

Enersource Hydro Mississauga Inc.

**Application for electricity distribution rates and other
charges effective January 1, 2016.**

AMPCO's Final Submissions

Enersource Hydro Mississauga Inc. (Enersource) filed an application Enersource Hydro Mississauga Inc. (Enersource) filed an application on October 2, 2015 under section 78 of the Ontario Energy Board Act, 1998, S.O. 1998, c. 15, (Schedule B) and under the OEB's Filing Requirements for Incentive Regulation Rate Applications seeking approval for changes to its electricity distribution rates to be effective January 1, 2016. Enersource's application includes a request for incremental capital funding.

Enersource is currently in the third year of its four-year 3rd Generation IR mechanism cost of service plan. Enersource rebased for 2013 rates (EB-2012-0333) and its current rate setting plan will expire at the end of 2016. Enersource indicates it intends to rebase to set 2017 rates.

As part of this application, Enersource seeks Board approval of incremental capital rate riders effective January 1, 2016 until the next cost of service rate application. AMPCO's submission is focussed on Enersource's incremental capital funding request.

Incremental Capital Module (ICM) Funding

Enersource applied for incremental capital rate riders effective January 1, 2016 until the next cost of service application.

Total 2016 capital expenditures include \$41.7 million for true-up of Connection and Cost Recovery Agreement ("CCRA") amounts of \$40.479 million for Churchill Meadows Transformer Station (TS) and \$1.3 million for Cardiff TS. \$1.3 million has been removed from the 2016 ICM project amount for Cardiff TS as Enersource was advised by HONI that no true-up is required.¹

Following the Technical Conference and the request for Enersource to identify the specific projects in its 2016 proposed capital budget that are part of the ICM. Enersource updated its ICM amounts as follows²:

- 2016 Distribution Plan CAPEX = \$115,425,661

¹ 2-Staff-6

² JT1.17

- Threshold CAPEX = \$47,160,842
- Maximum Allowed Incremental Capital = \$68,264,819
- Incremental Revenue Requirement = \$5,251,661

The Maximum Allowed Incremental Capital of \$68,264,819 includes \$40,478,700 for Churchill Meadows TS CCRA and \$27,786,119 for incremental 2016 CAPEX projects.

Enersource confirmed payment was made to HONI on December 15, 2015.³ AMPCO submits that the Churchill Meadows TS CCRA amount is no longer eligible for inclusion in the 2016 ICM as it is an out of period expense.

With the removal of the \$40,478,700 for Churchill Meadows TS CCRA, the ICM amount is \$27,786,119 million.

AMPCO has concerns regarding Enersource's ICM application. Firstly, AMPCO submits that Enersource's total 2016 capital budget of \$74,571,887 has not been adequately justified and should be reduced. Any reductions will impact the maximum allowable incremental capital. Secondly, AMPCO does not support all of the projects included in the ICM and reductions are proposed. Thirdly, AMPCO notes that Enersource proposes similar levels of capital spending for the years 2017 to 2021 and should the Board support the level of capital spending proposed in 2016, a Custom IR application may better suit the needs of Enersource given the forecast years of multiple capital projects.

Incremental Capital Module

The Board's Guideline's indicate the requested amount for an ICM claim must be incremental to a distributor's capital requirements within the context of its financial capacities underpinned by existing rates and satisfy the eligibility criteria of **materiality, need and prudence**.⁴

Materiality

A capital budget will be deemed to be material, and as such reflect eligible projects, if it exceeds the Board-defined materiality threshold. Any incremental capital amounts approved for recovery must fit within the total eligible incremental capital amount (as defined in this ACM Report) and must clearly have a significant influence on the operation of the distributor; otherwise they should be dealt with at rebasing. Minor expenditures in comparison to the overall capital budget should be considered ineligible for ACM or ICM treatment. A certain degree of project expenditure over and above the Board-defined threshold calculation is

³ Tech Conf Transcript Page 5

⁴ Chapter 3 Filing Requirements for Electricity Distribution Rate Applications, July 16, 2015 Page 17-18

expected to be absorbed within the total capital budget.

Need:

The distributor must pass the Means Test (as defined in the ACM Report). Amounts must be based on discrete projects, and should be directly related to the claimed driver. The amounts must be clearly outside of the base upon which the rates were derived.

Prudence: The amounts to be incurred must be prudent. This means that the distributor's decision to incur the amounts must represent the most cost effective option (not necessarily least initial cost) for ratepayers.

As discussed below, AMPCO identifies ICM projects proposed by Enersource that in its view do not meet the Board's criteria with respect to materiality, need and prudence.

2016 Capital Budget Update

In its original application, Enersource provided a list of capital projects that made up the total capital budget for 2016 of \$75,007,581, but Enersource did not indicate which projects were part of the ICM. In response to Technical Conference Undertaking JT1.2, Enersource provided an updated 2016 Capital Budget that specifically identified those projects that are included in the ICM. The 2016 capital budget has been updated to \$74,571,887 and the ICM projects total \$27,878,915.

Enersource's updated 2016 Capital Budget includes the removal of 2016 projects that will not be in service in 2016, offset by projects that started in 2015 that will be going in service in 2016.⁵ Enersource did not flag which projects fall into each of these categories. Enersource did not explain how it decided which projects are ICM projects.

As shown in Appendix A, AMPCO has determined that 7 projects totalling \$4,755,511 have been removed from the 2016 budget (none are ICM projects) and 9 projects totalling \$3,196,881 have been added to the 2016 budget. AMPCO notes that none of the projects added, except for one, are categorized as ICM projects, which seems to confirm that the projects added are projects that started in 2015 that will be going in service in 2016.

For the one project added as an ICM project in 2016, *BizTalk Upgrade* (\$373,118), Enersource has not provided any supporting details or business case on the need and prudence of this project. AMPCO submits that Board has no information or basis to approve this project. This

⁵ JT1.2

project is also below Enersource's materiality threshold of \$600,000 and as discussed below it should be excluded from the ICM.

Materiality

Enersource has identified investments greater than \$600,000 as material.⁶ As noted above under the materiality criterion, minor expenditures in comparison to the overall capital budget should be considered ineligible for ACM or ICM treatment. A certain degree of project expenditure over and above the Board-defined threshold calculation is expected to be absorbed within the total capital budget.

On this basis AMPCO submits that ICM expenditures of \$600,000 or less do not meet the materiality threshold. In Appendix B, AMPCO calculates that \$4,663,350 of Enersource's ICM projects should be excluded from the ICM.

Revised Project Budgets

Between December 2015 and January 2016, Enersource revised its 2016 capital and increased the project budgets for 13 projects totalling \$1,432,551. However, Enersource has not provided an explanation and/or an updated business case to support the additional budget requested. AMPCO submits that in the absence of this new information the Board is unable to determine if the proposed increase in spending related to each project is reasonable. AMPCO submits \$1,432,551 should not be eligible for ICM treatment.⁷(Appendix C)

⁶ Tab 2 Page 17

⁷ Tab 2 Page 17

2016 Capital Budget

Enersource's 2013 capital spend was below \$50,000 in 2013. For the years 2016 to 2020, Enersource has ramped up its spending to over \$75,000. As shown in the charts below, the largest increase is under the System Renewal Category.

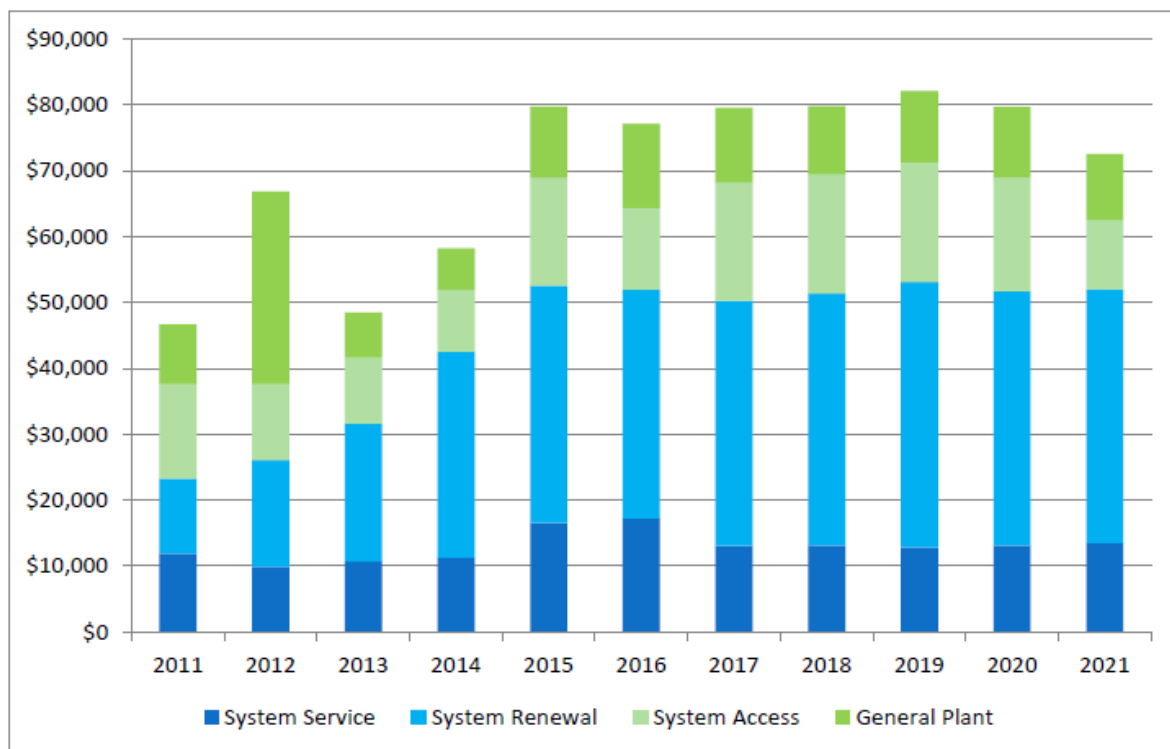
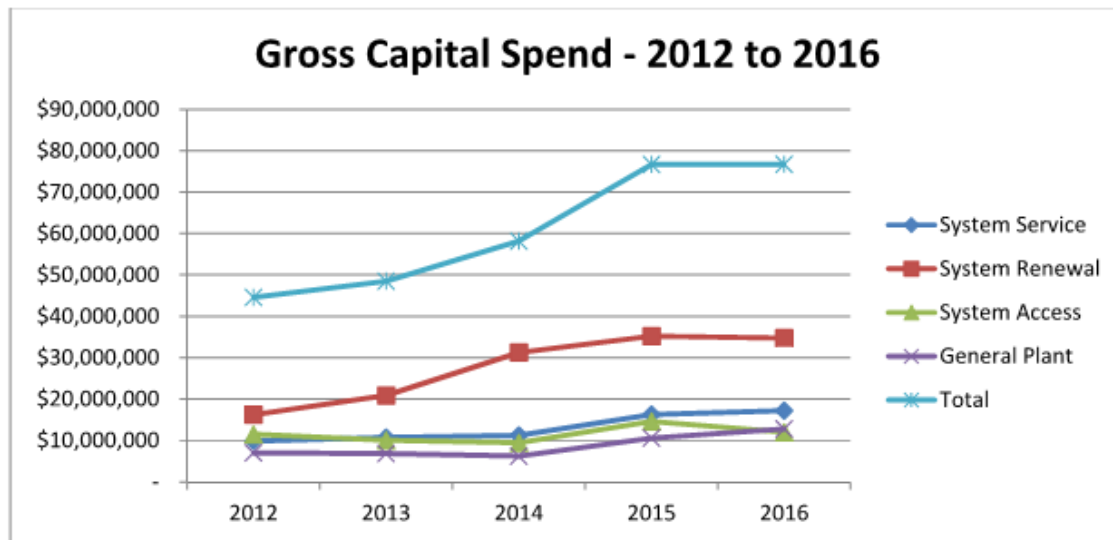


Figure 1. Enersource's actual and proposed capital investment portfolio expenditures (2011-2021)

Table 6: Gross Capital Spend 2012 to 2016



AMPCO's position is that Enersource has not adequately justified increasing its System Renewal spend by 60% over 2013 actuals, from \$46.173 to \$74.572. In AMPCO's view, Enersource's 2016 proposed asset renewal capital spend is at a pace and scope that exceeds the results of its most recent 2014 Asset Condition Assessment (ACA)⁸ which was used to develop the 2016 budget.

Asset Replacement Rate

Enersource has significantly ramped up its proposed 2016 capital spending compared to the spending levels proposed for 2016 in its 2012 Asset Management Plan for the following capital programs under System Renewal:⁹

- Subdivision Renewal Program (+5.816 million)
- Overhead Distribution Renewal and Sustainment (+\$2.461 million)
- Subtransmission Renewal (+1.955 million)
- Transformer Replacement (+5,664 million)

⁸ AMPCO-8 2014 ACA

⁹ JT1.8

The \$15.9 million increase in spending over 2012 forecasts for 2016 reflect more projects, new replacement programs resulting in an increase in the number of assets replaced.

AMPCO acknowledges that the 2014 ACA has identified more assets in poor condition compared to previous assessments. However, AMPCO submits Enersource's proposed asset renewal replacement rate is not consistent with its latest ACA and recommendations in its 2015 Distribution System Plan (DSP). AMPCO is concerned that Enersource is proposing to replace too many assets that have not reached end of useful life.

In the Board's recent Decision on the Toronto Hydro 5 year Custom IR application, the Board approved an annual reduction of 10% to the proposed capital spending due to the asset replacement rate and lack of productivity improvements. The Board was concerned that there was too heavy an emphasis on asset age rather than asset condition.¹⁰

Enersource's ACA and DSP describes the quantity of assets that are in very poor, poor, fair, good and very condition and makes recommendations for asset replacement. As shown below, the number of assets proposed for replacement in 2015 and 2016 is at a pace that is disproportionate to the number of assets identified as being in poor and very poor condition in the ACA¹¹ and the number recommended for replacement by Enersource's DSP.

Municipal Substation Transformer

Out of 108 Station transformers 2 are in poor condition and 1 is in very poor condition. The DSP says based on the ACA, Enersource should replace 7 transformers over the next 10 years.¹²

Enersource proposes to replace 6 in two years; 2 in 2015 and 4 in 2016.¹³

Circuit Breakers

Out of 510 circuit breakers, 1 is in poor condition and 9 are in very poor condition. The DSP says Enersource should replace 15 circuit breakers over the next 10 years.¹⁴

¹⁰ EB-2014-0116 Decision Toronto Hydro-Electric System Limited Pages 22 to 25

¹¹ AMPCO-8

¹² Supp-Staff-15 Page 94

¹³ AMPCO-9

¹⁴ Supp-Staff-15 Page 95

Enersource proposes to replace 50 in two years; 33 in 2015 and 17 in 2016.¹⁵

Pole Mounted Transformer

Out of 5,346 pole mounted transformers, 26 are in poor condition and 84 are in very poor condition. The DSP says Enersource should replace 449 pole mounted transformers over the next 10 years; 50 per year.¹⁶

Enersource proposes to replace 400 in two years; 200 in 2015 and 200 in 2016.¹⁷

Single-Phase Pad Mounted Transformer

Out of 14,242 Single-Phase Pad Mounted Transformers, 621 are in poor condition and 93 are in very poor condition. The DSP says Enersource should replace 1,591 single phase pad mounted transformers in the next 10 years¹⁸; 16 per year.

Enersource proposes to replace 700 in two years; 350 in 2015 and 350 in 2016.¹⁹

Three-Phase Pad Mounted Transformer

Out of 1,821 Three-Phase Pad Mounted Transformers, 38 are in poor condition and 9 are in very poor condition. The DSP says Enersource should replace 78 three phase pad mounted transformers in the next 10 years²⁰; 8 per year.

Enersource proposes to replace 140 in 2 years; 70 in 2015 and 70 in 2016.²¹

Vault Transformers

Out of 3,861 Vault Transformers, 280 are in poor condition and 67 are in very poor condition. The DSP says Enersource should replace 603 vault transformers in the next 10 years²²; 60 per year.

¹⁵ AMPCO-9

¹⁶ Supp-Staff-15 Page 79

¹⁷ AMPCO-9

¹⁸ Supp-Staff-15 Page 79

¹⁹ AMPCO-9

²⁰ Supp-Staff-15 Page 95

²¹ AMPCO-9

²² Supp-Staff-15 Page 96

Enersource proposes to replace 450 in 2 years; 250 in 2015 and 200 in 2016.²³

Pad Mounted Switchgear

Out of 862 Pad Mounted Switchgear, 25 are in poor condition and 48 are in very poor condition. The DSP says Enersource should replace 128 pad mounted switchgears in the next 10 years²⁴; 13 per year.

Enersource proposes to replace 80 in 2 years; 40 in 2015 and 40 in 2016.²⁵

44 kV Load Break Switches

Out of 338 44 kV Load Break Switches, 0 are in very poor condition and 16 are in poor condition. The DSP says Enersource should replace 20 of the 44 kV load break switches in the next 10 years²⁶.

Enersource proposes to replace 20 in 2 years; 10 in 2015 and 10 in 2016.²⁷

27.6 kV Load Break Switches

Out of 213 Load Break Switches (27.6 kV), 0 are in very poor condition and 3 are in poor condition. The DSP says Enersource should replace 7 of the 27.6 kV load break switches over the next 10 years.²⁸

Enersource proposes to replace 10 in 2 years; 5 in 2015 and 5 in 2016.²⁹

In Line Switches

The ACA shows that out of 2,002 In Line Switches, 67 are in poor condition and 27 are in very poor condition. The DSP says Enersource should replace 303 in line switches over the next 10 years³⁰; 30 per year.

²³ AMPCO-9

²⁴ Supp-Staff-15 Page 95

²⁵ AMPCO-9

²⁶ Supp-Staff-15 Page 95

²⁷ AMPCO-9

²⁸ Supp-Staff-15 Page 96

²⁹ AMPCO-9

³⁰ Supp-Staff-15 Page 97

Enersource proposes to replace 150 in 2 years; 75 in 2015 and 75 in 2016.³¹

Motorized Switches

The ACA shows that out of 104 Motorized Switches, 4 are in poor condition and 8 are in very poor condition. The DSP says Enersource should replace 25 motorized switches in the next 10 years³², less than 3 per year.

Enersource proposes to replace 10 in 2 years; 5 in 2015 and 5 in 2016.³³

Main Feeder Cables

The ACA shows that out of 2,233 km of Main Feeder Cables, 200 km are in poor condition and 258 km are in very poor condition. The DSP says Enersource should replace 678 conductor-km in the next 10 years³⁴, 70 km per year.

Enersource proposes to replace 40 km in 2015 and 50 km in 2016, which is less than the recommended replacement rate.

Distribution Cables

The ACA shows that out of 4,038 km of Distribution Cables, 861 km are in very poor condition and 519 km are in poor condition. The DSP says Enersource should replace 1,775 conductor-km in the next 10 years³⁵, 180 km per year.

Enersource proposes to replace 60 km in 2015 and 70 km in 2016, which is less than the recommended replacement rate.

Wood Poles

The ACA shows that out of 12,917 poles, 338 are in poor condition and 23 are in very poor condition. Enersource has since undertaken further analysis and determined that over 1,000 poles are in poor condition.³⁶ The DSP recommends that Enersource replace 2,394 wood poles

³¹ AMPCO-9

³² Supp-Staff-15 Page 97

³³ AMPCO-9

³⁴ Supp-Staff-15 Page 97

³⁵ Supp-Staff-15 Page 97

³⁶ Tec Conf Transcript Page 62

(18.5%) in the next 10 years³⁷; an average of 240 per year.

Enersource proposes to replace 500 wood poles in 2015 and 500 in 2016. For the years, 2010 to 2014 Enersource replaced an average of 292 per year.³⁸

It is AMPCO understands that Enersource replaces wood poles under several capital programs including the 2016 Wood Pole Installations program where wood poles identified in "poor" condition and at the end of their useful life through field inspections are proactively replaced.³⁹ AMPCO has no concerns with the 40 wood poles proposed for replacement under this program in 2016.⁴⁰ The quantity proposed for replacement is consistent with the 2010 to 2014 average of 42.⁴¹

Enersource has also included a new capital budget category in 2016 for Emergency Replacement in the amount of \$320,000. AMPCO submits poles in poor condition will also likely be replaced under this program on a reactive basis, along with transformers and switches.

Enersource indicates it plans to replace wood poles with concrete poles at twice the cost; the average cost to replace a wood pole is \$10,000 compared to \$20,000 for a concrete pole.⁴² Enersource's current projection is that a wood pole lasts 45 years compared to 55 for a concrete pole.⁴³

AMPCO notes that for the project MCLAUGHLIN ROAD WIDENING - EGLINTON TO PARKWOOD (2016 Road Project)⁴⁴ the existing poles will be upgraded to concrete poles in the future. Enersource's evidence does not include a business case to support replacing wood poles with concrete poles. The Enersource indicates it has not made any significant changes to its design and construction standards since its last cost of service application (EB-2012-0033). It is not clear to AMPCO under what circumstances Enersource replaces wood poles with concrete poles and how many wood poles in 2016 are affected. However, given the cost differential and the number of wood poles proposed for replacement over the levels recommended by the DSP, AMPCO submits further information on this proposal is required.

³⁷ Supp-Staff-15 Page 98

³⁸ JT1.13

³⁹ Supplementary Evidence - System Renewal, Business Case# 2016-C0561-4

⁴⁰ JT1.14

⁴¹ JT1.14

⁴² JT1.14

⁴³ Tech Conf Transcript Page 189

⁴⁴ Business Case# 2016-C0531-2

Overall AMPCO submits Enersource has not adequately justified its proposal to replace 500 wood poles in 2016, 50% more than recommended.

PowerStream Inc. is included in the merged entity with Enersource. AMPCO notes that PowerStream Inc. is implementing new technologies such as a Pole Remediation which costs significantly less than pole replacement and extends the life of the pole. AMPCO submits there may be opportunities for the merged entity to implement this technology in Enersource's service territory resulting in capital budget reductions in planned pole replacement.

Concrete Poles

The ACA indicates that out of 8,966 concrete poles, 5 are in poor condition and none are in very poor condition. The DSP says Enersource should replace 116 concrete poles in the next 10 years; an average of 12 per year.

Enersource proposes to replace 100 concrete poles in 2015 and 100 in 2016.⁴⁵

It is AMPCO understands that Enersource replaces concrete poles under a few capital programs including the 2016 Concrete Pole Installations program, where concrete poles identified in "poor" condition and at the end of their useful life through field inspections are proactively replaced.⁴⁶ In 2013, Enersource replaced 14 poles under this program. For the years 2010 to 2013, Enersource replaced on average 17.5 poles per year.⁴⁷

In 2016, Enersource proposes to proactively replace 40 concrete poles, over two times the amount replaced historically under the Concrete Poles Installation program. With no concrete poles in very poor condition and 5 in poor condition, AMPCO submits Enersource has not justified the increase in the number of concrete poles proposed for replacement under the Concrete Pole Installations program. The budget should be adjusted to reflect the proactive replacement of fewer poles. For example if the budget was set to replace 18 concrete poles, consistent with the historical average and the DSP recommendation, the resulting budget reduction is \$440,000. (22 less poles x \$20,000/pole).⁴⁸ Replacing assets at the appropriate pace is important to customers because the cost to replace a concrete pole in 2016 is \$20,000 per pole.

In addition to poles proactively replaced under the Wood and Concrete Pole Installations Programs, Enersource proposes to replace an additional 205 wood poles and 320 concrete poles under the following programs: Substation Upgrade, Subdivision Rebuild, Overhead

⁴⁵ AMPCO-9

⁴⁶ Supplementary Evidence - System Renewal, Business Case# 2016-C0561-5

⁴⁷ JT1.14

⁴⁸ JT1.14

Rebuild, and Roads.⁴⁹ There appears to be a discrepancy in the evidence regarding the number of proposed concrete pole replacements; 100 vs. 360 (40 under Concrete Pole Installation and 320 under other programs: Substation Upgrade, Subdivision Rebuild, Overhead Rebuild, and Roads; however both exceed the DSP recommendation.

AMPCO has some concerns regarding the increase in spending proposed in 2016 under Overhead Rebuild. As shown above, the condition of Enersource's assets as described in the 2015 DSP. Overhead Rebuild spending is discussed below.

In summary, AMPCO submits Enersource's asset replacement rate is disproportionate to the ACA results and 2015 DSP recommendations and too many assets are proposed for replacement. Further, Enersource has not provided adequate justification for the additional assets proposed for replacement compared to historical averages and the significant increase in spending on a project by project basis.

On a total asset replacement basis, Enersource's replacement strategy in 2016 exceeds the number of assets recommended for replacement in the DSP by 2.5 times. On average 686 total assets are recommended for annual replacement compared to Enersource's proposal to replace 1,696 assets. (Appendix D)

Enersource proposes to spend \$34.960 in 2016 on System Renewal. 2013 actuals are \$14.576. AMPCO submits based on the 2014 ACA, Enersource's proposed System Renewal budget is too high and the pace of asset renewal is too rapid. In AMPCO's view a 20 to 25% reduction in the System Renewal budget is not unreasonable. Any reduction in the capital budget will impact the maximum allowed incremental capital.

Enersource does not have a complete set of failure data. Enersource is working on connecting its major asset records and defining process workflows that will allow it to carry out more advanced data analysis, such as the analysis of the failure rate of its major assets.⁵⁰ Enersource is currently not able to track equipment failure statistics correlated to age in order to assess whether the equipment that failed is at or beyond end of life. Enersource is currently evaluating the work required to carry out more accurate tracking of failed equipment and subsequent failure analysis.⁵¹ AMPCO submits this type of information is useful to the Board in assessing asset replacement rates.

⁴⁹ AMPCO-15

⁵⁰ AMPCO-11

⁵¹ AMPCO-4 (b)

System Renewal ICM Projects

Enersource's proposed System Renewal ICM projects total \$18,465,000 as follows:

ENERSOURCE HYDRO MISSISSAUGA CAPITAL EXPENDITURE PROJECTS 2016 ICM

Business Unit	Description	2016 ICM Projects
<i>C0505 - Subdivision Rebuild</i>	Ellengale - Ibbetson Cres/ Shamir	\$ 2,000,000
<i>C0505 - Subdivision Rebuild</i>	Rockwood - Fieldgate/ Maple Ridge	\$ 1,500,000
<i>C0505 - Subdivision Rebuild</i>	Clarkson - Bromsgrove/ Cramer/Sherhill	\$ 1,750,000
<i>C0505 - Subdivision Rebuild</i>		\$ 5,250,000
<i>C0561 - Overhead Rebuilds</i>	Vermouth/Breckonridge	\$ 360,000
<i>C0561 - Overhead Rebuilds</i>	Holburne - Section 1	\$ 360,000
<i>C0561 - Overhead Rebuilds</i>	Meadow Wood/Country Club	\$ 1,170,000
<i>C0561 - Overhead Rebuilds</i>		\$ 1,890,000
<i>C0562 - Subtransmission Renewal</i>	Bloor - Cawthra to Tomken	\$ 600,000
<i>C0562 - Subtransmission Renewal</i>	Lakeshore - Seneca to Cawthra	\$ 690,000
<i>C0562 - Subtransmission Renewal</i>	Park - Hurontario to Kane	\$ 960,000
<i>C0562 - Subtransmission Renewal</i>	Queen - Briarwood to Seneca	\$ 600,000
<i>C0562 - Subtransmission Renewal</i>	Goreway - Derry to City Limits	\$ 1,200,000
<i>C0562 - Subtransmission Renewal</i>	Stavebank MS - Feeder Egress	\$ 150,000
<i>C0562 - Subtransmission Renewal</i>		\$ 4,200,000
<i>C0563 - U/G TX/Replace/Overhaul</i>	Underground Transformer and Equipment Renewal	\$ 4,125,000
<i>C0563 - U/G TX/Replace/Overhaul</i>		\$ 4,125,000
<i>C0564 - O/H TX/Replace/Overhaul</i>	Overhead Transformer and Equipment Renewal	\$ 3,000,000
<i>C0564 - O/H TX/Replace/Overhaul</i>		\$ 3,000,000
SYSTEM RENEWAL		\$ 18,465,000

Subdivision Rebuild

Enersource proposes to spend \$13,401,296, an increase of 70% over 2013 actuals of \$7,846,797. The program includes the replacement of underground cables and transformers. The proposed budget in 2016 is \$5.816 million more than what was forecast in Enersource's 2012 Asset Management Plan. Given that underground primary cables are the worst assets as per the health index compared to other assets and the failure for underground cable is 65% of the total for Equipment Failure⁵², AMPCO supports the three Subdivision Rebuild ICM projects.

Overhead Rebuild

Enersource proposes to spend \$13,401,296, an increase of \$5.54 over 2013 actuals of \$7,846,797. The 2016 budget includes new asset replacement programs (overhead switch & insulator) and 6 rebuild locations compared to 2 in 2013.

The 6 projects involve pole replacements and overhead transformer replacements. Given the 2014 ACA details for these assets, and that Enersource plans to replace 50% more wood poles

⁵² JT1.11 (2,866,852 minutes/4,419,294 minutes)

than recommended, and more transformers than recommended, AMPCO does not support the ramp up in spending on Overhead Rebuilds.

On this basis AMPCO does not support the inclusion of Meadow Wood/Country Club (\$1,170,000) as an ICM project.

Transformer Replacement

Enersource is proposing to spend \$7.125 million on Transformer Replacement in 2016, \$5.664 million more than originally forecast for 2016.⁵³ AMPCO submits the ACA does not support this accelerated spending.

Underground Transformer and Equipment Renewal

Enersource is proposing to spend \$4,125,000 compared to 2013 actuals of \$639,076. For the years 2010 to 2013, Enersource replaced an average of 104 transformers at an average cost of \$12,000 per transformer.⁵⁴ The 2016 budget will allow for the replacement of approximately 600 transformers.⁵⁵ AMPCO submits the ACA does not support this accelerated replacement rate. AMPCO submits that the magnitude of the increase in the replacement rate has not been adequately justified.

Enersource has included this project as an ICM project. The Board's Guidelines indicate that only discrete projects that are not part of typical annual capital programs qualify for ICM treatment. Underground Transformer and Equipment Renewal does not qualify as a discrete project.

AMPCO does not support the inclusion of Underground Transformer and Equipment Renewal (\$4,125,000) as an ICM project.

Overhead Transformer and Equipment Renewal

Enersource is proposing to spend \$3,000,000 compared to 2013 actuals of \$365,186. For the years 2010 to 2013, Enersource replaced an average of 55 transformers at an average cost of \$5,925 per transformer. In 2016, Enersource is proposing to replace 300 at a unit cost of \$10,000. In 2013, the unit cost was \$6,334. AMPCO submits the 2014 ACA does not support this accelerated replacement rate and AMPCO is not aware of any significant changes since 2013 to warrant the significant ramp up in budget. AMPCO submits that the magnitude of the

⁵³ JT1.8

⁵⁴ JT1.14

⁵⁵ Business Case 2016-C0563-1

increase has not been adequately justified. Enersource has not provided any information on why the unit costs have increased by 58% since 2013.

Enersource has included this project as an ICM project. The Board's Guidelines indicate that only discrete projects that are not part of typical annual capital programs⁵⁶ qualify for ICM treatment. Overhead Transformer and Equipment Renewal does not qualify as a discrete project.

AMPCO does not support the inclusion of Overhead Transformer and Equipment Renewal (\$3,000,000) as an ICM project.

Subtransmission Expansion

AMPCO notes that Enersource has changed the budget category for Subtransmission Expansion. Enersource has split Subtransmission Expansion into 2 categories: Subtransmission Expansion under System Service and Subtransmission Renewal under System Renewal. In 2016, Enersource proposes to spend \$4.2 million in Subtransmission Renewal. In 2013, Enersource spent \$5,831,729 on Subtransmission Expansion which included Subtransmission Renewal. In 2016, the total spend for Subtransmission Expansion and Subtransmission Renewal is \$7,787,253 (\$3,587,253 + \$4,200,000). Since \$5.8 million is built into rates, AMPCO submits the incremental amount eligible for an ICM is \$1.955 million.

AMPCO takes no issue with Subtransmission Renewal as an ICM project with incremental capital in the amount of \$1,955,524. This reflects an ICM reduction of \$2,244,476.

System Service ICM Projects

Under System Service, the ICM amount of \$6,495,385 includes \$4,995,385 for a Substation Upgrade (Mini Orlando MS) and \$1,500,000 for the purchase of three parcels of land: Webb MS, Mini Britannia and Duke MS at \$500,000 per site.

As noted above each of the land purchases are below Enersource's \$600,000 materiality threshold. Also, the substations will not be built on these lands until later and will not be in-service in 2016. Webb MS is scheduled to be in-service in 2017.⁵⁷ Mini Britannia will be built in 2018 and 2019 and Duke MS will be built in 2020 and 2021.⁵⁸ Given that the sites will not be in

⁵⁶ EB-2014-0219

⁵⁷ Supplementary Evidence – System Service, Business Case #2016-C0504-5

⁵⁸ Technical Conference Transcript Page 33

service in 2016 and for this reason as well, AMPCO does not recommend they be included in the ICM.

Mini Orlando MS

Enersource indicates that based on the system planning load forecast, a new substation, Mini Orland MS, is required in the area of Mavis, south of Highway 401. Mini Orlando MS is a growth driven investment in order to provide additional capacity for the planned commercial/industrial development in the area.

The new substation will add approximately 40 MVA of capacity on the 27.6 North system. Enersource indicates it takes approximately 2 years to build a station.⁵⁹ Mini Orlando is being built now and will be finished this year.⁶⁰ At completion, the substation will house two power transformers, two high voltage switchgears and two low voltage switchgears, which will deliver power via four 27.6 kV feeders.

Enersource includes this project as one of three that have a significant influence on operations of doing or not doing the project.

Enersource updated the budget for this project from \$2,850,000 in December 2015 to \$4,995,385 in January 2016. The Business Case filed October 2, 2015⁶¹ shows a project cost of \$4,450,000 (\$1,600,000 in 2015 and \$2,850,000 in 2016), a difference of \$545,385. Enersource did not update its Business Case to support the need for an additional \$545,385.

AMPCO supports Mini Orlando MS as an ICM project but submits Enersource should explain the nature of the \$545,385 increase in budget.

General Plant ICM Projects

Enersource's proposed 2016 General Plant budget is \$12,935,095. Given that Enersource is soon to be part of a merged entity and the Board has not determined that the merger is out of scope in this proceeding, AMPCO questions whether some of the proposed 2016 General Plant investments will proceed at all or as intended on a cost and timing basis, particularly related to IT, computer equipment, fleet renewal, ERP system, and ground and buildings expenditures.

⁵⁹ Technical Conference Transcript Page 33

⁶⁰ Technical Conference Transcript Page 38

⁶¹ Business Case C0504

PowerStream indicates that if a merger were to occur, the capital cost category affected would be the General Plant category of the capital budget.⁶²

Given the status of the merger, AMPCO submits it is reasonable to expect that the General Plant spending will be less and this budget should be reduced accordingly. AMPCO notes that any reduction in the General Plant budget impacts the Maximum Allowable Incremental Capital amount.

AMPCO also notes that in its original filing October 2, 2015 Enersource indicated the Long Term Asset Planning Solution (\$750,000) had an in-service date of 2017. The Business Case shows projects costs of \$1,500,000; \$750,000 in 2016 and \$750,000 in 2017.⁶³ AMPCO submits the proposed \$750,000 of costs in 2016 should be removed from the 2016 Capital budget it does not appear the project as a whole will be in service until 2017.

The General Plant ICM projects total \$1,655,210 as follows:

<i>C0581 - Engineering & Asset Systems</i>	InService Upgrade	\$	125,000
<i>C0581 - Engineering & Asset Systems</i>	G/Technology Upgrade	\$	70,000
<i>C0581 - Engineering & Asset Systems</i>	SmartPlant Foundation Upgrade	\$	362,092
<i>C0581 - Engineering & Asset Systems</i>		\$	557,092
<i>C0589 - Meter to Cash</i>	Monthly billing	\$	725,000
<i>C0589 - Meter to Cash</i>	BizTalk Upgrade	\$	373,118
<i>C0589 - Meter to Cash</i>		\$	1,098,118
GENERAL PLANT		\$	1,655,210

As discussed under materiality, projects with budgets below \$600,000 should be excluded from the ICM.

AMPCO supports Board Staff's submissions that monthly billing should not be approved as an ICM project.

In summary, AMPCO does not support the inclusion of any ICM projects proposed under General Plant.

⁶² EB-2014-0003 Section B Tab 1 Schedule 2 I-AMPCO-1 (a)

⁶³ 2016-C0588-3

System Access ICM Projects

Enersource's System Access ICM projects are as follows:

ENERSOURCE HYDRO MISSISSAUGA CAPITAL EXPENDITURE PROJECTS 2016 ICM

Business Unit	Description	2016 ICM Projects
C0597 - Grid Supply Point Metering	TCP/IP GSP Conversion & Reseal	\$ 163,320
C0597 - Grid Supply Point Metering	Tomken Upgrade	\$ 1,100,000
C0597 - Grid Supply Point Metering		\$ 1,263,320
SYSTEM ACCESS		\$ 1,263,320

As discussed above under materiality, the TCP/IP GSP Conversion & Reseal project (\$163,320) project should be excluded from the ICM as it is below Enersource's \$600,000 materiality threshold.

AMPCO takes no issue with the Tomken Upgrade project included as an ICM project.

Proposed ICM True-Up Process

Enersource is proposing to true-up its ICM capital spend on a discrete project by project basis.⁶⁴ This means that any funds not spent on a project will be returned to ratepayers. AMPCO supports this approach.

Summary

AMPCO proposes the following ICM project reductions:

Proposed Reductions	
Projects Not Material	\$4,663,530
Disallow Budget Increases	\$1,432,551
Meadow Wood/Country Club	\$1,170,000
Underground Transformer and Equipment Renewal	\$4,125,000
Overhead Transformer and Equipment Renewal	\$3,000,000
Subtransmission Renewal	\$2,244,476
Mini Orlando TS	\$545,385
Total	\$17,180,942

⁶⁴ Tech Conf Transcript Page 19

AMPCO's reductions reduce the ICM from \$27,786,119 to \$10,605,177.

Recovery of Reasonably Incurred Costs

AMPCO submits that its participation in this proceeding has been focused and responsible. Accordingly, AMPCO requests an order of costs in the amount of 100% of its reasonably-incurred fees and disbursements.

All of which is respectfully submitted this 3rd day of February 2016.

AMPCO Appendix A
Revised 2016 Capital Budget
Source: JT1.2

		Dec-15	JT1.2 Jan 18'16
		2016 Budget	2016 Budget
2016 Capital Projects - Removed			
C0507 - Subtransmission Expansion	Webb MS Feeder Egress - Section 1	\$ (750,000)	\$ -
C0531 - Roads	QEW - Hurontario to Mississauga Road	\$ (1,500,000)	\$ -
C0532 - LRT	Design - Underground	\$ (200,000)	\$ -
C0532 - LRT	Design - Overhead	\$ (200,000)	\$ -
C0594 - Smart Meters Large Users	900 Large Commercial Interval Meter Replacement Project	\$ (936,947)	\$ -
C0594 - Smart Meters Large Users	Collector (Gatekeeper) Replacement/Removal	\$ (568,564)	\$ -
C0588 - ERP System	JDE Major Version Upgrade	\$ (600,000)	\$ -
		\$ (4,755,511)	
2016 Capital Projects - Added			
C0504 - Substation Upgrade	Hensall MS	\$ -	\$ 205,881
C0507 - Subtransmission Expansion	HYDRO ONE ROW - WINSTON CHURCHILL TO SOUTHDOWN (PH2	\$ -	\$ 1,012,504
C0507 - Subtransmission Expansion	CLARKSON - ORR TO LAKESHORE	\$ -	\$ 811,689
C0576 - Auto Switches/SCADA	Thomas MS Switchgear	\$ -	\$ 276,801
C0576 - Auto Switches/SCADA	Rifle Range Automation	\$ -	\$ 70,170
C0576 - Auto Switches/SCADA	Mini Orlando Automation	\$ -	\$ 75,881
C0505 - Subdivision Rebuild	Erin Mills MS Feeders	\$ -	\$ 151,296
C0588 - ERP System	Website Upgrade	\$ -	\$ 40,193
C0589 - Meter to Cash	BizTalk Upgrade	\$ -	\$ 373,118
C0591 - Grounds & Building	North Tower Hydraulic Lift	\$ -	\$ 179,348
		\$ (4,755,511)	\$ 3,196,881
<i>Variance</i>			\$ (1,558,630)

AMPCO Appendix B
Enersource ICM Projects - Not Material
Source: JT1.2

		Dec-15 2016 Budget	JT1.2 Jan 18'16 Revised 2016 Budget - ICM Projects Not Material
C0504 - Substation Upgrade	Webb MS - Land	\$ 2,800,000	\$ 500,000
C0504 - Substation Upgrade	Mini Britannia - Land	\$ 500,000	\$ 500,000
C0504 - Substation Upgrade	Duke MS - Land	\$ 500,000	\$ 500,000
C0561 - Overhead Rebuilds	Vermouth/Breckonridge	\$ 360,000	\$ 360,000
C0561 - Overhead Rebuilds	Holburne - Section 1	\$ 360,000	\$ 360,000
C0562 - Subtransmission Renewal	Bloor - Cawthra to Tomken	\$ 600,000	\$ 600,000
C0562 - Subtransmission Renewal	Queen - Briarwood to Seneca	\$ 600,000	\$ 600,000
C0562 - Subtransmission Renewal	Stavebank MS - Feeder Egress	\$ 150,000	\$ 150,000
C0597 - Grid Supply Point Metering	TCP/IP GSP Conversion & Reseal	\$ 163,320	\$ 163,320
C0581 - Engineering & Asset Systems	InService Upgrade	\$ 125,000	\$ 125,000
C0581 - Engineering & Asset Systems	G/Technology Upgrade	\$ 70,000	\$ 70,000
C0581 - Engineering & Asset Systems	SmartPlant Foundation Upgrade	\$ 320,000	\$ 362,092
C0589 - Meter to Cash	BizTalk Upgrade	\$ -	\$ 373,118
		\$ 6,548,320	\$ 4,663,530

AMPCO Appendix C

2016 Capital Projects - Updated Budgets

Source: JT1.2

		Dec-15	JT1.2 Jan 18'16	
		2016 Budget	2016 Budget	Variance
C0504 - Substation Upgrade	Rifle Range MS	\$ 2,350,000	\$ 2,714,241	\$ 364,241
C0507 - Subtransmission Expansion	Churchill Meadows Feeder Egress (Easement) - TS to Winston Chu	\$ 450,000	\$ 563,060	\$ 113,060
C0561 - Overhead Rebuilds	Hull/Studley	\$ 720,000	\$ 742,453	\$ 22,453
C0561 - Overhead Rebuilds	Wharton Way/Berkel	\$ 360,000	\$ 390,147	\$ 30,147
C0561 - Overhead Rebuilds	Credit Woodlands - Section 2	\$ 720,000	\$ 741,745	\$ 21,745
C0531 - Roads	MCLAUGHLIN ROAD WIDENING - EGLINTON TO PARKWOOD	\$ 600,000	\$ 604,778	\$ 4,778
C0531 - Roads	GOREWAY at CITY LIMITS (GRADE SEPARATION)	\$ 300,000	\$ 324,700	\$ 24,700
C0531 - Roads	TORBRAM ROAD - Grade Separation	\$ 300,000	\$ 304,049	\$ 4,049
C0531 - Roads	Various Intersections	\$ 300,000	\$ 300,000	\$ -
C0542 - Ind/Comm Services	Industrial/Commercial Services	\$ 2,600,000	\$ 4,001,884	\$ 1,401,884
C0542C - CIAC Ind/Comm Services	Customer Contributions	\$ (1,000,000)	\$ (1,700,942)	\$ (700,942)
C0581 - Engineering & Asset Systems	SmartPlant Foundation Upgrade	\$ 320,000	\$ 362,092	\$ 42,092
C0584 - Rolling Stock	Bucket Trucks	\$ 1,190,000	\$ 1,294,344	\$ 104,344
* revised- inservice date 2017; land costs only		\$ 9,210,000	\$ 10,642,551	\$ 1,432,551

AMPCO Appendix D
Enersource Proposed Asset Replacement Rate

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Supp-Staff-15 DSP Pages 94-97

Asset	2014 Population	# of Units Planned for Replacement by Enersource		DSP Proposed # Average per Year
		2015	2016	
Substation Transformers	108	2	4	0.7
Substation Transformer Spares	12	N/A	N/A	0
Circuit Breakers	510	33	17	1.5
Pole Mounted Transformers	5346	200	200	50
Pad Mounted Transformers 1 Phase	14242	350	350	16
Pad Mounted Transformers 3 Phase	1821	70	70	8
Vault Transformers	3861	250	200	60
Pad Mounted Switchgear	862	40	40	13
Overhead Switches 44 kV Load Break	338	10	10	2
Overhead Switches 27.6 kV Load Break	213	5	5	0.7
Overhead Switches Inline	2002	75	75	30
Overhead Switches Motorized	104	5	5	2.5
UG Cables Main Feeder	2233	40	50	70
UG Cables Distribution	4038	60	70	180
Poles Wood	12917	500	500	240
Poles Concrete	8966	100	100	12
Total		1740	1696	686.4