



May 2, 2022

Ms. Nancy Marconi
Registrar
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Re: EB-2021-0110 Hydro One Networks Inc. 2023-2027 Joint Transmission & Distribution Rate Application
AMPCO's Interrogatories on Hydro One's Evidence Update

Dear Ms. Marconi:

In accordance with Procedural order No. 5 dated April 14, 2022, attached please find AMPCO's interrogatories on Hydro One's updated evidence filed March 31, 2022 and April 8, 2022.

Best Regards,

A handwritten signature in blue ink, appearing to read 'Colin Anderson'. The signature is fluid and cursive, with a prominent initial 'C'.

Colin Anderson
President

Best Regards,

A handwritten signature in blue ink, appearing to read 'Colin Anderson'. The signature is fluid and cursive, with a prominent initial 'C'.

Colin Anderson
President

Copy to: Hydro One Networks Inc.

EB-2021-0110

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15 (Schedule B);

AND IN THE MATTER OF an application by Hydro One Networks Inc. for an order or orders made pursuant to section 78 of the Act, approving or fixing just and reasonable rates for the transmission and distribution of electricity.

AMPCO SUPPLEMENTARY INTERROGATORIES

O-AMPCO-111

Ref: Exhibit O Tab 2 Schedule 1 Page 2

With respect to 2022, Hydro One plans to manage its in-service additions in 2022 within the total envelopes set out in its pre-filed evidence for both transmission and distribution. If necessary, Hydro One will leverage its internal redirection and reprioritization processes to manage within its planned total envelopes reflected in its pre-filed evidence for both transmission and distribution.

Please provide any internal documents that describe Hydro One's internal redirection and reprioritization processes including governance.

O-AMPCO-112

Ref: Exhibit O Tab 2 Schedule 1 Page 2

The 2021 transmission capital expenditures were \$117.8M above the OEB-approved amount of \$1,169.2M. Hydro One continues to make every effort to manage the capital expenditures at the envelope level by making reductions or deferrals to discretionary investments to mitigate the impact to the total capital envelope.

With reference to Hydro One's internal redirection and reprioritization processes, please explain why Hydro One was unable to adequately leverage its internal redirection and reprioritization processes in order to manage project variances and stay within the OEB-approved total transmission capital envelope of \$1169.2 million.

O-AMPCO-113

Exhibit O Tab 2 Schedule 1 Page 7

The 2021 distribution capital expenditures were \$135.2M (21.5%) above the OEB-approved amount of \$627.6M. Hydro One continues to make every effort to manage the distribution capital expenditures at the envelope level by making reductions or deferrals to discretionary investments to mitigate the impact to the total capital envelope.

With reference to Hydro One's internal redirection and reprioritization processes, please explain further why Hydro One was unable to adequately leverage its internal redirection and reprioritization processes in order to manage project variances and stay within the OEB-approved distribution capital expenditures at \$627.6 million.

O-AMPCO-114

Ref: Exhibit O Tab 2 Schedule 1 Page 6

The 2021 OM&A results for transmission were \$401.8M or \$12.8M higher than forecasted amount for 2021 of \$389.0M. This increase was primarily due to Common and Other OM&A costs exceeding forecast by \$20.4M, which was mostly driven by project write-offs and COVID-19 related expenditures that were not previously forecasted.

- a) Please provide a detailed breakdown of the \$20.4 million.
- b) Please provide the nature of the specific project write-offs and costs by project.
- c) For each project write-off, please provide the corresponding CWIP amount.

O-AMPCO-115

Ref: Exhibit O Tab 2 Schedule 1 Attachment 2 – Transmission Capital Projects, OEB Appendix 2-AA

Please explain the specific drivers for the 2021 variances in the following investments:

- a) System Access: Overhead Lines Refurbishment Projects, Component Replacement Programs and Secondary Land Use Projects
- b) System Renewal: Integrated Station Investment
- c) General Plant: Information Solutions

O-AMPCO-116

Ref: Exhibit O Tab 2 Schedule 1 Page 3

In 2021, System Renewal investments were \$112.0M below the OEB-approved amount of \$982.8M. The variance was primarily driven by redirections across OEB categories to accommodate emerging, mandatory system growth investments and required system

upgrades, as well as General Plant investments. This variance reflects lower than planned investments in transmission line refurbishments including underground cable replacement, partially offset by higher than planned expenditures for air blast circuit breakers and station reinvestments.

a) Please complete the attached tables.

Unit Accomplishments		2018 A	2019 A	2020 A	2021 F	2021 A	2022 F	2022 Update	2023	2024	2025	2026	2027
ISD	Investment Title T-SR-01 Transmission Station Renewal - Network Stations	# Transformers											
		# Breakers											
		# Protection Systems											
T-SR-02	Transmission Station Renewal - Air Blast Circuit Breakers	# Transformers											
		# Breakers											
		# Protection Systems											
T-SR-03	Transmission Station Renewal - Connection Stations	# Transformers											
		# Breakers											
		# Protection Systems											

O-AMPCO-117

Ref: Exhibit O Tab 2 Schedule 1 Page 4

In 2021, System Service investments were \$70.5M above the OEB-approved amount of \$148.2M, largely driven by investments in response to system needs identified through bulk system and regional planning processes. The variance is primarily due to the increased scope, complexity and cost associated with the Lakeshore TS project as well as schedule extensions and increased costs associated with delays to NextBridge’s East-West Tie line construction, which were beyond Hydro One’s control.

- a) Please provide details on the change in scope, complexity and cost associated with the Lakeshore TS project.
- b) Please provide the forecast completion date for the Lakeshore TS project.
- c) Please provide updates to all impacted System Service Investment Summary Documents related to the Lakeshore TS project.

O-AMPCO-118

Ref: Exhibit O Tab 2 Schedule 1 Attachment 2 Transmission Capital Projects, OEB Appendix 2-AA

Please provide Attachment 2 OEB Appendix 2-AA on the basis of In-Service Additions.

O-AMPCO-119

Ref: Exhibit O Tab 2 Schedule 1

Please update the following interrogatories and undertaking responses to include 2021 year-end actuals.

- a) B2-AMPCO-020 (a)
- b) B2-AMPCO-022A (a)
- c) B2-AMPCO-022B (a)
- d) B2-AMPCO-036 (b)
- e) B2-AMPCO-049 (a)
- f) JT-1.08
- g) JT1.09

O-AMPCO-120

Ref: Exhibit O Tab 2 Schedule 1

Please update the following interrogatories and undertaking responses to include 2021 year-end actuals and any changes to the 2022 forecast.

- a) B2-AMPCO-024
- b) B2-AMPCO-028
- c) B2-AMPCO-030
- d) B2-AMPCO-032 (d)
- e) B2-AMPCO-033 (b) & (d)
- f) B2-AMPCO-034 (b)
- g) B2-AMPCO-036 (d)
- h) B2-AMPCO-037 9 (c)
- i) B2-AMPCO-38 (d)
- j) B2-AMPCO-39 (c)
- k) B2-AMPCO-40 (b) & (c)
- l) B2-AMPCO-041 (b) & (c)
- m) B2-AMPCO-042 (b) & (c)
- n) B2-AMPCO-043 (a)
- o) B2-AMPCO-044 (a) & (b)
- p) B2-AMPCO-047
- q) B2-AMPCO-050 (a) & (b)
- r) B2-SEC-095
- s) B2-SEC-109
- t) JT-2.01

O-AMPCO-121

Ref: B2-AMPCO-034 (c)

- a) Please provide the number of ABCBs replaced in 2021.
- b) Please provide the number of ABCBs forecast to be replaced in 2022.

O-AMPCO-122

Ref 1: Ref: Exhibit O Tab 2 Schedule 1

Ref 2: B2-AMPCO-035

- a) Part (c): Please provide the response to part (c) on the basis of total work completed under SR-03 for the period 2018-2022 (not only the sub-set of historical costs associated with the connection station investments planned over the 2023-2027 period).
- b) Part (e): Please provide the number of transformers, breakers and protection systems replaced in 2021.
- c) Part (e): Please provide the number of transformers, breakers and protection systems forecast to be replaced in 2022.
- d) Part (f): Please provide total Detailed Investment Costs for all work over the 2018 - 2022 period (not only historical costs associated with the connection station investments planned over the 2023-2027 period).

O-AMPCO-123

Ref 1: Exhibit O Tab 2 Schedule 1

Ref 2: B2-AMPCO-032 (f)

- a) Please provide Appendix B Detailed Investment Costs for the period 2018 to 2022 for total costs including 2021 actuals and 2022 forecast (not only historical costs associated with the network station investments planned over the 2023-2027 period).
- b) Please identify the investments in part (a) not undertaken and explain why.

O-AMPCO-124

Ref 1: Exhibit O Tab 2 Schedule 1

Ref: B2-AMPCO-033 (e)

- a) Please provide Appendix B Detailed Investment Costs for the period 2018 to 2022 for total costs including 2021 actuals and 2022 forecast (not only historical costs associated with the network station investments planned over the 2023-2027 period).
- b) Please identify the investments in part (a) not undertaken and explain why.

O-AMPCO-125

Ref: JT-1.24

Please add 2021 data to the response.

O-AMPCO-126

Ref: JT-1.25

Please add 2021 data to the response.

O-AMPCO-127

Ref: Exhibit O Tab 2 Schedule 1 Page 8

System Renewal capital expenditures were \$14.7M higher than the OEB-approved amount of \$237.3M. This increase was primarily due to trouble call and storm damage response expenditures exceeding forecasts by \$32.4M, which were partially offset by the reduction of other planned work.

Please provide the specific reductions to planned work and explain how this was achieved.

O-AMPCO-128

Ref: Exhibit O Tab 2 Schedule 1 Page 8

2021 actuals for System Service expenditures were \$33.3M lower than the OEB-approved amount of \$144.1M. These reductions were primarily to accommodate increases in non-discretionary System Access expenditures. Reductions were achieved through deferrals of load growth projects.

- a) Please provide the list of load growth projects deferred and the revised timeframe.
- b) Please discuss any forecast changes to the 2022 plan and beyond for D-SS-01: System Upgrades Driven by Load Growth.

O-AMPCO-129

Ref: Exhibit O Tab 2 Schedule 1 Page 8

In 2021, General Plant expenditures were \$75.8M higher than the OEB-approved amount of \$95.3M. This variance was primarily due to the timing of the ISOC and Information Solutions business enablement projects to modernize processes.

Please provide specific details on the reasons for the variance in General Plant.

O-AMPCO-130

Ref: Exhibit O Tab 2 Schedule 1

Please update the following interrogatories to include 2021 year-end actuals.

- a) B3-AMPCO-055
- b) B3-AMPCO-056
- c) B3-AMPCO-058
- d) B3-AMPCO-80
- e) B3-AMPCO-088
- f) B3-AMPCO-090
- g) B3-AMPCO-091

O-AMPCO-131

Ref: B3-AMPCO-085

Please provide 2021 year end actuals.

O-AMPCO-132

Ref: B3-AMPCO-087 (b)

Please update the table in the response to reflect 2021 year end actuals and any changes to the 2022 forecast.

O-AMPCO-133

Ref: B3-AMPCO-093 (b)

Please update the table in part (b) to include 2021 year end actuals and the 2022 forecast.

O-AMPCO-134

Ref: Exhibit O Tab 2 Schedule 1

Please update the following interrogatories to include 2021 year-end actuals and any changes to the 2022 forecast - and include updated excel spreadsheets as applicable.

- a) B3-AMPCO-094
- b) B3-AMPCO-097
- c) B3-AMPCO-098
- d) B3-AMPCO-099
- e) B3-AMPCO-100

- f) B3-AMPCO-102
- g) B3-AMPCO-103
- h) B3-AMPCO-104
- i) B3-SEC-121

O-AMPCO-135

Ref: Exhibit O Tab 2 Schedule 1

Please add 2021 year end actuals to the table provided in the response to the following interrogatories:.

- a) B3-AMPCO-060
- b) B3-AMPCO-061
- c) B3-AMPCO-062
- d) B3-AMPCO-064
- e) B3-AMPCO-070
- f) B3-AMPCO-071
- g) B3-AMPCO-072

O-AMPCO-136

Ref: B3-AMPCO-065

Please update the excel spreadsheet to reflect 2021 year end actuals and file the excel spreadsheet.

O-AMPCO-137

Ref: B3-AMPCO-066

Please update the excel spreadsheet to reflect 2021 year end actuals and any changes to the 2022 forecast and file the excel spreadsheet.

O-AMPCO-138

Ref 1: Exhibit O Tab 2 Schedule 1

Ref 2: B3-AMPCO-077

With respect to Station Transformer data, the response indicates 62 station transformers will be addressed over the 2018 to 2022 period and 118 transformers will be addressed over the 2023 to 2027 period, 106 transformers in SR-04 and 12 transformers in SR-11.

Please complete the following table:

# Station Transformer Units by ISD													
Investment Summary Document ID	2018	2019	2020	2021 Forecast	2021 Actual	2022 Bridge	2022 Update	2023 Test	2024 Test	2025 Test	2026 Test	2027 Test	

O-AMPCO-139

Ref: B3-AMPCO-078 Updated 20220331

Please add the following columns to the spreadsheet provided in the response.

- a) 2021 year end actuals.
- b) Any changes to 2022 forecast.
- c) Please file the updated excel spreadsheet.

O-AMPCO-140

Ref: B3-SEC-115

Please update the table for 2021 year end actuals and any changes to the 2022 forecast.

O-AMPCO-141

Ref: B3-SEC-148 Updated 20220331

Please update the table for 2021 year end actuals and any changes to the 2022 forecast.

O-AMPCO-142

Ref 1: Exhibit O Tab 2 Schedule 1

Ref 2: B3-AMPCO-103

Please complete the following tables:

D-SR-10 Distribution Lines Sustainment Initiatives	2018	2019	2020	2021 Forecast	2021 Actual	2022 Bridge	2022 Update	2023 Test	2024 Test	2025 Test	2026 Test	2027 Test
# Units												
Rebuild (km)												
Relocation (km)												
Cable Replacement (km)												
Direct Buried Cable Injection (km)												
Other - Relocations/Rebuilds (km)												
Other - Cable Replacement km												

D-SR-10 Distribution Lines Sustainment Initiatives	2018	2019	2020	2021 Forecast	2021 Actual	2022 Bridge	2022 Update	2023 Test	2024 Test	2025 Test	2026 Test	2027 Test
\$												
Rebuild (\$)												
Relocation (\$)												
Cable Replacement (\$)												
Direct Buried Cable Injection (\$)												
Other - Relocations/Rebuilds (\$)												
Other - Cable Replacment (\$)												

O-AMPCO-143

Ref 1: Exhibit O Tab 2 Schedule 1

Ref 2: B3-Energy Probe-043 (a)

Please provide the table in the response to part (a) for the years 2018 to 2022.

O-AMPCO-144

Ref 1: Exhibit O Tab 2 Schedule 1

Ref 2: B3-SEC-153

- a) For Other Projects (<\$1 M), please provide the work completed by work type for 2021 (actuals) and 2022 (forecast).
- b) For each work type in part (a), please provide the investment cost for 2021 (actuals) and 2022 forecast.