

**Hydro One Networks Inc. (Hydro One)
2020 to 2022 Custom IR Transmission Application
AMPCO Interrogatories**

July 3, 2019

A-AMPCO-1

A-3-1 P13

Please discuss any changes to Hydro One's strategic priorities since EB-2016-0160.

A-AMPCO-2

A-3-1 P13

Please discuss any changes to Hydro One's business values and objectives since EB-2016-0160.

A-AMPCO-3

A-3-1 P28

Hydro One indicates the asset analytics system enables Hydro One planners to review aggregated information from various enterprise reporting systems.

Please list the enterprise reporting systems that are currently used and advise of any changes since EB-2016-0160.

A-AMPCO-4

A-3-1 P29

- a) Please confirm the six risk factors are consistent with EB-2016-0160.
- b) Please provide the relative weightings for each risk factor.

A-AMPCO-5

A-3-1 P30

Please provide a list of Hydro One's key transmission asset types from the highest value to lowest value.

A-AMPCO-6

A-3-1 P32

Under step 2, Candidate Investment Development, please confirm the number of candidate investments identified at this step compared to the number developed and submitted for possible inclusion in the investment plan.

A-AMPCO-7

**Hydro One Networks Inc. (Hydro One)
2020 to 2022 Custom IR Transmission Application
AMPCO Interrogatories**

July 3, 2019

A-3-1 P39

Please provide the reductions in costs attributable to a reduction in vacancies and provide the calculation and assumptions.

A-AMPCO-8

A-3-1 P40

Hydro One indicates its maintenance reduction has included reductions in activities including a one year extension of planned maintenance and asset condition assessments and represents a managed increase in asset risk that may manifest in terms of increased corrective/demand failures and/or reduced asset useful life that can be contained with a one year reduction in work and will be managed and mitigated in future years.

Please discuss how this managed asset risk was evaluated and measured.

A-AMPCO-9

A-3-1 P42 Table 10

Please expand Table 10 to include the years 2014 to 2018.

A-AMPCO-10

A-3-1 Attachment 1

- a) Please confirm when the 2019-2024 Transmission Business Plan was approved by the Board of Directors.
- b) Please provide any subsequent communication with Hydro One's Board of Directors regarding the Plan.

A-AMPCO-11

A-5-1 Attachment 2

With respect to Hydro One's Executive Organization Structure, please discuss the need, scope, timing and cost impact of any organizational restructuring that has taken place since 2017 or is planned for the test period.

A-AMPCO-12

A-6-2

Please provide the 2017 and 2018 Hydro One Networks Inc. Transmission Business Financial Statements.

A-AMPCO-13

A-6-6

**Hydro One Networks Inc. (Hydro One)
2020 to 2022 Custom IR Transmission Application
AMPCO Interrogatories**

July 3, 2019

Please provide the 2018 Annual Report.

A-AMPCO-14

EB-2016-0160 Exhibit I-03-001 Attachment 4

- a) Please provide a list of the Audit Reports Issued in 2016, 2017, 2018 and 2019 to date.
- b) Please provide the Final Audit Plan for 2019 to 2020.

B-AMPCO-15

B-1-1 TSP Section 1.4 P1 & P29

HONI's evidence at Page 1 includes benchmarking studies and third party assessments that help inform Hydro One of the condition of its assets and how to effectively and efficiently manage those assets. This includes a "Review of Hydro One's capabilities in Transmission Asset Analytics and Reliability Risk Modelling" (Attachment #13). At Page 29 (Table 20), Hydro One provides the Asset Analytics Methodology Recommendations.

Please provide a status report on Hydro One's progress regarding implementation of these recommendations.

B-AMPCO-16

B-1-1 TSP Section 1.4 P7

From Hydro One's perspective, please confirm the purpose and analysis implications of the Reliability Risk Model, historically and now.

B-AMPCO-17

B-1-1 TSP Section 1.4 P13

Hydro One indicates the final results of the ESL Assessment of Specific Relays study was not available at the time of the filing of the rate application.

Please indicate when the final report will be available or file the study if available.

B-AMPCO-18

B-1-1 TSP 1.5 P5

- a) Please provide a copy of Hydro One's Transmission final Scorecard from EB-2016-0160.
- b) Please provide a list of measures that are new to the scorecard compared to EB-2016-0160.

**Hydro One Networks Inc. (Hydro One)
2020 to 2022 Custom IR Transmission Application
AMPCO Interrogatories**

July 3, 2019

- c) Please provide a list of measures that have been removed from the scorecard compared to EB-2016-0160 and explain why.

B-AMPCO-19

B-1-1 TSP 1.5 Attachment 1 P4

Please provide the monthly Compensation Team Scorecard for the past 6 months.

B-AMPCO-20

B-1-1 TSP Section 2.1 P10

Please add the years 2015 to 2019 to Table 1 – Forecast of Transmission Charge Determinants.

B-AMPCO-21

B-1-1 TSP Section 2.1 P40

Please add dates to Figures 15, 16, 17 and 18.

B-AMPCO-22

B-1-1 TSP Section 2.1 P45

With respect to Monitoring and Control, Hydro One indicates variances from the plan are identified and managed through a variance and redirection process.

- a) Please provide Hydro One's threshold variance limits with respect to cost, scope and schedule.
- b) Please provide the forecast number of projects compared to actuals for each of the years 2016 to 2018.
- c) Please provide the number of projects deferred, cancelled and moved forward from future years for each of the years 2016 to 2018.
- d) Please provide the number of cost variance reports and total dollar amount for each of the years 2016 to 2018.
- e) Please provide the number of schedule variance reports and total days for each of the years 2016 to 2018.
- f) Please provide the number of scope variance reports and total dollar amount for each of the years 2016 to 2018.

B-AMPCO-23

**Hydro One Networks Inc. (Hydro One)
2020 to 2022 Custom IR Transmission Application
AMPCO Interrogatories**

July 3, 2019

B-1-1 TSP Section 2.1 P45

Please provide the key internal metrics that Hydro One uses to project/program track cost, schedule and scope variances.

B-AMPCO-24

B-1-1 TSP Section 2.1 P45

Please provide Hydro One's key internal documents that govern project management and reporting.

B-AMPCO-25

B-1-1 TSP Section 2.2 P2 Figure 1

Please add the years 2014 to 2018 to Figure 1 and add wood poles and underground cable to Figure 1.

B-AMPCO-26

B-1-1 TSP Section 2.2 P3 Table 1

- a) Please add "Population" to Table 1.
- b) Please provide an excel version of Table 1.

B-AMPCO-27

B-1-1 TSP Section 2.2 P3 Table 1

Please recast Table 1 using the Major Asset Condition data from EB-2016-0160 for each asset type.

B-AMPCO-28

B-1-1 TSP

Please complete the attached excel spreadsheet B-AMPCO-28.

B-AMPCO-29

B-1-1 TSP

Please provide a list of Hydro One's key transmission asset types from the highest system impact to lowest system impact upon failure.

B-AMPCO-30

**Hydro One Networks Inc. (Hydro One)
2020 to 2022 Custom IR Transmission Application
AMPCO Interrogatories**

July 3, 2019

B-1-1 TSP

Please complete the attached excel spreadsheet B-AMPCO-30.

B-AMPCO-31

B-1-1 TSP Section 2.2 P13 Table 4

Please add 2018 data to Table 4.

B-AMPCO-32

B-1-1 TSP Section 2.2 P13 Table 4

Please provide the number of transformer failures by year for the year 2008 to 2018 by 15 kV, 230 kV, and 500 kV.

B-AMPCO-33

B-1-1 TSP Section 2.2

Please provide any changes to ESL by asset type compared to EB-2016-0160 and explain why.

B-AMPCO-34

B-1-1 TSP Section 2.3

Please provide any changes to Testing & Maintenance by asset type compared to EB-2016-0160 and explain why.

B-AMPCO-35

B-1-1 TSP Section 2.3 P57

Please provide Hydro One's Vehicle Utilization rate for the years 2015 to 2018 and provide the calculation and assumptions.

B-AMPCO-36

B-1-1 TSP Section 3.1 Table 2, Table 3, Table 4

Please list the ISDs that include pole replacement.

B-AMPCO-37

**Hydro One Networks Inc. (Hydro One)
2020 to 2022 Custom IR Transmission Application
AMPCO Interrogatories**

July 3, 2019

B-1-1 TSP Section 3.3 Tables 5, 6, 7 & 8

- a) Please provide one excel spreadsheet for Tables 5, 6, 7 & 8.
- b) Please indicate the ISDs that are new.

B-AMPCO-38

B-1-1 TSP Section 3.3 Tables 5, 6, 7 & 8

- a) For each of the ISDs in Tables 5, 6, 7, & 8, please provide the forecast and actual spending for the years 2015 to 2019.
- b) Please provide one excel spreadsheet for part (a).

B-AMPCO-39

B-1-1 TSP ISD OBG-12 P4 Table 1

- a) Please provide table 1 for the years 2015 to 2019.
- b) Please provide the total number of Light, Heavy and Off-road vehicles and helicopters in each of the years 2015 to 2018 an forecast for 2019 to 2022.
- c) Please provide the number Light, Heavy and Off-road vehicles and helicopters replaced each year for the years 2015 to 2019 and the age at replacement.

B-AMPCO-40

EB-2016-0160 Exhibit J7.4

Please update the table for the years 2016 to 2018

E-AMPCO-41

E-3-1 P21

Hydro One states "The reduction in the 2017 and 2018 actual load relative to the previously approved load forecast for 2017 and 2018 is primarily driven by the impact from the expanded Industrial Conservation Initiative ("ICI") program."

Please provide further details to explain this decrease and its impact on the 2020 forecast.

**Hydro One Networks Inc. (Hydro One)
2020 to 2022 Custom IR Transmission Application
AMPCO Interrogatories**

July 3, 2019

F-AMPCO-42

Ex F T1 S1 P3

- a) Please list all planned asset management cycles with a one-time extension and the corresponding cost implications.
- b) Please explain further how Hydro One proposes to manage the increase in asset risk and impact on customers

F-AMPCO-43

Ex F T1 S1 P3 Table 1

Please provide the number of FTEs at the Category Level comparing 2016, 2017, 2018 actuals to 2019 and 2020 forecast.

F-AMPCO-44

Ex F T1 S1 P5

Please provide a list of all OM&A functions that have been reallocated from 2015 to 2019 and where they have been allocated to and provide the cost impact.

F-AMPCO-45

Ex F T1 S1 P7

Please explain the need for the additional governance and oversight expenditures.

F-AMPCO-46

Ex F T1 S1 P8

Please explain the scope of the increased focus on large transmission customers.

F-AMPCO-47

- a) With respect to corrective and preventive maintenance categories, please discuss Hydro One's priority levels for resolution.
- b) Please provide the number of work requests for each of the years 2015 to 2018.

F-AMPCO-48

Ex F T1 S3 P5

**Hydro One Networks Inc. (Hydro One)
2020 to 2022 Custom IR Transmission Application
AMPCO Interrogatories**

July 3, 2019

- a) Please quantify the inspection assessment backlog.
- b) Please explain the reason for the backlog.

F-AMPCO-49

Ex F T1 S3 P5 48

Please provide a copy of NERC FAC-0003 (Transmission Vegetation Management)

F-AMPCO-50

Ex F T1 S3 P5 48

- a) Please provide the number of trees managed by Hydro One.
- b) Please provide the number of damage trees removed for each of the years 2014 to 2018 and forecast for 2019 and 2020.

F-AMPCO-51

Ex F T1 S3 P5 50

Please provide the unit accomplishments for Demand Control for each the years 2014 to 2018 and the forecast for 2019 and 2020.

F-AMPCO-52

Ex F T1 S3 P5 48

Please provide the forecast and actual unit accomplishments for Brush Control for each the years 2014 to 2018 and the forecast for 2019 and 2010.

F-AMPCO-53

Ex F T1 S3 P5 48

Please provide the forecast and actual unit accomplishments for Line Clearing for each of the years 2014 to 2018 and the forecast for 2019 and 2010.

F-AMPCO-54

Ex F T1 S3 P5 48

Please provide the percentage and value of the OM&A budget that is undertaken by external resources for the years 2014 to 2018 and forecast for 2019 and 2020.

F-AMPCO-55

Ex F T1 S3 P5 48

**Hydro One Networks Inc. (Hydro One)
2020 to 2022 Custom IR Transmission Application
AMPCO Interrogatories**

July 3, 2019

Please provide the number of cable locates for the years 2014 to 2018 and the forecast for 2019 and 2020.

F-AMPCO-56

Ex F T1 S3

- a) Please provide a table that combines Table 1 to Table 15.
- b) Please provide an excel version of the Table.

F-AMPCO-57

Ex F T1 S4 P3

Please provide the smart grid coverage of Hydro One's system as a percentage.

F-AMPCO-58

Ex F T1 S4 P5

Please estimate the cost impact in 2020 of implementing the proposed revisions to 8 functional requirement standards and 74 engineering design and constructions standards.

F-AMPCO-59

Ex F T1 S4 P7

Please provide the spending on Emerging Technology for the years 2015 to 2019 and the forecast for 2020.

F-AMPCO-60

Ex F T1 S4 P8

- a) Please provide the objectives of the Customer PQ program.
- b) Please provide the number of customer enrollments in Customer PQ meter integration program compared to the 2020 forecast.
- c) Please explain scope of the third party PQ audit activities.

F-AMPCO-61

Ex F T1 S5 P3

With respect to Operations staff labour costs, please provide the forecast and actual average vacancy rate applied for the years 2015 to 2018 and the forecast for 2019 and 2020.

F-AMPCO-62

Ex F T1 S5 P3

Please explain the need for additional governance and oversight expenditures in in 2016.

**Hydro One Networks Inc. (Hydro One)
2020 to 2022 Custom IR Transmission Application
AMPCO Interrogatories**

July 3, 2019

F-AMPCO-63

Ex F T1 S5 P4

Please provide the number of planned outages compared to actual outages for the years 2015 to 2018 and the forecast for 2019 and 2020.

F-AMPCO-64

Ex F T1 S6 P2 Table 1

Please explain further the scope of the \$3.4 million increase in spending primarily due to an increased focus on large transmission customers.

F-AMPCO-65

Ex F T1 S6 P7

Please provide a breakdown of the outsourcing costs in 2020.

F-AMPCO-66

Ex F T1 S7 P5

Please provide a breakdown of External Purchased Services for the years 2015 to 2018 (plan vs actuals) and forecast for 2019 and 2020.

F-AMPCO-67

Ex F T1 S7 P5

Please provide Hydro One's resource utilization rate for the years 2015 to 2018 and show the calculation.

F-AMPCO-68

Ex F T1 S7

Please explain the term "windsheid time".

F-AMPCO-69

Ex F T1 S7

Please provide the wrench studies completed in 2016 and 2017.

F-AMPCO-70

Ex F T1 S8

a) Please provide the total number of hours worked (excluding overtime) 2014 to 2018 and the forecast for 2019 and 2020.

**Hydro One Networks Inc. (Hydro One)
2020 to 2022 Custom IR Transmission Application
AMPCO Interrogatories**

July 3, 2019

- b) Please provide Hydro One's overtime hours for the years 2014 to 2018 and the forecast for 2019 and 2020.
- c) Please summarize the key work activities that require overtime.

F-AMPCO-71

Ex F T4 S1 P3

Please provide a breakdown of the number of Management Staff by Management category for the years 2014 to 2018 and forecast for 2019 to 2022.

F-AMPCO-72

Ex F T4 S1 P5

- a) Please provide contract staff costs for each of the years 2014 to 2018 by work program.
- b) Please provide the 2019 to 2022 forecast cost for contract staff and explain how the budget was derived.

F-AMPCO-73

Ex F T4 S1 P6

- a) Please provide the number of eligible retirements and actual retirements for each of the years 2014 to 2018.
- b) Please provide the number of forecast retirements for 2019 to 2022.
- c) How does Hydro One account for retirements in the Compensation budget for the test years?

F-AMPCO-74

Ex F T4 S1 P10

Please provide the number of co-op program graduate trainee hires compared to trainees for the years 2014 to 2018.

F-AMPCO-75

Ex F T4 S1 P12

- a) Please discuss the need and objectives of the new Operational Workforce Planning initiative and the expected outcomes.
- b) Please discuss the need and objectives of the new Strategic Workforce Planning initiative and the expected outcomes.

F-AMPCO-76

Ex F T4 S1 P13 Table 2

**Hydro One Networks Inc. (Hydro One)
 2020 to 2022 Custom IR Transmission Application
 AMPCO Interrogatories**

July 3, 2019

- a) Please recast Table 2 showing a breakdown of MCP employees between Management and non-represented staff.
- b) Please add the years 2014 to 2016 to the Table.
- c) Please provide an excel version of the revised Table 2.

F-AMPCO-77

Ex F T4 S1

For each of the years 2015 to 2018, please complete the following table:

Headcount	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Jan 1												
Hires												
Retirements												
Other Exits												
Vacancy Lag												

FTEs	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Jan 1												
Hires												
Retirements												
Other Exits												
Vacancy Lag												

F-AMPCO-78

Ex F T4 S1 P14

Hydro One indicates that total regular and non-regular FTEs increase over the 2019 to 2022 period due in part to support a 26% increase in the Transmission work program.

- a) Please provide a breakdown of the 26% by work program.

F-AMPCO-79

Ex F T4 S1

Please provide Hydro One's latest H/R staffing metrics.

F-AMPCO-80

Ex F T4 S1 P19 Table 3

**Hydro One Networks Inc. (Hydro One)
2020 to 2022 Custom IR Transmission Application
AMPCO Interrogatories**

July 3, 2019

At Table 3, Hydro One provides principles that inform the various compensation elements for MCP employees.

a) Please discuss if there are different weightings for each principle.

F-AMPCO-81

EB-2016-0160 Exhibit C1 Tab 4 Schedule 1 Page 7

Please update Figure 4 with actuals for 2016, 2017 and 2018 and include the forecast for 2019 to 2022.

F-AMPCO-82

Ex F T4 S1 P24

Hydro One indicates that individual merit increases are determined by demonstrated performance and comp-ratios.

By way of example, please explain how compa-ratios contribute to merit pay.

F-AMPCO-83

Ex F T4 S1

Hydro One provides the 2019 Team Scorecard.

Please provide the Team Scorecards for the years 2014 to 2018.

F-AMPCO-84

Ex F T4 S1 Attachment 5

Please provide an excel version of Attachment 5.

F-AMPCO-85

Ex F T4 S1

Please provide a table that sets out Hydro One's compensation costs as a percentage OM&A and Capital for the years 2014 to 2018 and forecast for 2019 and 2020.

F-AMPCO-86

Ex F T4 S1

a) Please provide Hydro One's absenteeism rate for the years 2014 to 2018.

b) Please provide Hydro One's turnover rate for the years 2014 to 2018.

F-AMPCO-87

Ex F T4 S1

**Hydro One Networks Inc. (Hydro One)
2020 to 2022 Custom IR Transmission Application
AMPCO Interrogatories**

July 3, 2019

Please provide a table that compares forecast and actual depreciation for the years 2015 to 2018.

F-AMPCO-88

Ex I1 T1 S2 P4

Please discuss if Hydro One has made any changes to what is included as a network asset since the methodology was first approved and provide details.