



May 15, 2024

BY EMAIL: shelly.spence@auditor.on.ca

Ms. Shelley Spence
Auditor General of Ontario
20 Dundas Street West, Suite 1530
Toronto M5G 2C2

Dear Ms. Spence:

Re: Request for value for money audit of the IESO's proposed \$2.2 billion contract for OPG's proposed new 430 MW gas-fired peaker plant in Napanee

Introduction

I am writing on behalf of the Ontario Clean Air Alliance to request that you conduct a value for money audit of the Independent Electricity System Operator's (IESO's) proposed \$2.2 billion contract for Ontario Power Generation's (OPG's) proposed new 430-megawatt (MW) gas-fired peaker plant in Napanee.

As detailed below, we believe that Ontario has many much lower cost options to meet its electricity needs "on the hottest and coldest days of the year."ⁱ

Proposed Peaker Power Contract

According to the IESO, the capacity cost of the proposed Napanee peaker plant is approximately \$1,681.14 per MW per business day; the nameplate and contract capacities are 430 MW and 405 MW respectively; and the contract expiry date is 2040. Therefore, assuming the peaker plant commences operation on Jan. 1, 2028, its total capacity cost that will be borne by Ontario's electricity consumers and/or taxpayers is \$2.2 billion.ⁱⁱ

Stationary Battery Storage

On May 9, 2024, the IESO also announced that it is planning to procure almost 1,800 MW of stationary battery storage at a cost of \$672.32 per MW per business day. That is, at a cost that is 60% lower than the cost of the proposed Napanee peaker plant.ⁱⁱⁱ

According to the IESO:

“Storage facilities can charge during off-peak hours, take advantage of Ontario’s clean energy supply mix, and inject energy back into the grid when it is needed most. These characteristics provide the IESO with flexibility to leverage non-emitting supply to displace the use of natural gas during peak demand periods.”^{iv}

Commercial, Institutional and Industrial Demand Response

The IESO has contracted with commercial, institutional and industrial consumers to shift some of their demands from peak to off peak periods during the summer of 2024 and the winter of 2024/25.

The payments to shift demand to off-peak periods are \$367.41 per MW per business day in the summer and \$146.96 per MW per business day in the winter. That is, 78% to 91% lower than the IESO’s proposed payments to build a gas-fired peaker plant.^v

According to Rodan Energy:

“The IESO will use Demand Response to help the province manage summer and winter electricity system peaks. The annual capacity auctions are an important tool to meet Ontario’s power system needs and provide the flexibility required to enable the province to adapt to changing conditions. The capacity auction helps Ontario’s largest energy consumers earn revenue by reducing power consumption when needed.”^{vi}

Residential Peak Perks Program

Last year the IESO established the Peak Perks program to turn down the thermostats of residential air-conditioners and heat pumps by up to two degrees Celsius on hot summer days. As of February 2024, the program had already enrolled more than 100,000 participants who together can deliver up to 90 MW of peak demand reductions.

Participants are paid \$75 when they enroll and \$20 for each additional year that they stay enrolled in the program. These payments are equivalent to approximately \$175 to \$656 per MW

per business day.^{vii} That is 60 to 90% lower than the IESO's proposed payments to OPG for the Napanee gas plant.

Summer Peak Power Imports from Hydro Quebec

Quebec's demand for electricity peaks during cold winter nights since most of its homes are heated with electric baseboards. As a result, Hydro Quebec has a huge surplus of electricity generation capacity available for export to Ontario in the summer.

In August 2023, the Governments of Ontario and Quebec announced their intention to enter into a 10-year trading agreement that would allow Ontario to import 600 MW from Hydro Quebec during hot summer days.^{viii}

In addition, in December 2023 the IESO contracted with Hydro Quebec to import 300 MW of capacity during the summer of 2024 at a cost of \$367.41 per MW per business day. That is, 78% lower than the IESO's proposed payments per MW per business day to OPG for the Napanee gas plant.^{ix}

With our existing transmission lines, Ontario could import an additional 430 MW from Hydro Quebec to avoid the need for the proposed Napanee gas plant to power our air conditioners on hot summer days.^x

Conclusion

We need a value for money audit to determine the total electricity cost savings that could be achieved between 2028 and 2040 by cancelling the proposed Napanee gas-fired peaker plant contract and investing in cleaner and lower cost options to keep our lights on during the hottest and coldest days of the year.

Yours truly,



Jack Gibbons
Chair

ⁱ Ontario Ministry of Energy, [News Release](#), “Ontario Completes Largest Battery Storage Procurement in Canada to Meet Growing Electricity Demand”, (May 9, 2024).

ⁱⁱ $405 \text{ MW} \times \$1,681.14 \text{ per MW/business day} \times 250 \text{ business days per year} \times 13 \text{ years} = \$2,212,800,525$. See: IESO, [IESO Resource Adequacy Update May 9, 2024](#) and IESO, [Long-Term RFP \(LT1 RFP\) – Final Results](#), (May 9, 2024).

ⁱⁱⁱ [IESO Resource Adequacy Update May 9, 2024](#).

^{iv} [IESO Resource Adequacy Update May 9, 2024](#).

^v IESO, [Capacity Auction: Post-Auction Report](#), (December 7, 2023).

^{vi} Rodan Energy, [News Release](#), “Rodan Energy Secures Largest Position in the IESO Capacity Auction”, (December 11, 2023).

^{vii} The cost of achieving a 90 MW demand reduction during the first year are approximately \$7.5 million (\$75 per participant x 100,000 participants). There are 127 business days during the IESO’s 2024 summer period (May 1 to October 31). Therefore, the first-year cost of the Peak Perks demand reductions is approximately \$656 per MW per business day [$(\$7.5 \text{ million}/90 \text{ MW})/127 \text{ days}$]. The cost of the subsequent year demand reductions will be approximately \$2 million (\$20 per participant x 100,000 participants). Therefore, the cost of the second-year demand reductions will be approximately \$175 per MW per business day [$(\$2 \text{ million}/90 \text{ MW})/127 \text{ days}$].

^{viii} Ontario Ministry of Energy, [News Release](#), “The Governments of Ontario and Quebec Support New Electricity Trade Agreement”, (August 30, 2023).

^{ix} IESO, [Capacity Auction: Post-Auction Report](#), (December 7, 2023).

^x As a result of the completion of the upgrades to Hydro One’s transmission system between its Merivale and Hawthorne Transmission Stations in Ottawa, Ontario can import 1,650 MW of firm power from Quebec. IESO, [Ontario-Quebec Interconnection Capability: A Technical Review](#), (May 2017), page 23; Email to Jack Gibbons from Leonard Kula, IESO, (February 14, 2019); and Hydro One, [News Release](#), “Hydro One completes \$46.9 million investment to strengthen transmission system and improve resiliency and reliability in Ottawa”, (November 23, 2023).