

UNDERTAKING J8.1

Undertaking

1. Does OPG operate the pump storage facility in a way which integrates the considerations of surplus baseload generation and the drivers of the hydro incentive mechanism? And if so, how does it do that?
2. Would it be appropriate for the hydroelectric incentive mechanism to be structured so that the pump storage facility is used to reduce the impact of surplus base load generation as much as possible?
3. Does OPG have any proposals as to how this might be achieved?

Response

1. Yes, OPG operates the Pump Generating Station ("PGS") to integrate the considerations of Surplus Baseload Generation ("SBG") with the Hydroelectric Incentive Mechanism ("HIM"). Market price spreads are often large enough to incent OPG to deploy the PGS during periods of SBG.

Under the HIM, use of the PGS is driven by the difference between on-peak and off-peak market prices and the cost of pumping as described in Ex. E1-T2-S1, page 1, line 25 to page 2, line 20. These economic considerations do not change during periods of SBG (Ex. L-11-008, part k).

2. It would not be appropriate to restructure the HIM to reduce the impact of SBG by using the PGS as much as possible. This would distort the mechanism's effectiveness to drive operational decisions based on market price signals and affect the outcomes in the IESO-administered markets.

The HIM is effective at incenting OPG to time shift energy from low price to higher price periods in all market conditions, including times of SBG. This benefits the ratepayer by reducing demand-weighted market prices.

Uneconomic PGS operation (i.e., if OPG were to initiate pump activities in the absence of a favourable forecast of price spread) would result in a net loss to OPG since the additional pump costs may not be recovered in the subsequent generation cycle.

3. OPG does not offer any proposals to reduce, beyond the capability of the current HIM, the impact of SBG spill by uneconomic operation of the PGS. The accountability to manage/mitigate SBG rests with the IESO because it has the ability to comprehensively assess the impact of spill on the Ontario power system (Ex. L-11-008, part d) and to assess the capability and costs associated with the curtailment provisions of all market participants (Ex. L-05-024, part b). OPG does not have these capabilities.