

IESO Engagement

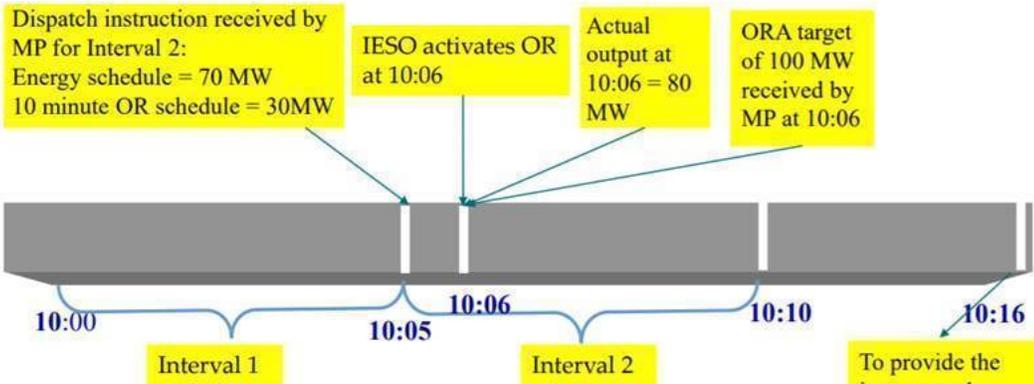
From: Mike Zajmalowski
Sent: April 24, 2020 10:52 AM
To: IESO Engagement
Cc: Dale Fitzgerald; Diljeet Singh; Steven Ferenac; Mike Zajmalowski; Dustin Dmytrow
Subject: Improving Accessibility of Operating Reserve

Hi

Northland Power inc. (NPI) provides the following observations/comments regarding the material presented on March 30, 2020 from the Improving Accessibility of Operating Reserve meeting.

- Generally, NPI understands the need to recover payments made to participants for Operating Reserve that were activated and paid if the resource does not actually provide the amount of operating reserve that was it compensated for.
- That said, NPI does not agree with the framework that the IESO is contemplating as it appears as though there are design flaws in how participants are treated from a potential compliance standpoint. The issue relates to how the IESO is viewing a participant's overall compliance with ORAs. The example below was taken from the engagement site (February 10, 2020). On the surface the example doesn't seem to identify any material issues. However if you add the condition that this Generator is a 100 MW generator (that has offered a combined 100 MWs in the energy market based on its capability to generate a maximum 100 MW), then it creates issues.
- The IESO has repeatedly recognized and acknowledged that it's difficult for resources to always be right on dispatch – giving participants a deadband that if their output was within a deadband, the IESO's Compliance Division (MACD) would not pursue an investigation into the resource being off dispatch.
- Add another variable to the example below – this 100 MW generator is also registered in the RT-GCG program. Its registered MLP is 70 MW. The requirement of the RT-GCG program is for generators to operate at or above their MLP for their entire MGBRT. Meaning if for example the resource was generating at 69 MW for any 5 minute interval it would by definition not meet the requirements of the RT-GCG program and could be subject to not getting any of their costs covered for a RT-GCG start. Therefore there is an incentive to ensure that you are at least at or above your MLP in order to remain outside of the requirements. So in this example you have contradicting drivers. This isn't a hypothetical example. This is a very real example.
- My issue in this example is that if a resource was generating at 70.1 MW (not 80), and received an ORA for 30 MW, requesting it to be at 100.1 MW, it would therefore not meet the ORA and could be referred to MACD for further sanction consideration. Now consider the options MACD has in assessing a compliance infraction (see picture below). One of the variables MACD can consider is breach history. So here you are creating a framework that identifies failures of ORAs and potentially refers those cases to MACD applying a framework that in NPI's opinion is flawed.
- By following this design the IESO's programs will negatively impact participants one way or another. You have the RT-GCG program to meet IESO operability needs, and you want to incent participants to offer in the operating reserve market, but you have contradicting drivers between the RT-GCG program and OR markets – with compliance implications.

Generator OR Activation Timeline and Target



- 1) Pre-activation: Energy Schedule = 70 MW and OR (10 minute) = 30 MW
- 2) During Activation the actual output is 80 MW. Total OR activated was 30 MW
- 3) Post activation: OR activation target expected to be at or above 110 MW

To provide the incremental energy of 30MW by 10:16 the expected output needs to be at or above 110 MW



Impact Level	Non-Compliance Level (Severity and Breach History)							
	Low		Moderate		High		Severe	
	Range Limit		Range Limit		Range Limit		Range Limit	
	Min	Max	Min	Max	Min	Max	Min	Max
Low Little or None	\$2,000	\$25,000	\$2,000	\$50,000	\$3,000	\$75,000	\$5,000	\$100,000
Medium Material	\$2,000	\$100,000	\$4,000	\$250,000	\$6,000	\$450,000	\$10,000	\$600,000
High Severe	\$4,000	\$250,000	\$8,000	\$500,000	\$12,000	\$750,000	\$20,000	\$1,000,000

Note: matrix can be used to assess penalties on a per breach basis or as one aggregated breach.

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Northland Power Inc.

d: [REDACTED] | c: [REDACTED]

