Q. Deferral of 2015, 2016 and 2017 Supply Costs Application

Please discuss the costs associated with a GT on line for the provision of spinning reserve. Are the fuel costs provided only those for startup and for maintaining minimum load? Or do the costs for spinning reserve also reflect any above-minimum load at which the unit is operating?

A.

The costs for operation of the gas turbines (GT) are for all energy produced from the gas turbines over and above the test year expected production from these facilities, regardless of the purpose of the unit being online and its loading level.

Therefore, the application includes fuel costs incurred when the gas turbines are producing above minimum.

As indicated in its response to NP-NLH-301, Hydro operates the system to withstand: (1) any single transmission contingency without violating any operating limit and impacting customer service, and (2) the loss of the largest generating unit contingency without violating the reserve criterion. At times, this requires that gas turbines be placed online when sources of conventional (primary) generation and/or reactive resources have been exhausted. Once gas turbines are online, similar to the other sources of conventional generation, they may be required to run above minimum production for periods of time. For example, a gas turbine which is online to support Island spinning reserves may be required to run above minimum load during peak periods for load following and/or system regulating requirements. A gas turbine online to support transmission corridor system operating limits may be required to run above minimum load during peak periods to ensure that the corridor and the region's delivery points are maintained within static and dynamic limits in real time or post contingency. Therefore, in its

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| 1 | application Hydro did not determine a need to differentiate fuel costs for start-up |
|---|---|
| 2 | and for maintaining minimum load versus those costs for generation above- |
| 3 | minimum load as all fuel costs were necessary to reliably meet customer demand |
| 4 | requirements. |
| 5 | |
| 6 | Hydro notes that the Energy Supply Cost Variance Deferral Account credits the |
| 7 | savings in No. 6 fuel that result from the operation of its gas turbines in determining |
| 8 | the amounts proposed to be recovered from customers. This credit is reflected in |
| 9 | Part C of the account, Holyrood TGS Fuel Costs/(Savings). |
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