



Bull, Houser & Tupper LLP  
3000 Royal Centre  
1055 West Georgia Street  
Vancouver, BC V6E 3R3

T 604.687.6575  
F 604.641.4949  
[www.bht.com](http://www.bht.com)

Reply Attention of:	R. Brian Wallace, Q.C.
Direct Phone:	604.641.4852
Direct Fax:	604.646.2551
E-mail:	<a href="mailto:rbw@bht.com">rbw@bht.com</a>
Our File:	11-4265
Date:	January 31, 2013

British Columbia Utilities Commission  
6<sup>th</sup> Floor – 900 Howe Street  
Vancouver, BC V6Z 2V3

**Attention:** Erica Hamilton, Commission Secretary and Mark R. Thomas, Director of Infrastructure

Dear Madame and Sir:

**Re: Inquiry into Potential Adjustments for the British Columbia Mandatory Reliability Standards (MRS) Program, Order R-72-12 (Inquiry) Association of Major Power Customers of BC (AMPC) Submission**

We are legal counsel to AMPC in this matter. We write to provide AMPC's submission in this Inquiry in accordance with Order R-72-12.

This submission provides a summary of AMPC's recommendations followed by:

1. an overview of AMPC's general concerns regarding MRS standards and how they are administered in BC;
2. a discussion of the recent MRS changes in the U.S. and the desirability of moving quickly, where there is a general consensus, to be consistent with FERC Order 773; and
3. responses to the Commission's three "Straw Dog" documents.

## A. Summary of Recommendations

The following is a summary of AMPC's recommendations at this time:

- Straw Dog 1
  - AMPC believes that some issues are simple and that there is very likely to be a strong general consensus on how BC should move forward. Other issues require more detailed review. Accordingly, AMPC recommends that the BCUC split the Inquiry Process into two streams:
    - The first stream should immediately move to consider recommendations to Cabinet to:
      - adopt the revised BES Definition contained in FERC Order 773; and
      - empower the Commission to incorporate a BC-specific Exception Process into the Commission's Rules of Procedure for Reliability Standards in BC.

AMPC believes that these two recommendations will be widely seen as inevitable and straightforward changes that can be undertaken in short order. As such, they are best dealt with separately using a written process under the Commission's Streamlined Review Process (SRP). Early Commission direction on these two issues will ensure that BC MRS rules are in line with key improvements undertaken to MRS in the U.S..

- The second stream should consider the remaining issues, such as Penalties, the Exception Process, and the nature and make-up of a Technical Advisory Committee, in parallel to the SRP and under the current process.
- Streamline the proposed de-registration process so that, subject to a 30 day notice period, if a current Registered Entity states, with reasons, that it is no longer a Registered Entity under the new BES definition, it ceases to be one – unless the Administrator formally objects to the Entity's assertion during the notice period. Ideally no administrative steps such as audits would be taken against an exiting Entity during the 30 notice period.

- Establish a BC Exception Process. AMPC supports the basis for Exceptions contained in Section 3.1. The Commission should maintain significant procedural flexibility regarding filing requirements and procedures, at least during the initial years of the Exception process.
- Straw Dog 2
  - AMPC notes that the penalties contained in the table in Straw Dog #2 are higher than those for similar offences elsewhere in Canada, with the exception of Ontario, which is generally similar to the Straw Dog proposal. AMPC sees no need for such high penalties in BC and urges the Commission to adopt a more moderate approach.
- Straw Dog 3
  - Require the inclusion of Load and IPP representatives on the Technical Advisory Committee (TAC). Such representatives should be selected with input from load and generation industry representatives.

## **B. General Views Concerning MRS in BC**

AMPC members represent approximately 20% of BC Hydro's total load, 80% of its industrial load, and take service at a transmission level. Some AMPC members also operate generation and transmission facilities as ancillary components of their operations.

AMPC supports regulation that ensures the safe and reliable operation of the bulk electric system (BES). The effort undertaken in both the U.S. and Canada to create appropriate transmission reliability standards via the North American Reliability Corporation (NERC) following the 2003 Northeast blackout is important.

AMPC accordingly supports BC involvement in the development of NERC standards. The processes and procedures related to similar standards in BC should recognize the facts on the ground in BC and represent an appropriate level of regulation relative to other jurisdictions.

AMPC's experience with MRS has been that reliability functions previously provided by BC Hydro have become those of AMPC members. The resulting obligations to register, develop compliance plans in some cases, document and prepare reports to the Western Electricity Coordinating Council (WECC), and prepare for WECC audits are new obligations and costs. These obligations and costs exist in addition to the good

engineering practices that AMPC customers have consistently undertaken, and come at a disproportionate cost to AMPC members.

The anomalous nature of BC MRS compliance costs is apparent when comparing the entities in neighbouring jurisdictions that are subject to similar obligations. In the U.S., Alberta, and other Canadian provinces, only transmission facility operators and generators are typically subject to MRS standards, and not customers.

AMPC is of the view that the adoption of FERC Order 773 will better achieve an efficient level of regulation, with an appropriate focus on transmission entities such as BC Hydro.

Based on its review of the BCUC Straw Dogs and the associated NERC documents (a revised BES definition and associated procedures), AMPC is proposing the following limited number of straightforward variations to the Straw Dog approaches.

### **C. Specific Straw Dog Comments**

#### **1. Fast tracking the adoption of the FERC Order 773 Definition of the BES and granting the Commission the power to create an exception process.**

On December 20, 2012 FERC issued Order No. 773, a copy of which is included with this submission.

In FERC's words this order:

*... approves modifications to the currently-effective definition of "bulk electric system" developed by the North American Electric Reliability Corporation (NERC), the Commission-certified Electric Reliability Organization. The Commission finds that the modified definition of "bulk electric system" removes language allowing for regional discretion in the currently-effective bulk electric system definition and establishes a bright-line threshold that includes all facilities operated at or above 100 kV. The modified definition also identifies specific categories of facilities and configurations as inclusions and exclusions to provide clarity in the definition of "bulk electric system."*

*In this Final Rule, the Commission also approves: (1) NERC's revisions to its Rules of Procedure, which create an exception process to add elements to, or remove elements from, the definition of "bulk electric system" on a case-by-case basis; (2) NERC's form entitled "Detailed Information to Support an Exception Request" that entities will use to*

*support requests for exception from the “bulk electric system” definition; and (3) NERC’s implementation plan for the revised “bulk electric system” definition.*

This Final Rule will become effective March 5, 2013 (60 days after publication in the Federal Register on January 4, 2012), just a little over a month from now.

The passage of this Order is contemplated by Straw Dog #1 (ex. A-7) circulated by the Commission on December 20, 2012, although at the time it was drafted, the question of whether there might be amendments and the timing of the issuance of the Order were seen as uncertain. As a result of Order 773, uncertainty regarding the substance and the timing of FERC action has been resolved and the desirability of moving quickly has increased.

AMPC is of the view that Order 773 is generally a significant improvement on the current MRS situation and, when implemented, will substantially reduce risks to customers and the burden of MRS administration borne by BC industry. This possibility was partially recognized with respect to potential penalties in Straw Dog #1 in the following passage:

*The Commission may order that violations would be struck from the record and penalties would be not applicable if it is determined later that as a result of the new BES Definition specific Reliability Standard(s) should not have applied to the Entity between the date the new BES Definition takes effect in BC and the date any relevant change in registration status for the Entity is approved. Commission Staff note that this is a possible outcome only and is not a recommendation at this point.*

This statement is of limited comfort and does not relieve the need to get the new BES definition in place as quickly as possible. While the possibility of penalties is of concern to AMPC members, the ongoing administrative burden of MRS is even more important. That burden was described in AMPC’s November 28, 2012 letter (Ex. C14-2).

Accordingly, AMPC is proposing changes to the Regulatory Process in this matter so that the Commission’s recommendations on what AMPC sees as the two major non-contentious issues are fast tracked utilizing the Commission’s Streamlined Review Process. These questions are (i) whether BC should adopt the new BES Definition, and (ii) whether the Commission should have the power to issue exemptions under the MRS Regulation (to enable a BC-specific Exception Process entering the Commission’s Rules of Procedure for Reliability Standards, fully mirroring the new FERC BES definition).

These two questions fit the SRP criteria perfectly, as it is highly unlikely that anyone will suggest that the new FERC definition of the BES should not apply to BC, or that the Commission should not have the power to establish an exception process. The added benefit of fast-tracking these two questions is that they require further legislative steps to take effect while the other issues under consideration will not.

The statutory mechanics of implementing the new BES definition are relatively straightforward: the MRS Regulation must be changed to amend the “bulk power system” definition and to provide the BCUC with the power to create exceptions to who reliability standards apply to (i.e., enabling the inclusion/exclusion process proposed for the BC Rules of Procedure). A draft amended regulation which demonstrates the ease with which this objective can be achieved is attached for discussion purposes.

The draft generally incorporates the language of FERC into the existing MRS Regulation. The draft also drops the concept of a Direct User from the existing regulation because it is not used by FERC and is redundant and confusing. Under the new BES, responsibility for facilities used by a Direct User will appropriately fall on the owner or operator of the Transmission Element used to provide service to the Direct User.

The more detailed and potentially contentious issues regarding the particulars of the Exception Process, the Technical Advisory Committee, and Administrative Penalties could continue on the current schedule, which contemplates Final Submissions on April 30, 2012 and Commission decision at some time thereafter.

## **2. Streamlining the De-Registration Process**

AMPC is concerned that the deregistration process proposed in Straw Dog #1 is cumbersome and onerous. It applies to current Registered Entities that will no longer be Registered Entities under the new BES definition. It requires the involvement of WECC and the TAC and ultimately, a Commission decision simply to confirm that the law does not apply to each particular customer. Under the proposed process, a customer is required to justify the law’s non-application and then support its submissions through an complex administrative process. It is unreasonable and unfair. Furthermore, this process is not consistent with a scheme of regulation that puts the responsibility to register on entities in the first instance. If entities can decide when MRS applies to them, they should be permitted to deregister unless someone in authority objects for cause.

An example of a practical and fair revised procedure would be to create a thirty-day notice period following a customer’s formal declaration that it is no longer required to be

a Registered Entity. During this period the administrator could object to the entity's position or bring an Exception Application to have the entity included. If the Administrator does not take either step during the 30 day notice period, the customer would be deemed to have its registration removed. Ideally, no administrative steps such as audits would be taken against an exiting Entity during the 30 notice period.

### **3. Straw Dog 2 – Assessing Violations and Penalties**

AMPC notes that the penalties contained in the table in Straw Dog #2 are higher than those for similar offences elsewhere in Canada, with the exception of Ontario, which is generally similar to the Straw Dog proposal. AMPC sees no need for such high penalties in BC and urges the Commission to adopt a more moderate approach.

### **4. Straw Dog 3 – Transmission Advisory Committee (TAC)**

AMPC submits that the proposed TAC is fundamentally flawed in that there is no mandatory provision for non-utility representatives from load or generation users of the electrical system. Non-utility representation on the TAC under Straw Dog 3 would depend totally on the good-will and judgement of utility representatives. This is a major oversight that must be corrected.

Under the new BES definition, customers with assets operating above 100 kV and independent power producers (IPPs) with generation assets will, in the normal course, continue to be Registered Entities subject to MRS compliance and will be affected by the MRS requirements and possibly exposed to penalties. Some other customers will also be potentially subject to inclusion processes if the BC Rules of Procedure are amended in conjunction with the new BES definition, consistent with the new FERC definition and as proposed by Commission Staff.

Non-utility load and generation customers can provide a valuable system perspective which will not always be aligned with the views of BC Hydro and Fortis. The Commission should be in a position to hear these views on important technical matters through the TAC. Accordingly, AMPC recommends that the Commission directly appoint two non-utility load and generation representatives course possessing the requisite



BULL  
HOUSSER

expertise and experience directly to the TAC. These appointments should be made after consultation with load and IPP industry representatives.

Yours truly,

**Bull, Houser & Tupper LLP**

A handwritten signature in black ink that reads "R. Brian Wallace". The signature is written in a cursive, flowing style.

R. Brian Wallace, Q.C.

*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 all Transmission Elements operated at 100 kV or higher and Real Power and Reactive Power resources connected at 100 kV or higher, except facilities used in the local distribution of electric energy and subject to the inclusions and exclusions identified in Schedule A.

"bulk power system" ~~means~~ means Bulk Electric System.

~~(a) electrical generation facilities and transmission facilities, including interconnections with neighbouring systems, that are generally operated at voltages of 100 kilovolts or greater, and~~

~~(b) transmission facilities that are generally operated at voltages of less than 100 kilovolts and that are, on their own or in combination with other generation, transmission or distribution facilities, material to reliability~~

~~but excludes radial transmission facilities, regardless of voltage, serving only end-users of electricity with one transmission source;~~

~~**"direct user"** means~~

~~(a) an entity that enters into an agreement for transmission service, and~~

~~(b) an end-user of electricity that receives electricity from transmission facilities at voltages of 100 kilovolts or greater;~~

~~**"distributor"** means an entity that receives electricity from transmission facilities at voltages of 69 kilovolts or greater for the purpose of serving end-users of electricity at voltages of less than 69 kilovolts;~~

~~**"generator"** means an owner or operator of an electrical generating unit or facility.~~

**"Transmission Element"** means any electrical device with terminals that may be connected to a transmission line, and may comprise one or more components.

### ***Application***

2 A reliability standard adopted under section 125.2 (6) of the Act applies to all of the following:

(a) an owner or operator of a ~~transmission facility with respect to the portion of the facility that is~~(i) a Transmission Element forming part of the ~~bulk power system~~Bulk Electric System, or

~~(ii**b**)~~ a radial transmission facility generally operated at voltages of 200 kilovolts or greater, if the reliability standard concerns vegetation management;~~;~~;

~~(b) a direct user of the bulk power system;~~

~~(c) a distributor who~~

~~(i) serves greater than 25 megawatts of peak load and is directly connected to the bulk power system, or~~

~~(ii) owns, controls or operates a facility, regardless of its size, that is part of~~

~~(A) an under-frequency load shedding program;~~

~~(B) an under-voltage load shedding program;~~

~~(C) a special protection system, or~~

~~(D) a transmission protection system~~

~~designed, installed and operated for the protection of the bulk power system;~~

~~(d) a generator with respect to all of the following:~~

~~(i) a generating unit that is greater than 20 megavolt amperes gross nameplate rating and is directly connected to the bulk power system, unless~~

~~(A) the net capacity provided to the bulk power system by the generating unit does not exceed 20 megavolt amperes, and~~

~~(B) standby, backup and maintenance power services are provided to the generating unit, or to end-users of electricity directly served by the generating unit, under a binding~~

~~obligation with another generator or  
under terms approved by the  
commission;~~

~~(ii) a generating facility consisting of two or  
more generating units that are connected to  
the bulk power system at a common bus with a  
total combined generation of the generating  
units of greater than 75 megavolt amperes  
gross aggregate nameplate rating, unless~~

~~(A) the net capacity provided to the bulk  
power system by the facility does not  
exceed 75 megavolt amperes, and~~

~~(B) standby, backup and maintenance  
power services are provided to the  
generating facility, or to end-users of  
electricity directly served by the  
generating facility, under a binding  
obligation with another generator or  
under terms approved by the  
commission;~~

~~(iii) a generating facility that is connected to  
the bulk power system at a common bus with  
one or more other generating facilities or units,  
if the total combined generation of those  
facilities and units is greater than 75 megavolt  
amperes gross aggregate nameplate rating,  
unless~~

~~(A) the net capacity provided to the bulk  
power system by the generating  
facilities and units does not exceed 75  
megavolt amperes, and~~

~~(B) standby, backup and maintenance  
power services are provided to the  
generating facilities, or to end-users of  
electricity directly served by the~~

~~generating facilities, under a binding obligation with another generator or under terms approved by the commission;~~

~~(e) a generator with respect to a generating unit, regardless of size, that is~~

~~(i) a blackstart unit material to and designated as part of a transmission facility operator's plan for the restoration of the bulk power system, or~~

~~(ii) material to the reliability of the bulk power system.~~

### **Exceptions**

3 The Commission may exclude or include Transmission Elements from the Bulk Electric System following a hearing that determines whether or not the Transmission Element's inclusion or exclusion is necessary for the reliable operation of the Bulk Electric System.

### **Reports**

~~3~~4 (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).

[Provisions of the *Utilities Commission Act*, R.S.B.C. 1996, c. 473, relevant to the enactment of this regulation: section 125.2]

## SCHEDULE A

### Definitions

“Balancing Authority” means the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority area, and supports interconnection frequency in real time;

“Blackstart Resource” means a generating unit(s) and its associated set of equipment which has the ability to be started without support from the System or is designed to remain energized without connection to the remainder of the System, with the ability to energize a bus, meeting the Transmission Operator’s restoration plan needs for Real and Reactive power capability, frequency and voltage control, and that has been included in the Transmission Operator’s restoration plan;

“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;

“Facility” means a set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.);

“Flowgate” means a designated point on the transmission system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions.

“Load” means an end-use device or customer that receives power from the electric system;

“Reactive Power” means the portion of electricity that establishes and sustains the electric and magnetic fields of alternating-current equipment;

“Real Power” means the portion of electricity that supplies energy to the load.

### 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 exception process.