



Market Rule Amendment Proposal

PART 1 – MARKET RULE INFORMATION

Identification No.:	MR-00332-R00		
Subject:	Operating Reserve (OR)		
Title:	Reducing Synchronized OR Requirement due to Regional Reserve Sharing Program Changes		
Nature of Proposal:	<input checked="" type="checkbox"/> Alteration	<input type="checkbox"/> Deletion	<input type="checkbox"/> Addition
Chapter:	5	Appendix:	
Sections:	4.6		
Sub-sections proposed for amending:	4.5.6B		

PART 2 – PROPOSAL HISTORY

Version	Reason for Issuing	Version Date
1.0	Draft for Technical Panel Review	June 8, 2007
2.0	Published for Stakeholder Review and Comment	June 14, 2007
3.0	Draft for Technical Panel Review	July 17, 2007
4.0	Draft for Technical Panel Vote	August 21, 2007
5.0	Recommended by Technical Panel; Submitted for IESO Board Approval	August 28, 2007
6.0	Approved by IESO Board	September 7, 2007
Approved Amendment Publication Date:	September 13, 2007	
Approved Amendment Effective Date:	December 12, 2007	

PART 3 – EXPLANATION FOR PROPOSED AMENDMENT

Provide a brief description of the following:

- The reason for the proposed amendment and the impact on the *IESO-administered markets* if the amendment is not made.
- Alternative solutions considered.
- The proposed amendment, how the amendment addresses the above reason and impact of the proposed amendment on the *IESO-administered markets*.

Summary

This amendment would allow the IESO to reduce its synchronized and/or non-synchronized ten-minute operating reserve (OR) requirement by a total of 100 MW, in accordance with Northeast Power Coordinating Council's (NPCC) recently approved changes to its Regional Reserve Sharing program (RRS).

The market efficiency gains that would result from this change are estimated to be approximately \$20,000 per year.

Background

In June 2005, NPCC approved a voluntary program of 100 MW of regional reserve sharing (RRS). The purpose of the RRS is to improve regional reserve market efficiency in a manner that maintains reliability.

Although RRS allows for 100 MW of energy to be delivered under the program in the event of contingency, initially each participating area was only permitted to count 50 MW towards its non-synchronized ten-minute OR requirement, subject to availability and deliverability of the associated energy. The provision to count only 50 MW towards the non-synchronized ten-minute OR requirement was imposed by NPCC's Reliability Coordinating Committee (RCC) pending a review by the Task Force on Coordination of Operation (TFCO) of the effectiveness of RRS six months after implementation. RRS was implemented on January 4, 2006.

A November 2006 report on RRS prepared by the Control Performance Working Group (CO-1) of TFCO concluded that:

- "RRS in its present form has been successful in promoting reliability and should be continued.
- Consideration should be given to allowing regional reserve sharing energy to count towards ten-minute synchronized reserve requirements in the future."¹

Based on the conclusions of the CO-1 report and subsequent discussions, on April 27, 2007, NPCC approved changes to RRS that allow participating areas to reduce their ten-minute OR requirement (synchronized and/or non-synchronized) by a total of 100 MW when the associated energy is available and deliverable in the event of a contingency.

¹ Source: NPCC web site at <http://www.npcc.org/PublicFiles/openProcess/C-3820070312clean.pdf>

PART 3 – EXPLANATION FOR PROPOSED AMENDMENT

The existing market rules regarding RRS permit the IESO to reduce its requirement for domestic supply of non-synchronized ten-minute reserve by up to 100 MW. A market rule amendment is required to allow the IESO to reduce its synchronized and/or non-synchronized ten-minute OR requirement by 100 MW, as permitted by the changes approved by NPCC.

- **Reliability Impacts**

Between January 4, 2006 and December 31, 2006, there were three contingency events that resulted in a request for, and delivery of, the energy associated with the RRS². The IESO was counting 50 MW of RRS towards satisfying its non-synchronized ten-minute reserve requirement at the time of those contingencies.

An NPCC review of the first nine months of RRS concluded that NPCC Balancing Areas and Reliability Coordinators have not experienced any negative reliability impacts resulting from the implementation of RRS.

The IESO is satisfied that reliability will not be put at risk as a result of the greater flexibility to manage the IESO-controlled grid permitted under the proposed amendment.

- **Market Efficiency Impacts**

The purpose of RRS is to improve regional reserve market efficiency in a manner that maintains reliability. The IESO conducted an efficiency analysis of the proposed change. The results of this analysis suggest that reducing the synchronized ten-minute OR requirement by 100 MW rather than reducing the non-synchronized ten-minute OR requirement would yield net benefits of approximately \$20,000 per year.

Discussion

It is proposed to amend section 4.5.6B of Chapter 5 by removing the term “non-synchronized” from the reference to the ten-minute operating reserve requirement. The existing market rule definition of ten-minute operating reserve means “those operating reserves required to respond fully within ten minutes of being called upon by the IESO”. Therefore, ten-minute operating reserve includes both synchronized and non-synchronized ten-minute reserves if no other qualifiers are specified.

Removing the term “non-synchronized” from the reference to the ten-minute operating reserve requirement would allow the IESO to reduce its synchronized and/or non-synchronized ten-minute OR requirement by a total of 100 MW in accordance with NPCC’s recently approved changes to its Regional Reserve Sharing program.

² This statement corrects and provides additional information than was included in amendment submission MR-00332-Q00. MR-00332-Q00 indicated that since January 4, 2006, there has only been one contingency event resulting in the delivery of the energy associated with RRS. Between November 1 and December 31 2006, there were two other contingency events that resulted in a request for, and delivery of, the energy associated with the RRS. Both of these events were due to a nuclear unit turbine trip and they occurred on November 23 and December 19, respectively.

PART 4 – PROPOSED AMENDMENT**Regional Reserve Sharing**

4.5.6B The *IESO* may participate in regional reserve sharing programs with neighbouring *control areas*. Subject to availability and deliverability of the associated energy, the *IESO* may count towards its ~~non-synchronised~~ *ten-minute operating reserve* requirement a contribution of up to 100 MW from neighbouring *control areas* in accordance with applicable regional reserve sharing programs and applicable *reliability standards*. The *IESO* shall activate *energy* from regional reserve sharing programs in accordance with applicable *reliability standards*.

PART 5 – IESO BOARD DECISION RATIONALE

This proposed change would improve IESO-administered market economic efficiencies by reducing the amount of operating reserve to be purchased by the market, with no impact on reliability of the IESO-controlled grid.