

To: All Parties in EB-2013-0321 Proceeding

Re: Ontario Power Generation Inc.
2014-2015 Payment Amounts Applications

In a letter dated July 11, 2014 in response to a request from the Green Energy Coalition (GEC) for evidence from the OPA the Board responded that "Should the OPA choose to answer some of the additional questions posed by the GEC and Environmental Defence, it would be appreciated but the board will not compel them to do so." The 6 questions raised by the GEC related to the figures used for the costs of production, the cost of importing power as an alternative (and the feasibility of doing so is implied), and the potential for foregone or curtailed RE production. Hopefully the OPA will respond constructively and will perhaps fill in some important missing data.

In particular, the existing OPG generation facilities and the other Ontario power generators are capable of producing considerably more energy than is actually being delivered. OPG has identified 1.2 TWh of "surplus baseload generation" from their hydro operations (which account for less than 100% of Ontario's hydro power generation, implying the overall total is greater). The IESO web site reports that the nuclear power generation capacity is 12,947 MW but during periods when the power demand is low the actual generation falls to 8,736 MW or less, and at night the generation drops significantly compared to the daytime production, suggesting that the output is being throttled back on a daily basis as well as on a seasonal basis. The GEC has asked whether power from Pickering is exacerbating this pattern (Q4) and whether solar and wind generation are being curtailed because of a surplus of nuclear power (Q5). Collectively these "lost energy" contributions appear to be large enough to have a substantial impact on the price of power in Ontario, and they could all be reduced by employing energy storage, which would also reduce the cost of importing power from Quebec (Q3) and make more power available from that source.

One issue of immediate concern is the direct and consequential cost of greenhouse gas (GHG) production. The OPA has estimated that the GHG from power generation has dropped to about 5 million tonnes (CO2 eq) and is expected to remain at roughly that level for the coming two decades. However, the OPG is cited by the Environmental Commissioner of Ontario as the source of an estimate of 15 million tonnes, peaking in 2022. (Reported in the ECO report "Looking for Leadership: The Costs of Climate Inaction", submitted July 9, 2014, Page 51). Ontario currently consumes about 1 Tcf of natural gas for which the attributable GHG emissions will amount to about 105 million tonnes of GHG per year, but the data on how that GHG generation should be distributed is ambiguous.

Hopefully the OPA (and perhaps other agencies) will voluntarily provide more data on both of these issues, which are fundamental to predictions of power costs and capital expenditures for generating facilities in Ontario.

Yours truly,

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