



VIA FACSIMILE AND E-MAIL

December 28, 2004

Mr. John Zych
Secretary
Ontario Energy Board
P.O. Box 2319, 26th Floor
2300 Yonge Street
Toronto, ON M4P 1E4

Dear Mr. Zych:

**Re: Independent Electricity Market Operator
Reliability Activities Compliance Filing for Year 2004**

Under the terms of the Independent Electricity Market Operator (the "IMO") License EI-2003-0088, the IMO is required to provide the Ontario Energy Board (the "Board") with such information as the Board may require from time to time.

Section 6.2(f) of the IMO's new license requires that the IMO provide the Board, on or before the end of each calendar year, with a summary of any significant activities related to the development of reliability standards undertaken by the IMO pursuant to subsections 5(1)(f) or 5(1)(g) of the Electricity Act.

The IMO is the Control Area Operator and Reliability Authority in Ontario, member of Northeast Power Coordinating Council (NPCC)¹ and signatory of the NPCC Membership Agreement, and has adopted the North American Electric Reliability Council (NERC)² and NPCC reliability standards and compliance requirements. The IMO also administers and enforces the reliability compliance program in Ontario and participates in various industry forums for the development and administration of operational policies and reliability standards.

¹ The IMO is a member of the Northeast Power Coordinating Council (NPCC) and complies with Reliability Standards administered by the NPCC. These standards are particular to the region that includes Ontario.

² NERC is the not-for-profit corporation charged with promoting standards for the reliable operation and planning of the bulk electric systems in North America.

This report summarizes the significant IMO activities related to the development and administration of reliability standards for the year ending 2004. The report is organized as follows:

- i. New or Revised Reliability Standards and Measures
- ii. Market Rule Amendments
- iii. Administration of Reliability Standards and Compliance Requirements
- iv. Post 2003 Blackout Activities
- v. Coordination with Reliability Organizations and Industry Forums

I. New or Revised Reliability Standards and Measures

The IMO, through its rule making authority granted to it by the Electricity Act, 1998, has the ability to establish and enforce reliability standards. Through these mechanisms the IMO maintains strict adherence to NERC and NPCC requirements, as well as reliability standards established by the IMO specific to Ontario.

A large number of NERC reliability standards are at various stages of development in line with a new American National Standard Institute (ANSI) certified standard development process. NERC adopted the process to develop and establish its Version "0"³ and Version "1" reliability standards. The IMO is actively participating in the development of NERC's reliability standards. The IMO is also participating in the discussions to evolve NERC's powers for reliability oversight, and the development of new and amended NPCC standards, particularly those that are most relevant to the IMO and Ontario by and large.

In 2004 the IMO established additional reliability standards, stakeholdering and compliance processes to address evolving reliability requirements and challenges, including:

- a) a dedicated IMO Reliability Standards Program (IRSP) to ensure timely reviews and submission of comments with respect to reliability related activities undertaken by individual standards authority, including the IMO itself;
- b) specific standards pertaining to Vegetation Management and Cyber Security;
- c) providing regular updates to market participants, by way of the Market Operations Standing Committee (MOSC)⁴, to keep them abreast of these evolving industry changes and to encourage their participation in addressing reliability matters; and

³ Version "0" represents a translation of existing NERC operating policies and planning standards into a new set of specific and more measurable NERC standards.

⁴ The IMO manages the consultation process including reliability related matters through MOSC. This forum is also used to receive market participant's feedback on IMO-administered market and related matters.

- d) a comprehensive public Webpage for reliability related information, including IMO, NERC and NPCC activities. The site also provides a mechanism to solicit market participant's comments on standards development process and activities. The Webpage is located at:" (<http://www.theimo.com/imoweb/ircp/reliability.asp.0>)

In addition, the IMO finalized its Local Area (LA) reliability performance criteria. Moreover, new criteria was also developed for initiating/triggering preventive actions for "on-watch" local areas, enabling the IMO to undertake precautionary actions, where appropriate, to prevent local areas from declining below critical reliability limits.

These processes are crucial in permitting the IMO to maintain high operational standards and practices and addressing priority reliability requirements. As of the September 2004, the IMO was the only Reliability Coordinator to have met all NERC standards in respect of policies 5, 6 and 9. Also, it is worth noting that the NERC Control Area Readiness Audit that was conducted in April 2004, concluded that the IMO meets or exceeds electricity system reliability standards and demonstrated the IMO's readiness for the 2004 summer high demand period.

II. Market Rule Amendments

Several Market Rule amendments were made to address on-going changes in reliability requirements and to improve operational efficiency and stability of the IMO-controlled grid. The rule amendment process follows a rigorous change-control process including participant commentary and stakeholdering and co-ordinated system modifications where necessary. Details of these amendments can be found on the IMO's Website at: <http://www.theimo.com/imoweb/manuals/marketdocs.asp>.

Notable amendments pertaining to reliability management include:

- a) **MR-00240-R00: Segregated Mode of Operation Dispatch Data and Request Timing (Appendix 7.7 sections 1.2 and 1.3)**—these amendments require market participants to submit an outage slip and also maintain dispatch data for a facility for the period the facility is in segregated mode of operation. They also allow market participants to make a request for segregated mode of operation up to 2 hours ahead of the dispatch hour, rather than the current 4-hour request time limit.
- b) **MR-00255-R00: Extension of the Emergency Demand Response Program (Chapter 5 section 4.8A.2)**—these rule amendments extend the Emergency Demand Response Program (EDRP). The proposed amendments:
- call for the IMO Board to review the need for EDRP prior to the expiration of any EDRP contracts; and
 - provide that the market rules associated with EDRP would cease to have effect when the IMO Board determines that there is no longer a need for EDRP.

- (c) **MR-00244-R00: Technical Requirements - Changes to Generator Technical Requirements (Appendix 4.2 of Chapter 4)**—the rules amended the following technical and performance standards for generation facility equipment:
- reactive power capability;
 - excitation system performance;
 - automatic voltage regulator;
 - power system stabilizer; and
 - speed governor.

The changes are either a relaxation or clarification of the existing requirements, or an alignment of the requirements with applicable industry reliability standards. In some cases, the requirements specify a “default” standard and the IMO is permitted to require a stricter standard or permit a more relaxed standard as a result of the Connection Assessment and Approval process for a given generation facility.

- d. **MR-00248-R00-R02: IMO Permanent Licence and Amendments to OEB Act (various sections of Chapters 2, 4, 7, 10 and 11)**—these amendments aligned the market rules with various provisions in the IMO’s permanent licence issued by the OEB and changes to Ontario Energy Board Act, 1998 regarding transmitter’s obligations. The amendments include:
- provisions authorizing the IMO to enter into operating agreements with market participants that own or operate a transmission system (i.e. are transmitters) but that are not required to have an OEB transmitter’s licence;
 - obligating transmitters that do not have an OEB transmitter’s licence to enter into an operating agreement with the IMO, upon request by the IMO to do so; and
 - clarifying the application of market rules for transmitters that are not required to have an OEB transmitter’s licence (e.g. obligations pertaining the collection and distribution of transmission charges).
- (e) **MR-00282-R00-R05: Changes to Emergency Preparedness Market Rules**—the amendments modified the market rule provisions for emergency preparedness and system restoration plans. The need for these amendments was identified by the Emergency Preparedness Task Force and the Emergency Preparedness Working Group⁵, as a result of their review of the August 2003 blackout. The amendments include:

⁵ The Emergency Preparedness Task Force (EPTF) is a stakeholder body chaired by the IMO and was established to direct and oversee the development of plans to respond to electricity-related emergencies. The Emergency Preparedness Working Group is an IMO led working group established under the EPTF.

- provision relaxing the market participant's requirements to audit their plans but requiring an officer of the participant's organization to certify the plans. These measures are intended to reduce participant's costs while maintaining the quality of the participant plans;
- provision extending the application of the Ontario electricity emergency plan beyond the IMO-controlled grid to emergencies of registered facilities connected to the IMO-controlled grid. This will allow the emergency plan to address situations such as the ice storm of 1998; and
- provision modifying the IMO review and audit obligations regarding the Ontario electricity emergency preparedness plan and the Ontario power system restoration plan to improve the effectiveness and responsiveness of those reviews and audits.

III. Administration of Reliability Standards and Compliance Requirements

Compliance with the Market Rules is key to the efficient operation of the wholesale reliable electricity markets and for maintaining the reliability of the integrated power system. To promote awareness about reliability requirements and the need for participant compliance with the rules, the IMO continued its work to clarify and educate market participants about their obligations pursuant the Market Rules.

To facilitate market participants' compliance with reliability standards, the IMO established the IMO Reliability Compliance Program (IRCP). This program is unique from other jurisdictions in that it is directly coupled to the Market Rules and participant's license, making compliance to reliability provisions a binding obligation. The NPCC's Compliance Monitoring and Assessment Subcommittee (CMAS) has commended the IMO for its reliability compliance program, calling it "a role model for other Areas to follow". CMAS has further commended the IMO's procedures and practices, calling them "exemplary, enabling the IMO to discharge its' reliability authority functions".

In total, 43 NERC/NPCC related reliability standards were monitored for compliance by the IMO of which 5 were assessed on a monthly basis. Of the 43 standards, the IMO and participants were fully compliant with all standards. This full-compliance status for the year 2004 demonstrates the IMO's efforts and achievements towards ensuring and maintaining the reliable operation of the IMO-administered markets and bulk electric system and strict adherence to reliability standards and practices established by the standards authorities including NERC, the NPCC and the IMO. Details of these standards, along with the associated compliance assessments and status are available on the IMO's Webpage at:

http://www.theimo.com/imoweb/ircp/ircp_templatesSchedule.asp.

In addition, generators, distributors and connected wholesale customers affecting local areas of the IMO-controlled grid were also included in the reliability compliance monitoring and enforcement process. For example, as part of IMO's continuing efforts to enhance local area reliability, the IMO initiated and successfully completed a review of the IMO-controlled Grid protection system maintenance practices. This review

involved approximately 120 market participants. Where applicable, follow-ups are being made to ensure that the market participant's protection system maintenance is completed within the required timeframes.

A Control Area Readiness Audit was conducted by NERC on April 2004. The Readiness Audit team was tasked with assessing the degree to which the Control Areas meet their responsibilities. The audit of the readiness of the IMO to perform its assigned responsibilities concluded that that the IMO "demonstrated a commitment to meeting or exceeding industry criteria resulting in quality operations. The audit report is available at:

http://www.theimo.com/imoweb/pubs/ircp/NERC/NERC_IMO_Audit_Report-2004.pdf

IV. Post 2003 Blackout Activities

The IMO continued its work with market participants to identify lessons learn and ensure that the US-Canada Power System Outage Task Force (the "Task Force") recommendations are acted on by market participants and the IMO. As well, the IMO supported NERC's investigation and review of the Blackout findings, including participating on the review teams.

The IMO also participated in Technical Conferences in both Philadelphia and Toronto sponsored by the Task Force to seek recommendations concerning the Blackout. Accordingly, on January 13, 2004, the IMO submitted its recommendations regarding restoration practices to the Task Force.

The stakeholder-represented Emergency Preparedness Task Force, chaired by the IMO, has completed the August 2003 Blackout Restoration Evaluation Report. This task force conducted an extensive review of the facts surrounding the restoration of Ontario's power grid and related emergency response activities, assessed the effectiveness of restoration efforts, and identified recommendations for improvement. The majority of the more significant actions identified in the Restoration Evaluation Report have been addressed. The report is available at:

http://www.theimo.com/imoweb/pubs/corp/EPTF_Aug2003_RestorationEvalRpt.pdf

In addition, the IMO initiated a reliability Interdependencies Workshop, to identify and address interdependencies amongst other critical infrastructure industries such as telecommunications, petroleum, and banking/finance industries.

An IMO/Hydro One Blackout Steering Committee was established and assigned milestones by including specific recommendations and action items that are of greater significance to the IMO and the Hydro One. Among other things, the recommendations and action items pertain to critical and priority loads, communication infrastructure, IMO/Hydro One control room coordination opportunities, and rotational loading shedding schemes.

V. Coordination with Reliability Organizations and Industry Forums

The IMO continues to work cooperatively with various reliability organizations and industry working groups to develop and advance reliability standards, effective administration processes, best practices and regulatory oversight and compliance mechanisms.

Should you have question about any of these matters, please feel free to call me at (416) 506-2858.

Yours truly,

Original signed by

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Independent Electricity Market Operator

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