



LETTER L-71-13

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VIA EMAIL

December 5, 2013

**FOLLOW UP COMMENT PROCESS TO
BCUC MRS INQUIRY**

EXHIBIT A-1

To: Distribution List
(BCUC – MRS Inquiry)

Re: British Columbia Utilities Commission
Establishing a Follow-Up Comment Process to the
Inquiry into Potential Adjustments for the
British Columbia Mandatory Reliability Standards Program

The Commission writes to initiate a follow-up comment process to the Inquiry into Potential Adjustments for the British Columbia Mandatory Reliability Standards Program (MRS Inquiry) Report (Report). Comments are to be submitted to the Commission by Monday, December 23, 2013.

Purpose of Follow-Up Comment Process

The purpose of this follow-up comment process is for stakeholders to provide final comments on amendments to the *Mandatory Reliability Standards Regulation*, BC Reg. 32/2009, Ministerial Order M039 (*MRS Regulation*) which would allow for the incorporation of the new Bulk Electric System (BES) Definition and exception process, or a definition consistent with the new BES definition, as part of the BC MRS program. Stakeholders are also invited to comment on any of the issues noted by the Commission Panel on pages 25 to 26 of the Report. Those pages are included as Enclosure 1 with this letter.

In the fall of 2012, the North American Electric Reliability Corporation (NERC) recommended significant changes to the definition of BES Definition and revisions to the NERC Rules of Procedure to provide an exception process to be used in conjunction with the proposed new BES Definition.

The MRS Inquiry proceeded on the assumption that the Commission would be recommending adoption of the new BES Definition, as developed by the NERC and approved by the Federal Energy Regulatory Commission (FERC), in place of the “bulk power system” definition in the current *MRS Regulation* and that the *MRS Regulation* would be amended accordingly.

Although not within the scope of the MRS Inquiry, some Interveners suggested amendments to the *MRS Regulation* which they submitted could accommodate the change to the definition of the BES, and more generally, facilitate alignment of aspects of the BC MRS Program with NERC’s MRS program.

This comment process provides an opportunity for stakeholders to indicate support for the Commission staff draft proposed amendments to *MRS Regulation*, or provide potential alternatives. Upon receipt of stakeholder comments, the Commission intends to expeditiously provide a recommendation to Government.

Scope of the Follow-Up Comment Process

The scope of this follow-up comment process is limited to potential amendments to the *MRS Regulation* to allow for the incorporation of the new BES Definition and exception process, or a definition consistent with the new BES Definition, as part of the BC MRS program. Stakeholders are also invited to comment on any of the issues noted by the Commission Panel on pages 25 to 26 of the Report.

Guiding Principles for Recommendations to Government

The following two principles will guide the Commission's recommendation to Government and should also guide stakeholder comments in this process.

1. Consistency with Policy Action No. 14 in the 2007 BC Energy Plan

Policy Action No. 14 in the 2007 "BC Energy Plan: A Vision for Clean Energy Leadership" states:

"14. Ensure that the province remains consistent with North American transmission reliability standards.

Government will commit to ensure that industry developed reliability standards are introduced in British Columbia, cost-effectively and in a manner that respects BC's regulatory sovereignty."

2. Efficiency of the MRS Program in BC

In light of the NERC Phase II BES Initiative which may result in additional future changes to the NERC BES Definition, any proposal made to Government regarding potential changes to the *MRS Regulation* should consider the efficiency of the MRS Program as a desired outcome.

These principles should guide stakeholders in their comments.

NERC Bulk Electric System Definition and BC Bulk Power System Definition

FERC Order No. 773, issued December 20, 2012, approved NERC's BES Definition and the related revisions to the NERC Rules of Procedure. FERC Order No. 773-A, issued April 18, 2013, denied rehearing in part, granted limited rehearing in part, and otherwise reaffirmed FERC's determinations in FERC Order No. 773. FERC approved a 24-month transition period after the effective date before full compliance would be required in the US for Elements that would be newly included with the new BES Definition.¹ The new BES Definition is included with this letter as Enclosure 2.

On June 13, 2013, after the filing of Final Submissions in the MRS Inquiry, FERC granted NERC's request to extend the effective date of the new BES Definition and Rules of Procedure exception process to July 1, 2014. In announcing the extension, NERC's website reports that NERC is addressing revisions to the BES Definition

¹ The term "Element" is defined in the NERC Glossary of Terms as "Any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An element may be comprised of one or more components."

(clarifications for Exclusions E1 and E3) directed in FERC Order Nos. 773 and 773-A and flowing from NERC's Phase II initiative.

NERC developed the new BES definition to provide a consistent and clear demarcation for applying reliability standards across North America. The new BES Definition uses technical criteria to identify Elements as inclusions to or exclusions from the BES, and provides for exceptions to be made where appropriate for Reliable Operation of the interconnected North American bulk electric transmission grid.

In the NERC MRS Program, the new BES Definition refers to a NERC exception process, set out in the NERC Rules of Procedure, whereby specific Elements (as defined in the NERC Glossary of Terms) that are otherwise classified as part or not part of the BES can potentially be included or excluded by exception. In the NERC framework, Regional Entities (e.g. Western Electricity Coordinating Council) process exception requests and NERC confirms or denies exceptions.

The BES Definition by itself does not identify entities that are subject to Reliability Standards. In the NERC MRS Program, the BES Definition is used together with NERC's Statement of Compliance Registry Criteria to identify BES Elements and Entities that are subject to Reliability Standards in the United States (US). The BES Definition describes Elements that are part of the BES. The Reliability Standards apply in relation to the Entities – owners, operators and users of the BES – that own, operate and use the Elements described in the BES Definition.

In BC, the *MRS Regulation* defines the “bulk power system” and various other terms related to the BC MRS Program. It is the legislative instrument that prescribes the Entities to which the Reliability Standards adopted in section 125.2(6) of the *Utilities Commission Act* apply.

The definition of “bulk power system” currently found in the *MRS Regulation* will be inconsistent with NERC's new BES definition unless the MRS Regulation is amended to adopt the new BES Definition, or a definition consistent with it, as part of the BC MRS program.

Commission Staff Proposed Draft Amendments to the *MRS Regulation*

The Commission seeks comments on the Commission staff draft proposed amendments to the *MRS Regulation*, or proposed alternatives, included as Enclosure 3.

Commission staff's proposed draft amendments to the *MRS Regulation* include:

1. replace the “bulk power system” definition with the new BES Definition, in section 1 – Definitions
2. add definition of the term “element” to section 1
3. remove definitions for terms “direct user”, “distributor”, “generator” from section 1
4. modify subsection 2(a) – Application to read “an owner, operator or direct user of an element forming part of the bulk power system.”
5. add schedule 1 to the *MRS Regulation* which contains a list of Exclusions and Inclusions
 - a. schedule 1 notes terms used in Inclusions and Exclusions have the same meaning as the terms defined in the most recently adopted NERC Glossary of Terms

- b. schedule 1 also notes elements may be included or excluded through the Rules of Procedure for Mandatory Reliability Standards in British Columbia exception process

These proposed draft amendments are intended to achieve alignment with the new BES Definition and Government Policy.

Questions for Comment by Stakeholders

1. **Do you support the Commission staff draft amendments described above and included in Enclosure 3. If not, why not?**
2. **If you do not support, Commission staff's draft amendments, do you have alternative draft amendments to offer? If so, please provide alternative wording blacklined against the existing *MRS Regulation*.**
 - 2.1 **What is the legal basis upon which you rely to support implementation of the alternative you propose?**
3. **Discuss the merits and legal basis for adopting the BES Definition in the *MRS Regulation* by reference to the BES Definition in the Rules of Procedure for Mandatory Reliability Standards in BC?**
4. **Do you have any comments in response to the Commission Panel's issues at pages 25 to 26 of the Report? If so, and you have not already addressed them in your response to Question 2.1, please provide them.**

Timetable for Filing of Stakeholder Comments

Written comments are requested to be filed with the Commission no later than 4:00 p.m., Monday, December 23, 2013. Stakeholders proposing alternative amendments should provide draft amendments blacklined against the existing *MRS Regulation*.

Yours truly,

Erica Hamilton

AG/cms
Enclosures

ENCLOSURE 1 – EXCERPT FROM MRS INQUIRY REPORT, PAGES 25-26

Discussion and Recommendation

As noted in section 1.3, the suitability of the new BES Definition itself, or mechanisms for adopting the new BES Definition in BC were not included in the scope of the Inquiry. Despite this, both AMPC and BC Hydro submitted draft revisions for the *MRS Regulation* which they suggest would allow for the incorporation of the BES definition by reference and allow the Commission to make exceptions to that definition. Neither draft revision includes a definition for “direct user,” “generator” or “distributor” found in section 125.2(8) for the reasons referred to above. FortisBC states that definitions for those terms should be prescribed.

Further, both revisions introduce the term “bulk electric system” which is not presently found in section 125.2 of the UCA.

As the Panel has not been tasked with recommending changes to the *MRS Regulation*, it will only offer some general comments on four issues concerning the draft revisions submitted by AMPC and BC Hydro.

The first issue is whether delegation of powers through incorporation by reference can take place as suggested by the AMPC and BC Hydro submissions and their draft revisions to the *MRS Regulation*. Both AMPC and BC Hydro (and any other parties that support incorporation by reference of the new BES Definition and the apparent delegation of powers to the Commission to amend the new BES Definition from time to time) will need to provide legal argument to support such an approach. The Panel is not persuaded that the amendments are as “relatively straight-forward and easily accomplished” as BC Hydro suggests at page 3 of its Final Submission.

The second issue is whether changes to section 125.2 of the UCA are required in addition to amendments to the *MRS Regulation*. For example, does section 125.2(8) need to be amended to delete references to “direct user,” “generator” or “distributor”? Should a reference to “bulk electric system” be added to the definition of “reliability standard” in section 125.2(1) and to section 125.2(8) or should it replace the reference to “bulk power system” in those sections?

The third issue is that if “bulk power system” is retained, should it be defined to mean “bulk electric system”. The Panel notes that the NERC Glossary of Terms (updated August 19, 2013) contains different definitions for “bulk electric system” and “bulk power system”. Further, the NERC Memorandum describes the “bulk electric system” as a subset of the “bulk power system” (Exhibit C18-8, AMPC IR 1.1, p. 1 at p. 3 of the NERC Memorandum). Given that there may be advantages to maintaining definitions of “bulk electric system” and “bulk power supply” [sic] that are consistent with NERC definitions, why should the definition of “bulk electric system” be the same as the NERC definition and the “bulk power system” be different from the NERC definition?

Finally, there are terms used in the UCA that are defined and/or used by NERC (i.e., owner, operator). There are also terms used in the UCA that are not defined and/or used by NERC (i.e., direct user). How should these terms be defined in BC’s MRS program?

As stated previously, the Panel is of the view these are not matters to be decided here, given the scope of the Inquiry. However, the Panel is of the view that the Commission would benefit from submissions on these issues, supported by legal authorities in the case of the first and second issues, prior to making any recommendations to Government on changes to the *MRS Regulation*. Accordingly, the Panel recommends that the parties provide further submissions on these issues.

The Panel recommends that the Commission undertake a process to receive submission on these matters. Given that the new NERC definition will come into force on July 1, 2014, this process should be undertaken on an expedited basis to take into account that amendment to the UCA, in addition to changes to the Regulation may be required.

ENCLOSURE 2 – FERC APPROVED NEW NERC BES DEFINITION

Bulk Electric System (BES): Unless modified by the lists shown below, all Transmission Elements operated at 100 kV or higher and Real Power and Reactive Power resources connected at 100 kV or higher. This does not include facilities used in the local distribution of electric energy.

Inclusions:

I1 - Transformers with the primary terminal and at least one secondary terminal operated at 100 kV or higher unless excluded under Exclusion E1 or E3.

I2 - Generating resource(s) with gross individual nameplate rating greater than 20 MVA or gross plant/facility aggregate nameplate rating greater than 75 MVA including the generator terminals through the high-side of the step-up transformer(s) connected at a voltage of 100 kV or above.

I3 - Blackstart Resources identified in the Transmission Operator's restoration plan.

I4 - Dispersed power producing resources with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) utilizing a system designed primarily for aggregating capacity, connected at a common point at a voltage of 100 kV or above.

I5 - Static or dynamic devices (excluding generators) dedicated to supplying or absorbing Reactive Power that are connected at 100 kV or higher, or through a dedicated transformer with a high-side voltage of 100 kV or higher, or through a transformer that is designated in Inclusion I1.

Exclusions:

E1 - Radial systems: A group of contiguous transmission Elements that emanates from a single point of connection of 100 kV or higher and:

a) Only serves Load. Or,

b) Only includes generation resources, not identified in Inclusion I3, with an aggregate capacity less than or equal to 75 MVA (gross nameplate rating). Or,

c) Where the radial system serves Load and includes generation resources, not identified in Inclusion I3, with an aggregate capacity of non-retail generation less than or equal to 75 MVA (gross nameplate rating).

Note – A normally open switching device between radial systems, as depicted on prints or one-line diagrams for example, does not affect this exclusion.

E2 - A generating unit or multiple generating units on the customer's side of the retail meter that serve all or part of the retail Load with electric energy if: (i) the net capacity provided to the BES does not exceed 75 MVA, and (ii) standby, back-up, and maintenance power services are provided to the generating unit or multiple generating units or to the retail Load by a Balancing Authority, or provided pursuant to a binding obligation with a Generator Owner or Generator Operator, or under terms approved by the applicable regulatory authority.

E3 - Local networks (LN): A group of contiguous transmission Elements operated at or above 100 kV but less than 300 kV that distribute power to Load rather than transfer bulk power across the interconnected system. LN's emanate from multiple points of connection at 100 kV or higher to improve the level of service to retail customer Load and not to accommodate bulk power transfer across the interconnected system. The LN is characterized by all of the following:

a) Limits on connected generation: The LN and its underlying Elements do not include generation resources identified in Inclusion I3 and do not have an aggregate capacity of non-retail generation greater than 75 MVA (gross nameplate rating);

b) Power flows only into the LN and the LN does not transfer energy originating outside the LN for delivery through the LN; and

c) Not part of a Flowgate or transfer path: The LN does not contain a monitored Facility of a permanent Flowgate in the Eastern Interconnection, a major transfer path within the Western Interconnection, or a comparable monitored Facility in the ERCOT or Quebec Interconnections, and is not a monitored Facility included in an Interconnection Reliability Operating Limit (IROL).

E4 – Reactive Power devices owned and operated by the retail customer solely for its own use.

Note - Elements may be included or excluded on a case-by-case basis through the Rules of Procedure exception process.

ENCLOSURE 3 – COMMISSION STAFF DRAFT PROPOSED AMENDMENTS TO *MRS REGULATION*

Proposed Draft Amendments to the *MRS Regulation*, blacklined against existing *MRS Regulation*

Utilities Commission Act

MANDATORY RELIABILITY STANDARDS REGULATION

Contents

- 1 Definitions
- 2 Application
- 3 Reports

Definitions

- 1 In this regulation:

"**Act**" means the *Utilities Commission Act*;

"**bulk electric system**" means bulk power system;

"**bulk power system**" means all transmission elements operated at 100 kV or higher and Real Power and Reactive power resources connected at 100 kV or higher. This does not include facilities used in the local distribution of electric energy and is subject to the inclusions and exclusions identified in Schedule 1;

"**element**" means any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An element may be comprised of one or more components;

Application

- 2 A reliability standard adopted under section 125.2 (6) of the Act applies to all of the following:
an owner, operator or direct user of an element forming part of the bulk power system.

Reports

- 3 (1) Subject to subsection (2), a report on a reliability standard, prepared by the transmission corporation in accordance with section 125.2 (3) of the Act, must be provided to the commission within one year of the later of the following dates:
- (a) the date the reliability standard is adopted by the regulatory body with jurisdiction over the standard-making body that established the reliability standard;
 - (b) the date this regulation comes into force.
- (2) On application by the transmission corporation, the commission may extend the time by which the transmission corporation must provide a report under subsection (1).

Utilities Commission Act

MANDATORY RELIABILITY STANDARDS REGULATION

SCHEDULE 1

Terms used in this list of Inclusions and Exclusions mean the same as the terms approved by FERC (the regulatory body with jurisdiction over the standard-making body that established the reliability standards), as published by NERC and defined in the most recently adopted “Glossary of Terms Used in NERC Reliability Standards” in British Columbia.

Inclusions:

I1 - Transformers with the primary terminal and at least one secondary terminal operated at 100 kV or higher unless excluded under Exclusion E1 or E3.

I2 - Generating resource(s) with gross individual nameplate rating greater than 20 MVA or gross plant/facility aggregate nameplate rating greater than 75 MVA including the generator terminals through the high-side of the step-up transformer(s) connected at a voltage of 100 kV or above.

I3 - Blackstart Resources identified in the Transmission Operator’s restoration plan.

I4 - Dispersed power producing resources with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) utilizing a system designed primarily for aggregating capacity, connected at a common point at a voltage of 100 kV or above.

I5 - Static or dynamic devices (excluding generators) dedicated to supplying or absorbing Reactive Power that are connected at 100 kV or higher, or through a dedicated transformer with a high-side voltage of 100 kV or higher, or through a transformer that is designated in Inclusion I1.

Exclusions:

E1 - Radial systems: A group of contiguous transmission Elements that emanates from a single point of connection of 100 kV or higher and:

- a) Only serves Load; or
- b) Only includes generation resources, not identified in Inclusion I3, with an aggregate capacity less than or equal to 75 MVA (gross nameplate rating); or
- c) Where the radial system serves Load and includes generation resources, not identified in Inclusion I3, with an aggregate capacity of non-retail generation less than or equal to 75 MVA (gross nameplate rating).

Note – A normally open switching device between radial systems, as depicted on prints or one-line diagrams for example, does not affect this exclusion.

E2 - A generating unit or multiple generating units on the customer’s side of the retail meter that serve all or part of the retail Load with electric energy if:

- a) the net capacity provided to the BES does not exceed 75 MVA; and

b) standby, back-up, and maintenance power services are provided to the generating unit or multiple generating units or to the retail Load by a Balancing Authority, or provided pursuant to a binding obligation with a Generator Owner or Generator Operator, or under terms approved by the applicable regulatory authority.

E3 - Local networks (LN): A group of contiguous transmission Elements operated at or above 100 kV but less than 300 kV that distribute power to Load rather than transfer bulk-power across the interconnected system. LN's emanate from multiple points of connection at 100 kV or higher to improve the level of service to retail customer Load and not to accommodate bulk-power transfer across the interconnected system. The LN is characterized by all of the following:

a) Limits on connected generation: The LN and its underlying Elements do not include generation resources identified in Inclusion I3 and do not have an aggregate capacity of non-retail generation greater than 75 MVA (gross nameplate rating);

b) Power flows only into the LN and the LN does not transfer energy originating outside the LN for delivery through the LN; and

c) Not part of a Flowgate or transfer path: The LN does not contain a monitored Facility of a permanent Flowgate in the Eastern Interconnection, a major transfer path within the Western Interconnection, or a comparable monitored Facility in the ERCOT or Quebec Interconnections, and is not a monitored Facility included in an Interconnection Reliability Operating Limit (IROL).

E4 – Reactive Power devices owned and operated by the retail customer solely for its own use.

Note - Elements may be included or excluded on a case-by-case basis through the Rules of Procedure for Mandatory Reliability Standards in British Columbia exception process.