



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.	
Name: <u>IESO Staff</u>	
(if applicable) <i>Market Participant / Metering Service Provider</i> No. ¹ : <u>N/A</u>	<i>Market Participant Class</i> : <u>N/A</u>
Telephone: <u>905-855-6464</u>	Fax: _____
E-mail Address: <u>rule.amendment@ieso.ca</u>	

PART 2 – MARKET RULE AMENDMENT SUBMISSION INFORMATION

Subject: <u>Connection Assessment</u>	
Title: <u>Change Connection Assessment Requirements for Embedded Generation Facilities</u>	
Nature of Request (please indicate with x)	
<input checked="" type="checkbox"/> Alteration	<input type="checkbox"/> Deletion
<input type="checkbox"/> Addition	<input type="checkbox"/> Clarification
Chapter: <u>11</u>	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*.

Background:

The Ontario Power Authority (OPA) and the Ontario Energy Board (OEB) have developed the Standard Offer Program for small generators that use renewable resources. This program was created in response to an August 18, 2005 directive from the Minister of Energy for the OPA and OEB to work together to address development barriers that many proponents of smaller generation projects were unable to overcome. Under the Standard Offer Program these generators up to 10 MW in size would connect to electricity distribution systems i.e. would be embedded within the local distribution company's system. For further information on the Standard Offer Program please refer to: <http://www.powerauthority.on.ca/Page.asp?PageID=1224&SiteNodeID=161>

Issue:

The OPA, and prospective developers have identified an issue with respect to the embedded generation connection assessment requirements specified in the market rules. The issue raised is whether it is appropriate that a 10 MW embedded facility be required to undergo the IESO Connection Assessment & Approval process.

Currently, the market rules specify that the IESO conduct a connection assessment for new and modified connections:

1. for all facilities that are directly connected to the IESO controlled grid; and
2. for generators embedded within a distribution system only when the proposed facility is rated at 10 MVA or higher.

These connection assessments are undertaken by the IESO to determine the impact of the new or modified connection upon the reliability of the IESO-controlled grid. Where adverse reliability impacts are identified, the IESO proposes mitigating measures to eliminate the identified reliability impact.

Currently the definition of connection applicant in chapter 11 of the market rules includes a distributor within whose distribution system a market participant or person seeks to establish an embedded generation facility rated at 10 MVA or higher. Since 10 MVA is equivalent to 9 MW (for a generation facility that meets the power factor requirements of the Market Rules – see paragraph below), the existing market rules obligate distributors to apply for a connection assessment for proposed embedded generation facilities above 9 MW.

Section 3.1.3 of Chapter 4 of the market rules states: “Each *embedded generator* whose *embedded generation facility* includes a *generation unit* rated at 10 MVA or higher or whose *embedded generation facility* is comprised of *generation units* whose net output is greater than 50 MVA shall ensure that its equipment meets all applicable performance standards in Appendix 4.2.” This rule specifies the need for an embedded generation facility which meets the threshold requirements to, in turn, satisfy the performance standards set out in Appendix 4.2, which includes reactive power capabilities.

PART 3 – DESCRIPTION OF THE ISSUE

The connection assessment process may be a significant barrier to the development of these small embedded facilities. The host distribution system is required to apply to the IESO for a connection assessment on behalf of the facility proponent. This will increase development costs for these facilities and will also increase the length of time necessary to put them in-service.

There is a need to modify the definition of a connection applicant to permit generation projects that choose the Standard Offer Program and build 10 MW facilities, to connect without having to undergo a Connection Assessment Process. Assuming that all applicable generation facility standards are met an embedded 10 MW facility will have no more adverse impact on the reliable operation of the IESO-controlled grid than an embedded 10 MVA facility. The proposed modification would align the connection assessment threshold with that developed for the purposes of the Standard Offer Program.

The difference between the MW and MVA facility ratings is that the MVA rating is inclusive of real power and reactive power components. Real power is measured in megawatts (MW) and reactive power is measured in megavars (MVAR). The combination of these is apparent power, which is measured in mega volt-amps (MVA). Equipment ratings in power systems are usually given by their apparent power, or MVA capability. This proposed change only represents a modification to the threshold for the Connection Assessment and Approval process. It does not alter other market rule requirements and obligations.

Similarly, nothing in this proposed change eliminates the need for Standard Offer Program participants to satisfy applicable Distribution System Codes or IESO market rule technical requirements. Operating standards and technical requirements for embedded facilities, which are specified in Chapter 4 section 3 of the market rules, will apply to Standard Offer Program participants.

PART 4 – PROPOSAL (BY SUBMITTER)

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

The definition of connection applicant in Chapter 11 of the market rules should be amended to change the threshold for the requirement for a connection assessment for an embedded generation facility from 10 MVA to greater than 10 MW.

PART 5 – FOR IESO USE ONLY

<i>Technical Panel</i> Decision on Rule Amendment Submission: _____	
MR Number: <u>MR-00321</u>	
Date Submitted to <i>Technical Panel</i> : <u>June 7, 2006</u>	
Accepted by <i>Technical Panel</i> as: (please indicate with x)	Date:
<input checked="" type="checkbox"/> General <input type="checkbox"/> Urgent <input type="checkbox"/> Minor	<u>June 13, 2006</u>
<p>Criteria for Acceptance: It identifies ways to simplify the market and/or reduce participant or IESO costs. Modifying the connection assessment threshold for embedded generation facilities developed under the Standard Offer Program will make it easier for these facilities to be established. The host distribution system will not be required to apply to the IESO for a connection assessment on behalf of the facility proponent. This simplification, in turn, will lower the development costs for these facilities and will reduce the length of time necessary to put them in-service.</p>	
Priority: <u>High</u>	
<p>Criteria for Assigning Priority: Practical Consequences. The existing market rule requirement for a connection assessment for embedded 10 MW facilities is a disincentive to their development. The transparent lowering of this development hurdle will provide an incentive for project proponents to participate in the Standard Offer Program and to develop facilities up to 10 MW in size. The Ontario Power Authority's Standard Offer Program is an integral part of the Ontario government's policy for the development of small, embedded generation facilities that use clean or renewable resources. The Ontario government has announced a goal of having 2700 MW of renewable generation capacity installed in the province by 2010 and this market rule amendment will assist industry in meeting the provincial government's policy objectives without compromising the reliable operation of the IESO-controlled grid.</p>	
Not Accepted (please indicate with x): <input type="checkbox"/>	
Clarification/Interpretation Required (please indicate with x): <input type="checkbox"/>	
<i>Technical Panel</i> Minutes Reference: <u>IESOTP 188-1</u>	
<i>Technical Panel</i> Comments: _____	