Attachment 1 – OPG Exemption Application Plan

The following notes apply to OPG's Exemption Application in respect of the Ontario Market Rules Chapter 11 definition of *"minimum loading point"* as it relates to the units at OPG's Lennox Generating Station.

Part 4 – Submission in Support of OPG's Exemption Application

1. Introduction and Context:

The current registered minimum load points ("MLP") for Lennox units do not conform to the definition contained in Chapter 11 of the Ontario market rules.

The definition is as follows:

minimum loading point means the minimum output of *energy* specified by the *market participant* that can be produced by a *generation facility* under stable conditions without ignition support;

The current registered MLPs of 28 MW and 43 MW for Lennox G1/G2/G4 and G3 respectively <u>do</u> require ignition oil support regardless of primary fuel being utilized.

Historically, Lennox units have operated at minimum load points as low as 43 MW since being placed in service in the 1970s. Minimum load points were reviewed in 1988 and again in 1993. Following testing and a review of turbine limitations, the minimum load points on units 1, 2 and 4 were lowered to 28 MW in September 2001¹. These historical changes support the general operational benefit of low minimum loads and clearly indicate that these benefits were recognized pre-market opening.

If OPG was to discontinue its practice of offering the lowest MLPs possible (taking into consideration both technical and environmental limitations), the minimum loads for Lennox units would be increased to approximately 125 MW.

¹ Unit 3's minimum of 43 MW is based on a slightly different LP rotor design than units 1, 2 and 4. It is currently planned for later this year to change the Unit 3 LP rotors making them consistent with units 1, 2 and 4. At that point, unit 3's MLP would also be 28 MW.

- 2. Plan Details
 - The exemption for which OPG is applying is for the life of the Lennox facilities.
 - OPG does not plan to modify its equipment nor does it intend to conduct its operations differently during the period for which the exemption would be in effect.
 - It is OPG's submission that granting this application would benefit both the operation and the economics of the Ontario market, and hence submits that there are no costs attributable to the granting of this exemption (see Section 3 below).

3. Discussion

Historically, Lennox GS has provided reliable, large-capacity generation sources with quick ramping capability and low stable minimum loads. Such general attributes were considered by the IESO as recently as 2009 during EDAC stakeholdering (see link below).

http://www.ieso.ca/imoweb/pubs/consult/se21-edac/se21-edac-20090129-MinimumLoadingPoint.pdf

Included in the above-referenced document is a discussion of the negative impacts associated with high MLPs, including reduced dispatch flexibility and synchronized operating reserve. The IESO's position stated at page 5 of that document is summarized as follows:

"The IESO found that increases to Minimum Loading Points can have substantial negative impacts...and therefore removes the need for generators to increase their Minimum Loading Point ... beyond the technical or environmental requirements of the generation facility."

4. Recommendation

OPG respectfully recommends that the exemption application be approved, as submitted.