14		X		X
IRO-010-1a	Reliability Coordinator Data Specification and Collection	R-1-13	X	X		
MOD	**Modeling, Data, and Analysis**					
MOD-001-1a	Available Transmission System Capability	G-175-11		X		X
MOD-004-1	Capacity Benefit Margin	G-175-11			X	X
MOD-008-1	Transmission Reliability Margin Calculation Methodology	G-175-11		X		

7 R3.1 retired on January 21, 2014.
8 R3 is effective as of October 1, 2016. R1, R2 are not applicable to BC Hydro.
9 FAC-001-1 retired on October 1, 2016
10 Preceded by FAC-001-1. FAC-001-2 is effective as of October 1, 2016.
11 R4 and R5 retired on January 21, 2014.
12 R3 superseded by EOP-010-1, R2.

Reference Number	Reliability Standard Name	BCUC Order Adopting	Applies to			
			TO	TOP	TP	TSP
MOD-010-0	Steady-State Data for Modeling and Simulation of the Interconnected Transmission System	G-67-09	X		X	
MOD-012-0	Dynamics Data for Modeling and Simulation of the Interconnected Transmission System	G-67-09	X		X	
MOD-018-0	Treatment of Non-member Demand Data and How Uncertainties are Addressed in the Forecasts of Demand and Net Energy for Load	G-67-09			X	
~~MOD-019-0.1~~[13]	~~Reporting of Interruptible Demands and Direct Control Load Management~~	~~G-167-10~~			~~X~~	
MOD-020-0	Providing Interruptible Demands and Direct Control Load Management Data to System Operators and Reliability Coordinators	G-67-09			X	
~~MOD-021-1~~[14]	~~Documentation of the Accounting Methodology for the Effects of Demand-Side Management in Demand and Energy Forecasts~~	~~R-1-13~~			~~X~~	
MOD-025-2[15]	Verification and Data Reporting of Generator Real and Reactive Power Capability and Synchronous Condenser Reactive Power Capability	R-38-15	X			
MOD-026-1[16]	Verification of Models and Data for Generator Excitation Control System or Plant Volt/Var Control Functions	R-38-15			X	
MOD-027-1[17]	Verification of Models and Data for Turbine/Governor and Load Control or Active Power/Frequency Control Function	R-38-15			X	
MOD-028-2	Area Interchange Methodology	R-32-14		X		X

13 MOD-019-0.1 retired on October 1, 2016. MOD-019-0.1 is superseded by MOD-031-1

14 MOD-021-1 is retired on October 1, 2016. MOD-021-1 is superseded by MOD-031-1

15 The effective dates are as follows: The effective date for 40% completion is October 1, 2017, for 60% completion is October 1, 2018, for 80% completion is October 1, 2019 and for 100% Completion is October 1, 2020.

16 The effective dates are as follows: R1 effective on October 1, 2016 and R2: 30% completion on October 1, 2019, 50% completion on October 1, 2021 and 100% completion on October 1, 2025.

17 The effective dates are as follows: R1 effective on October 1, 2016 and R2: 30% completion on October 1, 2019, 50% completion on October 1, 2021 and 100% completion on October 1, 2025.

Reference Number	Reliability Standard Name	BCUC Order Adopting	Applies to			
			TO	TOP	TP	TSP
MOD-029-1a	Rated System Path Methodology	G-175-11		X		X
MOD-030-02	Flowgate Methodology	G-175-11		X		X
MOD-031-1[18]	Demand and Energy Data	R-32-16			X	
PER	**Personnel Performance, Training, and Qualifications**					
PER-001-0.2	Operating Personnel Responsibility and Authority	R-41-13		X		
PER-003-1	Operating Personnel Credentials	R-41-13		X		
~~PER-005-1[19]~~	~~System Personnel Training~~	~~R-1-13~~		~~X~~		
PER-005-2[20]	Operations Personnel Training	R-38-15	X	X		
PRC	**Protection and Control**					
~~PRC-001-1.1[21]~~	~~System Protection Coordination~~	~~R-38-15~~		~~X~~		
PRC-001-1.1 (ii)[22]	System Protection Coordination	R-32-16		X		
PRC-004-WECC-1	Protection System and Remedial Action Scheme Misoperation	R-1-13	X	X		
PRC-004-2.1a	Analysis and Mitigation of Transmission and Generation Protection System Misoperations	R-32-14	X			
PRC-005-1.1b	Transmission and Generation Protection System Maintenance and Testing	R-32-14	X			

[18] Preceded by MOD-019-0.1 and MOD-021-1. MOD-031-1 is effective as of October 1, 2016.
[19] Preceded by PER-002-0. PER-005-1 is superseded by PER-005-2. PER-005-1 R3.1 is effective on January 15, 2016.
[20] Preceded by PER-005-1. R1-R4, R6 is effective on October 1, 2016.
[21] PRC-001-1.i is superseded by PRC-001-1.1 (ii)
[22] Preceded by PRC-001-1.1. PRC-001-1.1 (ii) is effective as of October 1, 2016

Reference Number	Reliability Standard Name	BCUC Order Adopting	Applies to			
			TO	TOP	TP	TSP
PRC-007-0	Assuring Consistency of Entity Underfrequency Load Shedding Programs with Regional Reliability Organization's Underfrequency Load Shedding Program Requirements	G-67-09	X	X		
PRC-008-0	Implementation and Documentation of Underfrequency Load Shedding Equipment Maintenance Program	G-67-09	X			
PRC-009-0	Analysis and Documentation of Underfrequency Load Shedding Performance Following an Underfrequency Event	G-67-09	X	X		
PRC-010-0[23]	Technical Assessment of the Design and Effectiveness of Undervoltage Load Shedding Program	G-67-09	X	X		
PRC-011-0	Undervoltage Load Shedding System Maintenance and Testing	G-67-09	X			
PRC-015-0	Special Protection System Data and Documentation	G-67-09	X			
PRC-016-0.1	Special Protection System Misoperations	G-167-10	X			
PRC-017-0	Special Protection System Maintenance and Testing	G-67-09	X			
PRC-018-1	Disturbance Monitoring Equipment Installation and Data Reporting	G-67-09	X			
PRC-019-1[24]	Coordination of Generating Unit or Plant Capabilities, Voltage Regulating Controls, and Protection	R-38-15	X			
PRC-019-2[25]	Coordination of Generating Unit or Plant Capabilities, Voltage Regulating Controls, and Protection	R-32-16	X			

[23] R2 retired on January 21, 2014.

[24] The effective dates are as follows: R1-R2: 40% completion on October 1, 2017, 60% completion on October 1, 2018, 80% completion on October 1, 2019 and 100% completion on October 1, 2020. PRC-019-1 will be superseded by PRC-019-2.

Reference Number	Reliability Standard Name	BCUC Order Adopting	Applies to			
			TO	TOP	TP	TSP
PRC-021-1	Under-Voltage Load Shedding Program Data	G-67-09	X			
PRC-022-1[26]	Under-Voltage Load Shedding Program Performance	G-67-09		X		
PRC-023-3[27]	Transmission Relay Loadability	R-38-15	X			
PRC-025-1[28]	Generator Relay Loadability	R-38-15	X			
TOP	**Transmission Operations**					
TOP-001-1a	Reliability Responsibilities and Authorities	R-1-13		X		
TOP-002-2.1b	Normal Operations Planning	R-41-13		X		X
TOP-003-1	Planned Outage Coordination	R-1-13		X		
TOP-004-2	Transmission Operations	G-167-10		X		
TOP-005-2a	Operational Reliability Information	R-1-13		X		
TOP-006-2	Monitoring System Conditions	R-1-13		X		
TOP-007-0	Reporting System Operating Limit (SOL) and Interconnection Reliability Operating Limit (IROL) Violations	G-67-09		X		
TOP-007-WECC-1a	System Operating Limits	R-38-15		X		
TOP-008-1	Response to Transmission Limit Violations	G-67-09		X		
TPL	**Transmission Planning**					
TPL-001-0.1	System Performance Under Normal (No Contingency) Conditions (Category A)	G-167-10			X	

[25] Preceded by PRC-019-1. The effective dates are as follows: R1-R2: 40% completion on October 1, 2017, 60% completion on October 1, 2018, 80% completion on October 1, 2019 and 100% completion on October 1, 2020.

[26] R2 retired on January 21, 2014

[27] Preceded by PRC-023-2. PRC-023-3 R1 - R5 circuits 4.2.1.1 and 4.2.1.4 is effective as of January 1, 2016. For circuits identified by 4.2.1.2, 4.2.1.3, 4.2.1.5 and 4.2.1.6: TBD. R6: TBD.

[28] The effective dates are as follows: The effective date for 40% completion is October 1, 2017, for 60% completion is October 1, 2018, for 80% completion is October 1, 2019 and for 100% Completion is October 1, 2020.

Reference Number	Reliability Standard Name	BCUC Order Adopting	Applies to			
			TO	TOP	TP	TSP
TPL-002-0b	System Performance Following Loss of a Single Bulk Electric System Element (Category B)	R-1-13			X	
TPL-003-0b	System Performance Following Loss of Two or More Bulk Electric System Elements (Category C)	R-32-14			X	
TPL-004-0a	System Performance Following Extreme Events Resulting in the Loss of Two or More Bulk Electric System Elements (Category D)	R-32-14			X	
VAR	**Voltage and Reactive**					
~~VAR-001-3~~[29]	~~Voltage and Reactive Control~~	~~R-38-15~~	~~X~~			
~~VAR-001-4~~[30]	~~Voltage and Reactive Control~~	~~R-38-15~~		~~X~~		
VAR-001-4.1[31]	Voltage and Reactive Control	R-32-16		X		
~~VAR-002-WECC-1~~[32]	~~Automatic Voltage Regulators~~	~~R-1-13~~		~~X~~		
VAR-002-WECC-2[33]	Automatic Voltage Regulators	R-32-16		X		

[29] VAR-001-3 retired on October 1, 2016
[30] VAR-001-4 retired on October 1, 2016. VAR-001-4 is superseded by VAR-001-4.1
[31] Preceded by VAR-001-3 and VAR-001-4. VAR-001-4.1 is effective as of October 1, 2016
[32] VAR-002-WECC-1 retired on October 1, 2016.VAR-002-WECC-1 is superseded by VAR-002-WECC-2
[33] Preceded by VAR-002-WECC-1. VAR -002-WECC-2 is effective as of October 1, 2016