



September 24, 2021

Via Email & RESS

Ms. Christine E. Long Registrar Ontario Energy Board 2300 Yonge Street, 27th Floor P.O. Box 2319 Toronto, Ontario M4P 1E4

Dear Ms. Long:

RE: EB-2021-0136 – Hydro One Networks Inc. – Leave to Construct Application - Richview to Trafalgar Reconductoring Project

Please find enclosed the interrogatories of Capital Power Corporation ("Capital Power") in this proceeding.

Yours truly,

Emma Coyle Director, Regulatory and Environmental Policy Capital Power Corporation

cc: Daniel Jurijew, Capital Power Corporation

ONTARIO ENERGY BOARD

THE MATTER OF the Ontario Energy Board Act 1998, S.O. 1998;

AND IN THE MATTER OF an Application by Hydro One Networks Inc. pursuant to s. 92 of the *Act* for an Order or Orders granting leave to reconductor existing transmission line circuits along the route between Richview Transformer Station and Trafalgar Transformer Station located in the municipalities of Toronto and Mississauga.

AND IN THE MATTER OF an Application by Hydro One Networks Inc. pursuant to s. 97 of the *Act* for an Order granting approval of the forms of the agreement offered or to be offered to affected landowners.

INTERROGATORIES OF CAPITAL POWER CORPORATION ("Capital Power")

1.1-Capital Power-1

Reference: Exhibit B-3-1, Attachment 3

Preamble:

In Section 1 of the IESO's June 12, 2021, report titled *Trafalgar TS x Richview TS 230 kV line upgrade: Need and Selection of the Preferred Plan* (the "Report") the IESO states, in part, that supply capacity east of the FETT interface is "expected to decline due to nuclear retirements and nuclear refurbishments, and could potentially decline towards the end of this decade due to contracts for generation facilities reaching the end of their terms."

The IESO goes on to state that "[t]his decline in supply contributes to an overall provincial need for capacity (see the 2020 Annual Planning Outlook), where due to limitations on the transfer capability of the FETT interface 1850 to 2250 MW of that capacity must be acquired east of the interface by 2026. More specifically, with the decline in supply capacity east of the FETT interface, studies show that the transfer capability of the FETT interface will not be sufficient to meet NERC and NPCC reliability requirements by 2026 requiring, approximately 2000 MW of supply to be specifically acquired east of FETT."

Questions:

- a) Is the 2000 MW an Unforced Capacity (UCAP) value? If so, please provide analysis showing calculations of the total installed capacity required to provide 2000 MW of UCAP for the following resource types: gas-fired generation, energy storage, imports from New York, imports from Quebec, and Demand Response.
 - If the 2000 MW is not a UCAP value, please explain what value it does represent and why UCAP was not used.
- b) Please provide in readable format (e.g., .xls, .csv) the hourly load flow estimates for the FETT interface for the years 2024 to 2030 used in the IESO's analysis of system need.
- c) Please provide the FETT loading conditions for normal and contingency operating conditions.
- d) Please indicate the FETT transfer capability for normal and contingency operating conditions.

- e) Please identify the expected number of hours and magnitude (i.e., in MW) of constraint used to define system need. Please provide the demand outlook and system conditions underpinning the estimate.
- f) Does the forecast used for system need utilize the IESO Annual Planning Outlook Demand Outlook scenario 1 or scenario 2? If neither scenario is used, please describe the scenario used for the IESO's system analysis and provide an explanation why a new demand outlook was required. Please provide assumptions used to generate a new demand outlook.
- g) With respect to the IESO's estimate of need for 2000 MW of resources east of FETT, please provide the following operating attributes the IESO expects to the resources to have and/or provide:
 - i. Hours of operation required during constrained time periods
 - ii. Ramping capabilities
 - iii. Locational requirements to resolve system need
- h) What forced outage assumptions for existing and committed resources were incorporated in the IESO's analysis estimating a need of 2000 MW of new resources as an alternative to the preferred plan?
- i) Did the IESO perform a probabilistic analysis assessing the frequency and duration of coincident forced outages for existing generation and transmission across the FETT interface? If so, please provide details and findings of the probabilistic analysis and explain whether the analysis aligned with the *Ontario Resource and Transmission Assessment Criteria* ("ORTAC") for load restoration. If the analysis was not performed, please explain why it was not undertaken.

1.1-Capital Power-2

Reference: Exhibit B-3-1, Attachment 3

Preamble:

Section 1 of the IESO's Report states, in part, that supply capacity east of the FETT interface is "expected to decline due to nuclear retirements and nuclear refurbishments, and could potentially decline towards the end of this decade due to contracts for generation facilities reaching the end of their terms."

Section 3 of the IESO's Report states that "[a]s indicated in the 2020 Annual Planning Outlook, in addition to this specific need for capacity east of the FETT interface, there is an overall need for capacity in Ontario due to increasing demand for electricity and the retirement of Pickering GS combined with nuclear unit outages for refurbishment. For the year 2026, that amount was determined to be about 5,200 MW after re-acquiring Lennox GS and 3400 MW assuming all other resources with expiring contracts in the province are re-acquired."

Questions:

- a) Please identify what assumptions the IESO relied on with respect to the continued operation of existing generation facilities for the purpose of assessing the alternative options and the preferred option.
- b) Has the IESO has determined that under both demand scenarios considered in the Annual Planning Outlook that the resource adequacy need for the years 2026 to 2040 exceeds 2000 MW? If additional demand scenarios were used in the IESO's analysis of the preferred and alternative options, please confirm whether the resource adequacy need exceeds 2000 MW under the additional demand scenarios.

