Feedback Form

Gatineau End-of-Life Study Webinar 2- August 11, 2022

Feedback Provided by:

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Title: Click or tap here to enter text.

Organization: Click or tap here to enter text.

Email:

Date: 1st September 2022

To promote transparency, feedback submitted will be posted on the "insert engagement webpage" unless otherwise requested by the sender.

Following the INSERT DATE engagement webinar, the Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on "insert the items discussed during the webinar". The webinar presentation and recording can be accessed from the <u>engagement web page</u>.

Please submit feedback to <u>engagement@ieso.ca</u> **by September 1, 2022**. If you wish to provide confidential feedback, please submit as a separate document, marked "Confidential". Otherwise, to promote transparency, feedback that is not marked "Confidential" will be posted on the engagement webpage.



Торіс	Feedback
What information should be considered in finalizing the recommendations?	

Торіс	Feedback
How can the IESO continue to engage with the community as these recommendations are implemented, or to help prepare for future bulk and regional planning work?	

General Comments/Feedback

Load meeting Capabilities

It is not clear from any of the documents that have been posted what exactly is the critical contingency condition that limits the Load Meeting Capability for the Ottawa Area.

I'm assuming that it corresponds to the situation with one of the 500kV circuits into Hawthorne TS out-of-service and having to respect the subsequent loss of its companion 500kV circuit into Hawthorne TS.

I'm also assuming that this corresponds to a system condition with zero transfers across the interconnections with Hydro Quebec, and with the Eastern Ontario hydroelectric facilities operating at their 98%-of-time outputs, to comply with ORTAC.

If my assumptions are correct, could be please clarify what remedial action was assumed to re-prepare the system for the subsequent contingency?

Since the Ontario-Quebec Electricity Trade Agreement is scheduled to expire in 2023 and there is no guarantee that it will be renewed, then, *strictly for the purpose of this study* I would have thought that bringing the TransCanada Napanee generating station into service immediately following the outage to the first 500kV line would be beneficial by providing an injection directly into the 230kV system connected into St Lawrence TS.

With the two 500kV circuits into Hawthorne TS out-of-service, the LMC for the Ottawa Area would therefore be constrained by the maximum combined, coincident injection that could be achieved via the 230kV circuits of both the Gatineau corridor and the Lennox/Hinchinbrooke/St Lawrence corridor, before hitting a system limit.

Slide 28 of the 1st Webinar shows an existing Load Meeting Capability (LMC) of **1700MW** for the Ottawa Area for the critical system condition.

And Slide 27 of the same Webinar shows that the current LMC for the Peterborough to Quinte West Area is **270MW**.

Slide 41 of the same Webinar shows that installing a new 230kV double-circuit line to Dobbin TS from either Cherrywood or Clarington would eliminate the existing bottleneck presented by circuit P15C between Cherrywood TS & Dobbin TS and achieve an increase in both of these LMCs of:

- 170MW For the Peterborough to Quinte West Area from 270MW to 440MW
- 250MW For the Ottawa Area from 1700MW to 1950MW

Could you please indicate what transmission element becomes limiting for an enhanced Ottawa Area LMC of **1950MW** and also whether this is a 'local' restriction (i.e. is it confined to just a particular section of a circuit)?

During the latest webinar, I believe mention was also made of deploying load rejection to enhance the Ottawa Area LMC.

Could you please confirm that load rejection would *not be required* in order to achieve an LMC of **1950MW** for the Ottawa Area?

Replacing the existing single-circuit 115kV line between St Lawrence TS and Merivale TS with a new 230kV double-circuit one would not only address concerns about an extreme contingency involving the Hawthorne-to-Merivale corridor, but should allow an increase in the Ottawa Area LMC.

Slide 41 of the 1st Webinar shows that this new line would achieve an enhanced LMC for the Ottawa Area of 2050MW (an increase of *only* 100MW) *but for the condition with circuits* T22C & T33E removed from service.

Could you please indicate what LMC for the Ottawa Area would be possible *with circuits T22C* & *T33E refurbished*? And could you also please indicate which transmission element of the two 230kV supply corridors becomes the limiting component?

Slide 25 of the 2nd Webinar shows Non-Wires Alternative (NWA) values of **100MW** (for the Peterborough to Quinte West Area) and the **480MW** (for the Ottawa Area).

Could you please explain where these NWA values come from? Shouldn't they be the same as the improvements in the LMCs that the new 230kV double-circuit line to Dobbin TS and the refurbishment of the Gatineau Corridor will achieve i.e *170MW* & 250MW respectively?

Extreme Contingency involving the Hawthorne - Merivale Corridor.

Slide 12 states that consideration of an 'extreme event' such as the loss of an entire transmission corridor and its effect on the reliability of the local Ottawa Area is beyond the requirements of applicable planning criteria.

I disagree. ORTAC (Clause 2.7.3) refers to the NPCC requirement that analytical studies *shall* be conducted to determine the effect of certain extreme contingencies. And where serious consequences are identified, an evaluation *must* be conducted of possible measures to mitigate the consequences.

While the loss of the Hawthorne to Merivale corridor would result in a significant loss of load within the City of Ottawa, the bigger concern would be the length of time before that supply could be restored.

With the recent experience on 11th August, that resulted in a major supply interruption to the Toronto downtown core, restoration of the load took approximately 8 hours *even with* alternative sources of supply readily available from both Manby TS and Cherrywood TS.

For the Hawthorne - Merivale corridor, for which only a very limited alternative source of supply would be available via circuits T33E/E34M (from Clarington TS via Almonte TS) and circuits C3S/M32S (from Chats Falls, via South March TS), restoration of the bulk of the interrupted load would necessitate at least one of the 230kV circuits of the Hawthorne - Merivale corridor to be returned to service. Depending on the severity of the damage sustained by this corridor, this could take days, not hours.