IESO Reliability Standards Review Webinar: Feedback Form

Meeting Date: August 26, 2020

Date Submitted: 2020/09/15 Feedback Provided By: Organization: Ontario Power Generation Main Contact: Rose DeSantis

Following the August 26, 2020 webinar on the planning assumptions related to resource adequacy, the IESO is seeking feedback from participants on the areas to prioritize, the methodology and assumptions, as well as the potential impacts of the proposed changes on participant's businesses (outage planning, investment decisions, etc.).

The IESO will work to consider feedback and incorporate comments as appropriate and post responses on the engagement webpage. The referenced presentation can be found under the <u>August</u> <u>26, 2020 entry on the Reliability Standards Review webpage.</u>

Please provide feedback by September 16, 2020 to <u>engagement@ieso.ca</u>. Please use subject: Feedback: Reliability Standards Review. To promote transparency, feedback submitted will be posted on the <u>Reliability Standards Review webpage</u> unless otherwise requested by the sender.

Stakeholder Feedback:

Table 1: Areas to Prioritize: Evaluate the appropriate level of non-firm imports to be usedin Resource Adequacy Analysis



Areas to prioritize:

Evaluate the appropriate level of non-firm imports to be used in Resource Adequacy Analysis

OPG supports the IESO's plan to evaluate the use of non-firm imports and the forced outage assumptions used in resource adequacy analysis. The comments discussed in this document are related to the IESO's presentation on August 26, 2020 on the Reliability Standards Review.

NPCC Guidance states that the IESO needs to make allowance for assistance over interconnections with neighboring areas. Allowances for economic, or nonfirm imports tend to decrease capacity requirements.

What needs to be considered in the Methodology are the following:

- Excess capacity available in neighbouring areas
- Excess supply available in neighbouring areas in real-time (timing of each area's peak demand)
- Sufficient intertie capacity (max limits) with consideration for constraints and limitations.
- Imports likely to flow under tight supply conditions/prices
- Deliverable within Ontario what would flow on a market perspective
- Ability to manage non-discretionary outage (regulatory requirements) - regulatory licensing outages
- The study should be divided into summer and winter periods in order to match the capacity planning periods and seasonal assessments.
- No more than 4 years should be considered when reviewing historical data for this study for the reason that any older information may no longer be relevant due to changing supply/demand balance in other jurisdictions.
- Firm imports obtained from the Capacity Auction also need to be factored into the methodology including any competition from such.
- The benefits from the use of non-firm imports needs to be balanced with the potential increased difficulty in scheduling outages.

Торіс	Feedback
Methodology and assumptions	OPG is in the process of assessing options and the potential impact from the use of non-firm imports. We would be happy to share our findings with the IESO in the future.
Potential impacts of the proposed changes on participant's businesses (outage planning, investment decisions, etc.).	A decrease in capacity requirements, in conjunction with the use of extreme weather forecasting in outage planning, will make it more difficult to schedule outages during the summer months. Infrastructure is aging and without investment in maintenance or sustaining capital the frequency and duration of outages may increase.

Table 2: Transmission Transfer Capabilities & Assistance Over Interconnections

Торіс	Feedback
Transmission Transfer Capabilities & Assistance Over Interconnections	Reliance on assistance from interconnections with non-firm imports may not be realizable. This is corroborated by the IESO's recently proposed market manual change to enable the option of entering into a Reliability Must-Run contract with Manitoba Hydro to provide "additional firm capacity to ensure availability of needed additional energy" between September 1 to October 31 prior to the completion of the EW tie line. Although this appears to be a firm import versus a non-firm import, it demonstrates the difficulty in relying on other jurisdictions solely through economic forces. OPG would like the IESO to provide the assessment in arriving at this decision, its impact on resource adequacy plans and its impact on both supply and load in the Northwest in particular if the import is constrained on.
Methodology and assumptions	N/A
Potential impacts of the proposed changes on participant's businesses (outage planning, investment decisions, etc.).	N/A

Table 3: Demand Uncertainty – Climate Change

Торіс	Feedback
Demand Uncertainty – Climate Change	The demand profile of recent years and existing climate science projections indicate that the demand uncertainty determined based on the past 31 years of weather data may not sufficiently represent the current and future uncertainty. In order to adapt to the changing climate and the market response to those physical impacts, the IESO should consider incorporating climate projections into the model.
Methodology and assumptions	The IESO (and NPCC peers) should incorporate the best available climate change data into forecast modelling. OPG has been evaluating various methodologies for applying climate models to forecasts for discrete stations. This is a very difficult task that depends on a broad range of assumptions. We would welcome the opportunity to discuss further and collaborate on a broader application of this principle.
Potential impacts of the proposed changes on participant's businesses (outage planning, investment decisions, etc.).	Improved projections and broader understanding of the climate considerations incorporated would increase greater market participant confidence in the forecasts and could improve generation and outage planning.
	Improved projections could also inform potential investments in generation upgrades or expansions based on regional opportunities and projected streamflow levels.

Table 4: Forced Outage Considerations/Fuel Security to be used in ResourceAdequacy Analysis

Торіс	Feedback
Forced Outage Considerations/Fuel Security to be used in Resource Adequacy Analysis	Currently the IESO is carrying an extra 500MW in winter for contingency planning which is referred to as the Additional Contingency Allowance (ACA). In the past this contingency was used to address coal units failing to start due to frozen or wet coal. The IESO is assessing the need to keep this contingency. During the 2020's Pickering NGS will be retiring, and
	nuclear refurbishments will continue. More reliance on and increased utilization of gas plants will occur as a result. This was discussed in the January 2020 APO in Section 4.4 on page 20.
	During the winter months, gas generating capacity may become unavailable due to pipeline outages and the requirements for heating load. In the past there have been seasonal issues with arranging fuel at thermal plants when needed which may be exacerbated with increased utilization.
	The IESO should consider retaining the contingency allowance for the gas fuel supply uncertainty during the winter months and consequently procuring additional capacity for the winter season when needed.
Methodology and assumptions	It would be beneficial if the IESO would incorporate fuel insecurity into the forecast and procure additional capacity for the winter season to meet this need. The Capacity Auction may be the appropriate mechanism to address short term seasonal needs.
Potential impacts of the proposed changes on participant's businesses (outage planning, investment decisions, etc.).	Natural gas pipeline constraints have serious implications for reliability and price volatility.
	Increased reliance on gas-fired electricity generation increases the potential for fuel interruption to supply certain facilities during the winter season.

General Comments/Feedback: