May 20, 2020

On May 20, 2020, the IESO delivered a webinar to provide information to stakeholders regarding upcoming changes to scheduling inputs used for variable generator (VG) resources that are expected to be implemented to the IESO's scheduling tools later this year. During the webinar, stakeholders requested additional data on how often the VG forecast was disabled by the IESO in the past and whether it has any impact on Hourly Ontario Energy Prices (HOEP). The IESO has conducted some analysis in response to this request which has been posted to the IESO's website <u>here</u>, where more information on the VG Forecasting Tool webinar can be found.

Frequency and Duration the VG Forecast Tool Was Disabled Between 2018-19

Between 2018 and 2019, the 5-minute VG forecast tool was disabled 189 times for approximately 8% of the time. In 75% of these instances, the tool was re-enabled within 7 hours. Of the remaining 25% of the time, the tool was re-enabled within 24 hours with the exception of one instance where the tool was disabled for up to 48 hours.

<u>NOTE</u>: The frequency and magnitude of the VG forecast tool issue is dependent on the number of VG resources under mandatory dispatch and their offered quantities during the instances when the VG forecast has been disabled.

Impact on HOEP

As outlined during the presentation, the IESO wants to use the most accurate input into scheduling. For resources under mandatory dispatch, when the forecast is disabled, each resource's max capacity is used to reflect its capability. The max capacity value is typically much higher than what ambient conditions can provide so it is an unrealistic reflection of available supply. Cumulatively, unrealistically high supply from the VG resources that are on mandatory dispatch when the forecast is disabled can result in a lower market clearing price. It is difficult to precisely measure and make definitive judgements about the degree to which an individual input contributed to a market pricing outcome because of the multitude of, inputs, factors and dynamics that simultaneously and collectively can contribute to price formation. That being said, the IESO believes replacing the current input with the 5-minute forecast will significantly improve the accuracy of the input which in turn will improve price fidelity and market efficiency.

