IESO Reliability Standards Review webinar Feedback Form August 26, 2020

Date Submitted:	Feedback Provided By:	
2020/09/16	Company Name:	Capital Power Corporation ("Capital Power")
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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 August 26, 2020 entry on the Reliability Standards Review <u>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 Reliability Standards Review <u>webpage</u> unless otherwise requested by the sender.**



Торіс	Feedback
Areas to prioritize	Capital Power supports the IESO's plans to review its assumptions and approach to modeling forecasted forced outage rates and non-firm imports. Priority should also be assigned to the areas of demand uncertainty and transmission capability.
Methodology and assumptions	
	 Demand Uncertainty The IESO should undertake to update its demand uncertainty assumptions
	to incorporate projected changes in weather patterns (e.g. average temperatures, multi-day heat events, extreme weather scenarios) related to climate change. Changes in weather patterns arising from climate change may result in shifts to forecasted demand curves without necessarily reflecting changes in forecasted average temperatures. The IESO should prioritize ensuring that its resource adequacy model is accounting for projected changes in weather patterns due to climate change. Assumptions and modeling techniques should be transparently communicated so that participants can reproduce the IESO's base case and consider different sensitivity scenarios for the purpose of anticipating and responding to future system needs.
	• The IESO's resource adequacy model should consider scenarios under which the ICI program is continued, terminated, or replaced by alternative demand-side resources/incentive programs, including DERs. It is not yet clear what the future is for the ICI program in Ontario. The IESO's resource adequacy modeling should transparently consider scenarios where the ICI program is discontinued and/or replaced with alternative demand-side incentive programs and participation from DERs. The most recent DERs



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	survey put to market participants suggests there is some uncertainty regarding the amount of behind-the-meter resources potentially available to the system, so any assumptions regarding the availability of these resources should be transparently stated and incorporated into the model.	
	Forced Outage Rates	
	• The IESO should consider whether changes in fleet operation will impact project forced outage rates. It appears to be prudent and reasonable to undertake a review of whether the winter ACA is still required. However, and further to comments provided above, it is not yet clear how the IESO is modeling the potential impact to fleet operations and potential derates resulting from changes to weather normalized demand patterns. Projected forced outage rates need to consider the extent to which the existing fleet will be challenged to respond to changes in weather normalized demand. To the extent that the IESO has changed its practices with regards to permitting the flexible scheduling of planned outages, forecasted forced outage rates should also consider any impact these changes may have on fleet performance going forward.	
	Assistance Over Interconnections + Transmission Capability	
	• Capital Power supports the IESO's efforts to thoughtfully consider the extent to which non-firm imports may be included in resource adequacy assumptions. This analysis should include the expected impacts of weather-related demand and future transmission outages. Recent events in California have demonstrated that over-reliance on non-firm imports during weather events may lead to reliability issues requiring intervention from the	



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	system operator. Again, shifts in weather patterns due to climate change may have profound effects on demand curves and system requirements. These effects may not be readily apparent from projected changes in average temperatures. Changes to intra-day temperatures, the duration of multi-day weather events and correlation with neighbouring jurisdictions are all factors that need to be considered when forecasting the availability of non-firm imports. Planned internal and external transmission outages and/or constraints should also be modelled and considered as part of this analysis.
Potential impacts of the proposed changes on participant's businesses (outage planning, investment decisions, etc.).	Accuracy, transparency, and reproducibility are the most critical features of the resource adequacy model. Capital Power relies heavily on the IESO's assumptions and forecasted projections when considering all operational and investment decisions relating to existing and potential future assets. Capital Power is most concerned with ensuring that the IESO's resource adequacy model is to the greatest extent possible, a transparent and accurate reflection of forecasted system needs. To the extent that avoidable errors are incorporated into the model, confidence in the system operator's forecasted needs over both the short and long term is undermined. Overstating or over-forecasting system requirements leads to unnecessary investment in system resources, while understating requirements leads to situations where the market operator and policy makers must react quickly, potentially overpaying for resources that could have been better planned had system needs been communicated earlier. Comments are offered here for the purpose of helping to identify areas where the IESO may focus with the aim of minimizing avoidable errors. Efforts to increase the accuracy and reliability of the forecast will help support better planning decisions and enhance opportunities for competition, thereby lowering costs for all consumers.



General Comments/Feedback:

Capital Power appreciates the opportunity to provide the comments on the IESO's review of its modeling of resource adequacy in accordance with applicable reliability standards. Capital Power also supports the comments and feedback provided by the Association of Power Producers of Ontario ("APPrO") of which it is a member organization.

