

Power Workers' Union Interrogatories to the IESO

Interrogatory: No. 2

Reference: IESO Report 0516, Lennox GS Deregistration Analysis, Page 2, Paragraph 3, Lines 6-11:

Under the current limit structure, the transfer capability to the Ottawa area is dependent on the number of Lennox units in service. More than two units are required to realize additional benefits by arming local load rejection. Extreme weather conditions in the Ottawa area can result in an FIO (Flow Into Ottawa) as high as 1950MW and under certain outage conditions may require all four Lennox units and at least 150 MW of load rejection armed in Ottawa to reliably supply the zone. The operating documents currently in force only allow load rejection in Ottawa to be armed if Lennox units are synchronized to the grid. A review of these operating limits to recognize the new connection to Quebec and its associated facilities is expected to result in an improvement in the transfer limit and the effectiveness of allow arming of load rejection in Ottawa when all Lennox units are disconnected from the grid. As a result, Lennox support may no longer be required beyond September 2009 to reliably supply the Ottawa zone if sufficient load rejection can be armed.

- a) Do the criteria set out in the Ontario Resource and Transmission Assessment Criteria (ORTAC)
(https://ieso.ca/imoweb/pubs/marketAdmin/IMO_REQ_0041_TransmissionAssessmentCriteria.pdf) apply in the above review?
- b) If so, please explain how the operating limits that recognize the new connection to Quebec and its associated facilities that are “expected to result in an improvement in transfer limit and the effectiveness of allow arming of load rejection in Ottawa when all Lennox units are disconnected from the grid”, meet the relevant criteria of the ORTAC.

IESO Response:

- a) Yes. The criteria set out in the ORTAC document apply in the review of the Lennox GS Deregistration Analysis. Specifically, the FIO power transfer limit is dictated by the voltage stability criterion described in section 4.5 on the ORTAC.
- b) Additional reactive compensation facilities are being installed in the Ottawa area, at Hawthorne TS, as part of the new HVDC interconnection project. These

additional facilities are expected to provide improvements to the transfer limit equivalent to the improvements provided by Lennox.