



IMO Staff Recommendation to Panel on Exemption Application (General)

PART 1 – GENERAL INFORMATION

Market Participant Name: Great Lakes Power – Distribution Division

Location/Site: Watson TS

Exemption Application ID: 01-1191

**Market Participant ID/ Metering Service
Provider:**

Description of Exemption Requested: GLP is applying for an exemption from the obligation to comply with the Wholesale Revenue Metering Standard – Hardware section 7.4.1 d) and f) at all existing facilities listed for all new and existing metering installations owned by GLP.

Date Exemption Application Received: 19 Nov 2001

Date all relevant application information supplied by applicant: September 30, 2004

IMO Management Approvals Obtained (YES or NO): Yes

Are there any outstanding disputes, compliance actions, or pending market rule amendments involving the subject matter of this exemption application? (YES or NO): No.

Are there any outstanding disputes, compliance actions, or pending market rule amendments involving the exemption applicant? (YES or NO): No.
(if YES, see attachments)

Section of the *Exemption Application and Assessment Procedure* under which the Exemption Application is made:

- *Section 1.4 “Application for Exemption General”*

Market Rule(s) or related Market Manual(s) from which exemption is requested (copy of Market Rule(s) or Manual(s) attached):

Market Rules Ch.6, Section 4.1.1 and 4.1.1.3 and Wholesale Metering Standard – Hardware section 7.4.1 d) & f)

Third Party Submissions Received (YES or NO): Yes

Supplemental Assessment Information Attached (YES or NO): No

Related Historical Exemption Application(s) or Related Exemption Application(s) in Process (YES or NO): No

Role of applicant in the market as it relates to this exemption application: Metered Market Participant (MMP)

Part 2 – Recommendation

Recommendation: To be granted with conditions

Criteria Used in Assessment of General Exemption Applications (Section 1.4.2 of *Exemption Application and Assessment Procedure*):

(If X appears in a box, the criterion is applicable to this exemption application and is evaluated in Part 3 – Details of Assessment; if X does not appear in a box, the criterion is not applicable to this exemption application.)

Whether the exemption that is the subject-matter of the exemption application would, if granted, materially:

- impact the ability of the IMO to direct the operations and maintain the reliability of the IMO-controlled grid; ☐

- impact the ability of the IMO to ensure non-discriminatory access to the IMO-controlled grid; ☐

- affect the ability of the IMO to operate the IMO-administered markets in an efficient, competitive, and reliable manner; ☒

Comment: The nature of this exemption application would have an impact on the operation of the IMO-administered markets in an efficient manner. Accurate billing of energy consumption is paramount to the operation of an efficient market. See Part 3 ‘Assessment’ section of this document for details.

- increase costs of market participants; or ☒

Comment: See “Increase Costs to Market Participants” section in Part 3 of this document

- increase costs of the IMO; ☐

Whether the exemption that is the subject-matter of the exemption application would, if granted, give the exemption applicant an undue preference in the IMO-administered markets; ☐

Whether the cost or delay to the exemption applicant of complying with the obligation or standard to which the exemption application relates is reasonable, having regard to the nature of the obligation or standard, the nature of the exemption application and the anticipated impact of non-compliance by the exemption applicant in terms of the elements referred to above; ☒

Comment: See “Cost of Compliance” section in Part 3 of this document

The adequacy of the exemption plan submitted by the exemption applicant; ☒

Comment: See “Adequacy of Plan” section in Part 3 of this document

Where the exemption applicant is the IMO, the identification of the benefit to market participants of compliance with the obligation or standard relative to the financial and other resources required to achieve compliance within such deadlines as may be applicable; ☐

Where the exemption applicant is the IMO, the manner in which it proposes to operate in the IMO-administered markets or direct the operations and maintain the reliability of the IMO-controlled grid during the period in which the exemption would be in effect; ☐

Whether the facility or equipment that is the subject-matter of the exemption application:

- was in service or was returned to service on the date on which the obligation or standard to which the exemption application relates came into force; ☒

Comment: metering installations that are the subject matter of these exemptions were in service at the time the obligation or standard to which the exemption application relates came into force.

- was ordered by the exemption applicant on or prior to the date on which the obligation or standard to which the exemption application relates came into force; or ☐

- was in the process of construction on or prior to the date on which the obligation or standard to which the exemption application relates came into force; and ☐

The capability of the owner of the facility to operate the facility consistent with the terms of the proposed exemption. ☐

PART 3 – DETAILS OF ASSESSMENT

Background:

The Wholesale Revenue Metering Standard – Hardware requires dedicated voltage transformers for each and every metering installation. Participants may not use the voltage as a source of supply for other devices and other metering installations. The reasons are:

- The standard arrangement ensures a high degree of reliability. Failure of a single voltage transformer (VT) affects a single metering installation only; not a series of meters all connected to the same VT.
- The standard arrangement ensures the best accuracy. The VT cannot be used for metering installations for which the voltage it measures has no relevance i.e. the VT would be on the appropriate circuit and not used on a circuit that it is not being measured.
- The limitation on the use of other devices is to ensure that participants do not connect devices that cause an error in the metering or cause the metering to become unreliable.

Market Rule Requirement:

GLP is requesting an exemption from the Wholesale Metering Standard – Hardware section 7.4.1 d) and f) which states the following:

d) Voltage transformers with one secondary winding shall be dedicated to the main metering and used for no other purpose.

f) Voltage transformers with more than one secondary winding shall have one winding dedicated to the main metering and shall be used for no other purpose.

Please note the IMO does not agree that an exemption is required for the above rules. The proposed IMO response covered in the Assessment below will result in an installation that is in compliance with these rules and hence it may not be necessary to gain exemption should the Exemption Panel accept this IMO response. The IMO response however, does require an exemption from Market Rule Chapter 6 section 4.1.1, 4.1.1.3 that requires each metering installation to have its own dedicated CTs (current transformers) and VTs – hence its inclusion. GLP has agreed to this change.

Assessment:

GLP has requested the exemption from complying with the standard on the grounds that the costs to comply are excessive and because there is a limited space available in the substations in which to install the required VTs.

The IMO accepts that to add VTs to existing installations that are undergoing an upgrade may be difficult and expensive. In the case of metalclad switchgear where there are space limitations, adding dedicated VTs to each and every feeder circuit will add significantly to the cost of metering.

The downside to the market of accepting shared VTs is that an element of unreliability and inaccuracy is introduced. The failure of a single VT can adversely affect the metering of many circuits, potentially affecting the IMO's ability to settle the market accurately. Whether or not there is a market impact depends on the magnitude of the load at the time of the failure and the response by the Metering Service Provider (MSP) to institute their emergency instrument transformer restoration plan.

Considering the potential impact on the market of a failed VT, the following principles are recommended:

1. The failure of a VT must not affect the IMO's ability to get actual metering data.
2. The VTs must under all operational configurations accurately reflect the voltage being measured.

PART 3 – DETAILS OF ASSESSMENT

3. VTs supplying main meters must be dedicated to that purpose.
4. Meter Trouble Reports (MTRs) will be issued to GLP for each metering installation supplied by the VTs and all are subject to estimates in accordance with Chapter 6, section 11.1.4A and non-compliance sanctions.

The fundamental technical requirements must not change, viz.

- The burden rating of the VTs must not be exceeded.
- Access to the secondary circuits of the VTs must be strictly controlled.
- Measurement error correction factors should be applied to compensate for extended use of VT secondary cabling.
- The VTs must comply with the Wholesale Metering Standard – Hardware and the Market Rules.

Although GLP requested exemptions for several meter points, an exemption is only required for meter installations at Watson TS. The IMO is recommending that dedicated VTs be used for the main meters and that a second set be used for the alternate meters plus other devices such as protection. This arrangement would comply with the above conditions. In the case of Watson TS, this means that each bus on each side of the bus-tie breaker will require two sets of VTs (each set comprised of 3 VTs). One set for the main meters and one set for the alternate meters. A total of four sets of VTs in all for Watson TS.

Note: Appendix A shows a single line representation of a typical single busbar layout covering the cases: the existing layout, what the Market Rules require, and the layout envisaged by the recommendations.

Cost of Compliance:

The cost of complying with the *Market Rules* at Watson TS is estimated at \$192,000 covering 8 installations.

The switchgear containing the VTs is 34.5 kV metalclad. A price of \$24,000 per cell is reasonable considering the possible modifications required.

Note: GLP has advised that 3 additional Measurement Canada approved VT's per bus to supply the alternate meters for each bus have been installed at Watson TS. These were installed to comply with the IMO requirement for 3 VT's on a 4-wire system. This was completed in August 2003.

Cost Recovery for GLP:

The costs of compliance will be born by GLP.

Increased Costs to Market Participants:

There are no direct cost increases to market participants.

Recommendation:

The IMO recommends the following:

1. That the application for exemption from the Wholesale Metering Standard – Hardware sections 7.4.1 d) and f) be rejected.
2. That an exemption from the Market Rules, Chapter 6, section 4.1.1 and 4.1.1.3 requiring that

PART 3 – DETAILS OF ASSESSMENT

each metering installation to have CTs and VTs be granted for the life of the facility to allow the use of a dedicated set of VTs for the main meter and a second set for the alternate meters, subject to the following conditions:

- The VTs must under all operational configurations accurately reflect the voltage being measured. VTs supplying main meters must be dedicated to that purpose.
- Meter trouble reports (MTRs) will be issued to GLP for all meter installations supplied by the VTs and all are subject to estimates in accordance with Chapter 6 section 11.1.4A and non-compliance sanctions.

PART 4 – TERMS AND CONDITIONS

Effective Date of Exemption (or event causing exemption to become effective)	The date the application was received
Date of Expiration of Exemption <ul style="list-style-type: none"> • If greater than 5 years, the Panel must be satisfied that the circumstances justify a later date • Circumstances which will cause the exemption to immediately expire 	For the life of the facility
Market Rule (s) or related Market Manual(s) from which the Exemption is granted	MR Ch 6 sections 4.1.1 and 4.1.1.3 (part)
Restrictions on the manner of operation and/or additional obligations to be met during the term of the Exemption, if any	None
Monitoring Information Required Information required to be provided by the Exemption Applicant for monitoring by the IMO	None required
Payment of Costs <ul style="list-style-type: none"> • Processing Costs (when introduced) • Incremental Exemption Costs • Settlement amounts to be withheld or repaid 	N/A

PART 4 – TERMS AND CONDITIONS

<p>Reconsideration/ Removal</p> <ul style="list-style-type: none"> • Date on which the Exemption will be reconsidered (<i>if applicable</i>) • Circumstances under which the Exemption will be reconsidered (<i>if applicable</i>) other than unforeseen future change in circumstances 	<p>No foreseen circumstances of reconsideration.</p>
<p>Transferability</p> <ul style="list-style-type: none"> • List the terms and conditions that need to be met to allow for a transfer of this exemption to be approved by IMO staff 	<p>Approval to transfer this exemption may occur once the following criteria have been met:</p> <ol style="list-style-type: none"> 1. the transfer meets applicable terms and conditions set forth in the <i>exemption</i> itself and whether the transfer would affect the ability of the proposed transferee to comply with all of the terms and conditions of the <i>exemption</i>; 2. the proposed transferee is a <i>market participant</i> or undertakes in writing to the <i>IMO</i> to apply for authorization as a <i>market participant</i>; and 3. the extent to which the transfer of the <i>exemption</i> will impact the timely implementation of the plan to become compliant with the exempted obligation (such plan may be the <i>exemption</i> plan, modified as required by the Panel as part of the terms and conditions of the <i>exemption</i>).
<p>Other: Applicable Metering Installations:</p>	<p>None foreseen at this time.</p>

Appendix A Typical Single Line Drawings

