



March 5, 2003

Mr. Guy V. Zito  
Manager, Planning  
Northeast Power Coordination Council  
1515 Broadway  
New York, NY 10036-8901

Dear Mr. Zito

Subject: **Comments to the Posted Draft for Review of the NPCC Document A2 – “*Basic Criteria for Design and Operations of Interconnected Power Systems*”**

The Independent Electricity Market Operator (IMO) offers the following comments to the currently posted draft of the NPCC Document A2 – “*Basic Criteria for Design and Operations of Interconnected Power Systems.*”

## **Section 2.1: Design Criteria - Last Paragraph**

The IMO strongly urges that the A-02 criteria document clearly articulates and focuses on ensuring the document contains **only** criterion binding each Area to designing and operating practices that **will NOT adversely impact its neighbors.** (i.e. the bulk power system) without being prescriptive on the HOW is it is achieved.

Section 1 states that *"the objective of these criteria is to ensure the **bulk power system** is designed and operated to a level of reliability such that the loss of a major portion of the system, or unintentional separation of a major portion of the system, will not result from any design **contingencies** referenced in Sections 5.1 and 5.2."* it further states that *"In NPCC the technique for assuring the reliability of the **bulk power system** is to require that it be designed and operated to withstand representative **contingencies** as specified in these criteria."*

However, this specific paragraph on Special Protection Schemes (SPS) is ambiguous, circular and prescriptive in its approach of **how** the A-2 objective is to be achieved. Additionally, the IMO strongly believes NPCC document A-11 is the appropriate document for any SPS criteria. Similar to the NPCC document A5 for protection systems.

As the market operator, the IMO has standards setting authority in Ontario, and is therefore able to enforce appropriate standards in Ontario without reliance on NPCC specific criteria. The IMO does however need the NPCC standards to ensure that other Areas conform to a standard such that they do not have an adverse impact on Ontario and that the reliability of the

IMO-controlled grid can be maintained. Otherwise, the IMO should be indifferent to the internal policies and practices of the other Areas

It is IMO opinion that the paragraph be deleted in its entirety with the exception of the last line as amended below. *"The decision to employ an SPS **in accordance with NPCC document A11** should take into account the complexity of the scheme and the consequences of correct or incorrect operation as well as its benefits."*

Further, installation of SPSs that ensures the reliability of the bulk power system through it design and operating practices, in IMO's view can be an extremely effective and a far superior alternative to NO transmission.

### **Section 3.0 Resource Adequacy - Design Criterion**

**replace:**

#### **3.0 Resource Adequacy - Design Criterion**

The probability (or risk) of disconnecting any **firm load** due to resource deficiencies shall be, on average, not more than once in ten years. Compliance with this criterion shall be evaluated probabilistically, such that the **loss of load expectation [LOLE]** of disconnecting **firm load** due to resource deficiencies shall be no more than 0.1 day per year. This evaluation shall make due allowance for demand uncertainty, scheduled outages and deratings, forced outages and deratings, assistance over interconnections with neighboring **Areas** and regions, transmission transfer capabilities, and capacity and/or load relief from available operating procedures.

**with:**

#### **3.0 Resource Adequacy - Planning Criterion**

The probability (or risk) of disconnecting any **firm load** due to resource deficiencies shall be evaluated probabilistically such that the **loss of load expectation [LOLE]** shall be no more than 0.1 day per year. This evaluation shall make due allowance for demand uncertainty, scheduled outages and deratings, forced outages and deratings, assistance over interconnections with neighboring **Areas** and regions, transmission transfer capabilities, and capacity and/or load relief from available operating procedures.

To comply with the **LOLE** criterion, each Area shall:

- a) assess its ability to respect an **LOLE** of no more than 0.1 day per year
- b) report this assessment to NPCC,
- c) where an **Area** reports it cannot meet the **LOLE** criterion, it shall ensure operating procedures are in place to prevent adverse impacts on other **Areas**, and
- d) shall initiate all actions within the **Area's** control to return to the required **LOLE**.

**rationale:**

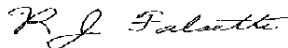
Remove the reference to “..once in ten years”. This standard is slightly different from the LOLE criterion, leaving room for alternative interpretations. The criterion should have only one measure, that being the LOLE of 0.1 day per year

Because many Areas are no longer vertically integrated utilities, and most do not perform design functions, it is not reasonable to assume they have authority to force compliance with the LOLE criterion (nor is it reasonable to assume their market will require that level of reliability). It is reasonable, however, for the sake of their neighbours, that they report whether they meet the criterion, ensure their non-compliance does not have spill-over impacts on adjacent areas and do everything within their means to close the gap between their assessed reliability level and the criterion.

In parallel with this transmittal, these comments will also have been posted on the NPCC Open Process Form at <http://www.npcc.org/>.

Thank you for your attention to these concerns.

Respectfully yours



Ronald J. Falsetti  
Independent Electricity Market Operator (IMO)