Market Rule Amendment Submission

This form is used to request an amendment to, or clarification of, the *Market Rules*. Please complete the first four parts of this form and submit the completed form by email or fax to the following:

Email Address: Rule.Amendments@ieso.ca
Fax No.: (416) 506-2847 Attention: Market Rules Group
Subject: Market Rule Amendment Submission

All information submitted in this process will be used by the *IESO* solely in support of its obligations under the *Electricity Act, 1998*, the *Ontario Energy Board Act, 1998*, the *Market Rules* and associated policies, standards and procedures and its licence. All submitted information will be assigned the *confidentiality classification* of "Public" upon receipt. You should be aware that the *IESO* will *publish* this *amendment submission* if the *Technical Panel* determines it warrants consideration and may invite public comment.

Terms and acronyms used in this Form that are italicized have the meanings ascribed thereto in Chapter 11 of the *Market Rules*.

PART 1 – SUBMITTER'S INFORMATION

Please enter contact information in full.

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(if applicable) *Market Participant* / *Metering Service Provider* No.[1]: 109661

Market Participant Class: Generator

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PART 2 – MARKET RULE AMENDMENT SUBMISSION INFORMATION

Subject: CMSC and GCG for Aggregated Facilities

Title: CMSC and GCG for Aggregated Facilities

Nature of Request (please indicate with x)

☒ Alteration ☐ Deletion ☐ Addition ☐ Clarification

Chapter: 7, 9 & other Appendix: _____ Sections: _____

Sub-sections proposed for amending/clarifying: _____

[1] This number is a maximum of 12 characters and does not include any spaces or underscore.

PART 3 – DESCRIPTION OF THE ISSUE

Provide a brief description of the issue and reason for the proposed amendment. If possible, provide a qualitative and quantitative assessment of the impacts of the issue on you and the *IESO-administered markets.* Include the Chapter and Section number of the relevant *market rules*.

See attached Part 3.

PART 4 – PROPOSAL (BY SUBMITTER)

Provide your proposed amendment. If possible, provide suggested wording of proposed amendment.

See attached Part 4.

PART 5 – FOR IESO USE ONLY

Technical Panel Decision on Rule *Amendment Submission:* Warrants consideration

MR Number: MR-00372

Date Submitted to *Technical Panel*: August 13, 2010

Accepted by *Technical Panel* as: (please indicate with x) Date:

☒ General ☐ Urgent ☐ Minor August 17, 2010

Criteria for Acceptance: The submission warrants consideration in order to consider whether the proposal would better enable the market to satisfy the market design principle of fairness.

Priority: High

Criteria for Assigning Priority: The questions about fairness need to be addressed.

Not Accepted (please indicate with x): ☐

Clarification/Interpretation Required (please indicate with x): ☐

Technical Panel Minutes Reference: IESOTP 240-1

Technical Panel Comments: The Technical Panel requested that the IESO report back to the Panel on implementation considerations as soon as possible.

Part 3

Background

(Note: All MW quantities stated in this document are approximate and rounded for ease of calculating.)

Thorold Cogen ("Thorold") is a 260MW (nominal) gas fired cogeneration facility located in Thorold, Ontario. The plant design consists of a 170 MW gas turbine and a 90 MW steam turbine that is to be dispatched as a single generation resource by the IESO. Thorold provides process steam to the Abitibi Mill (the "Mill") which has a relatively constant 26 MW electrical load. The Mill is connected to the transmission system via a 230 kV line; Thorold is connected to the Ontario grid via the same line (see figure 1).

The Thorold facility was designed and expected to operate as an "aggregated" facility; based on the aggregation of the 260 MW power generation facilities with the electrical load consumed by the Mill. The potential to aggregate the generator and the load was discussed in great detail with the IESO throughout the development of the project, and the concept of "net load" billing has been extensively discussed and established under the market rules. Based on these discussions and the provisions within the Market Rules, the facility design included aggregation of the Thorold dispatchable generator resource with the non-dispatchable Mill load resource. The two resources would be aggregated as a single Market Participant, Registered Market Participant, and Metered Market Participant by the IESO.

In consultation with the IESO, it was decided that the IESO would dispatch the generator based on the non-aggregated Generator Meter (which measures the total output of the generating plant and where operational telemetry is located) and the aggregated facility would be billed and settled by the IESO based on the aggregated Settlements Meter (which measures the net injection of power into the IESO grid). As an example of this arrangement, when the IESO dispatches Thorold to 260 MW and the Mill consumes 26 MW, the Generator Meter would show 260 MWs of generation and the Settlements Meter would read an injection of 234 MWs into the grid. In this example, Thorold would be required to generate 260 MWs and the Metered Market Participant would settle with the IESO for 234 MW and receive payments for the remaining 26 MW of power consumed by the Mill via an agreement between Thorold and the Mill. It should be noted that this aggregated arrangement of metering and market participation is not common in the IESO Market (In fact Thorold may be the only aggregated facility operating in this manner in the IESO markets).

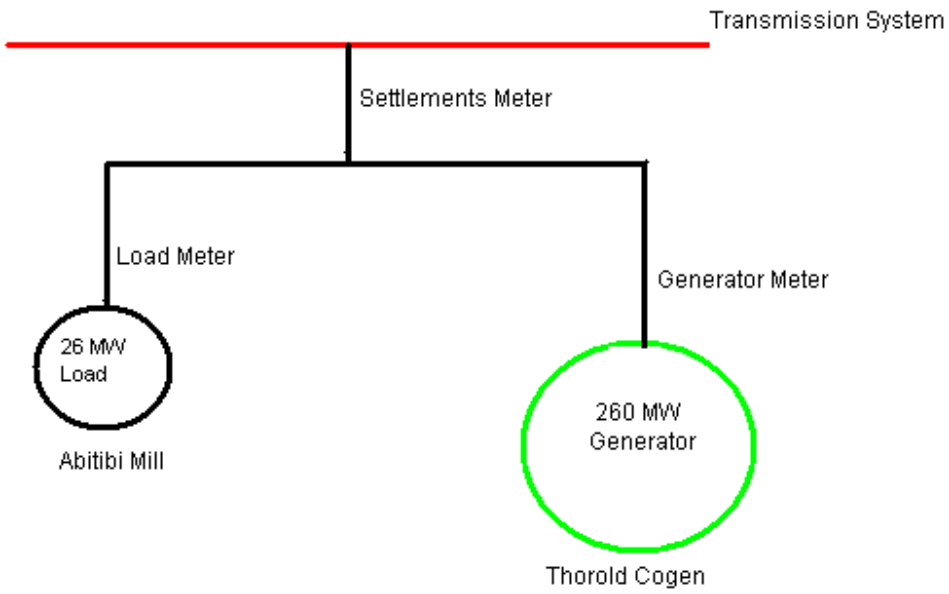

Figure 1

Market Rules Principles

The market Rules were established based on a number of principles which would apply to all Market Participants. Two key principles (among others) include:

a) Market Participants are to be fully compensated to recover their marginal cost of production when constrained on or off, via constraint payments;
b) Non-quick start generators should be offered cost guarantee programs in order to remove risk associated with starting up and coming to market.

The Issues

Once the Thorold Facility was closer to Commercial Operations Date, and upon closer scrutiny by the IESO and Thorold of the Settlements processes and tools, it became evident that the Market Rules as they existed did not adequately handle the unique circumstances associated with the aggregated configuration proposed in the design of the Thorold facility. These shortcomings were not apparent to either the IESO or Thorold in the earlier discussions and only became apparent when both the IESO and Thorold reviewed the metering and settlements associated with this unique aggregated facility in greater detail. Further complicating the issue was the fact that the market rules were evolving at the same time.

The current market rules and settlements tools present two major issues for the Thorold facility:

1) Constraint Payment Issue

Under the Market Rules, when Thorold is constrained on, it will receive the HOEP and a constraint payment only for the MWs injected at the **Settlement Meter**. As a result, even though the IESO dispatches the facility based on the **Generator Meter** and since payments will be based on the **Settlement Meter**, it will not collect a constraint payment associated with its full generation (i.e. it will not receive constraint payments for the 26 MWs of electricity consumed by the Mill).

Furthermore, on December 9, 2009 a number of Market Rule Amendments came into force, which further exacerbated the issue. Under the amended rules, the SGOL and DACP cost guarantee programs were modified such that generators were no longer able to submit costs associated with minimum run operation; instead the IESO now calculates such costs themselves based on the generator offers and Settlement Meter readings. Prior to the December amendments, some of the shortfall in constraint payments could have been recovered from the IESO through a cost guarantee payment because the generator could calculate this shortfall and submit it directly to the IESO through the cost guarantee program. However, as a result of the 2009 market rule changes, there is now no mechanism for the generator to recover any constraint payments associated with the Mill load.

2) Cost Guarantee Issue

The current Market Rules for qualifying for Generator Cost Guarantees under the DACP and SGOL programs requires the generator to reach its Minimum Loading Point as measured at the Settlements Meter. For most (if not all) generators operating in the IESO markets, the **Settlement Meter** and the **Generator Meter** are the same. However, for this aggregated facility, because the **Settlements Meter** is not the same as the **Generator Meter**, if Thorold was dispatched to its minimum load of 125 MW, the Settlements Meter would record 99 MW and Thorold would be deemed to have not reached its minimum loading requirement of 125 MW; the IESO would thus render Thorold ineligible for the Generator Cost Guarantee.

This is contrary to the intent of the Market Rules which were designed to compensate all non-quick start generators if they have not recovered their start-up and minimum generation costs when they are dispatched by the IESO through a Cost Guarantee program. Without the Generator Cost Guarantee programs, non-quick start generators would not come to market and the Thorold facility is no exception.

It should be noted that the facility was designed to be aggregated with the Mill from inception, and has a metering plan approved by the OPA to reflect this. In addition, the IESO has been extensively involved with the design and intended operation and settlements of Thorold and the Mill as an aggregated facility.

Receiving constraint payments and Generator Cost Guarantees are basic tenets of the Market Rules; All generators must be allowed to recover their costs. Thorold is no different and should be allowed to receive any constraint payments and must be eligible for Generator Cost Guarantees as intended by the Market Rules. Anything else would be inequitable and an inappropriate application of the Market Rules.

In summary, Thorold is requesting expedited Market Rule amendments that will allow the facility to aggregate and:

i) receive constraint payments to the full extent that it is dispatched by the IESO
ii) be eligible to receive Generator Cost Guarantees under the DACP and SGOL program.

Part 4: Proposal

While we cannot comment on all the Market Rules, Manuals, and IESO process changes that would be required to affect our request, we propose the following potential solution:

1) The IESO continue to pay constraint payments as it currently does, except instead of determining AQEI/AQEW from the Settlements Meter, it will use the Generator Meter for calculating constraint payments for aggregated facilities such as ours.

2) For aggregated facilities utilizing the Generator Cost Guarantees under the DACP/SGOL programs, the IESO will check compliance for the Cost Guarantee (i.e. that the minimum loading point has been reached) and will calculate Cost Guarantee payments using AQEI from the Generator Meter rather than the Settlements Meter.