



January 15, 2016

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319, 27th Floor
2300 Yonge Street
Toronto, ON M4P 1E4

Re: PowerStream Inc. Custom IR Application 2016 to 2020
AMPCO Final Submission
Board File No. EB-2015-0003

Dear Ms. Walli:

Attached please find AMPCO's final submission in the above proceeding.

Please do not hesitate to contact me if you have any questions or require further information.

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'Adam White', written over a light blue circular stamp or watermark.

Adam White
President
Association of Major Power Consumers in Ontario

Copy to: PowerStream Inc.

EB-2014-0003
PowerStream Inc.

**Application for electricity distribution rates for the period
from January 1, 2016 to December 31, 2020.**

AMPCO Submissions

PowerStream Inc. (PowerStream) filed a 5 year Custom Incentive Rate application with the Ontario Energy Board (OEB) on May 22, 2015 under section 78 of the Ontario Energy Board Act, 1998, S.O. 1998, c. 15, (Schedule B), seeking approval for changes to the rates that PowerStream charges for electricity distribution for the years 2016 to 2020.

PowerStream is seeking rates effective January 1, 2016 and interim rates effective January 1st of each of the years 2017 to 2020. Rates for 2017 to 2020 are subject to annual adjustments.

PowerStream is seeking approval of a 2016 base revenue requirement of \$187.0 million which represents a 24.4% (\$37.7 million) increase over the 2013 Board Approved amount of \$154.2 million.

Table 1: Revenue Requirement (\$ million)

	2013 BA	2013 Actual	2014 Actual	2015 Actual	2016 Forecast	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast
Revenue Requirement	\$154.2	\$153.1	\$161.8	\$174.6	\$187.0	\$210.3	\$221.4	\$232.0	\$241.6
Change from 2013 BA \$		\$(1.1)	\$7.6	\$20.4	\$32.8	\$56.1	\$67.2	\$77.8	\$87.4
Change from 2013 BA %		-0.7%	4.9%	13.2%	21.3%	36.4%	43.5%	50.5%	56.7%

By 2020, PowerStream's proposed base revenue requirement is \$241.6 million which represents an increase of \$87.4 million or 56.7% over the most recent (2013) Board Approved revenue requirement of \$154.2 million. This represents an average annual increase of 8.1% over the seven year period.

PowerStream indicates the change in revenue requirement is driven mainly by PowerStream's capital spending requirements.¹

¹ PowerStream AIC 20151214

In order for the Board to approve PowerStream's 5 year Custom Incentive Rate application, the must be satisfied that the application meets the objectives of its Renewed Regulatory Framework for Electricity (RRFE)² policy put in place in 2012. AMPCO's position is that PowerStream's Custom IR application does not.

For the reasons discussed below AMPCO submits that the Board should deny PowerStream's Custom IR application and set rates for 2016 only on a Cost of Service (COS) basis, recognizing PowerStream came in one year early for rebasing. For the years 2017 to 2020 PowerStream would then be under 4th Generation Incentive Rate-making, with annual adjustments based on the Board's Price Cap formula that includes a productivity factor, unless PowerStream brings forward a different RRFE application during that period for the Board's consideration.

AMPCO also proposes a 20% reduction in capital for 2016 and average annual reductions of 20% for the years 2017 to 2020 should the Board approve PowerStream's 5 year Custom IR application or a shorter period of time. Reductions to OM&A are also proposed.

Custom IR

The Board's RRFE is a comprehensive performance-based approach to regulation that is based on the achievement of four outcomes to ensure that Ontario's electricity system provides value for money for customers: Customer Focus, Operational Effectiveness, Public Policy Responsiveness and Financial Performance. Measuring performance is a key policy of the RRFE.

AMPCO submits PowerStream's Custom IR does not meet the RRFE expectations regarding Customer Focus, Operational Effectiveness and Measuring Performance.

PowerStream's choice of a Custom IR rate setting method was based on its proposed significantly large multi-year capital plan.

PowerStream last rebased for 2013 rates (EB-2011-0005) and was scheduled for rebasing for 2017 rates. Under the RRFE, PowerStream opted to file this application to rebase one year early under a Custom IR application seeking approval to set rates for 2016 to 2020 based on a 5 year forecast of revenue requirement and sales volumes.

Based on previous Board Decisions on Custom IR³, there are a number of features that the Board determined must be built into a Custom IR application that embody multi-year incentive

² Report of the Board Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach dated October 18, 2012

³ Hydro One, Toronto Hydro, Oshawa, Horizon, Hydro Ottawa

rate setting, in order for the application to meet the intent of the RRFE. As discussed below, AMPCO's position is that PowerStream's Custom IR lacks key RRFE features and should not be approved by the Board.

The Custom IR should include a custom index, to account for the specific circumstances of the distributor, as opposed to a formulaic Price Cap Index which is the key feature built into a 4GIRM and Annual IR application. The custom index is an annual adjustment mechanism to account for inflation and productivity, where a distributor-specific rate trend for the term is developed and informed by the distributor's forecasts (revenue and costs, inflation, productivity); the Board's inflation and productivity analyses; and benchmarking to assess the reasonableness of the distributor's forecasts.⁴ Expected inflation and productivity gains are to be built into the rate adjustment over the term.

PowerStream's Custom IR has a central flaw in that it is inconsistent with multi-year incentive rate setting as it does not include a productivity factor. In fact, PowerStream characterizes its Custom IR as a Custom Cost of Service application.⁵ The Board has already determined in its Hydro One Decision that it does not accept the interpretation that a custom index includes custom cost of service.⁶ Accordingly, AMPCO submits PowerStream's similar Custom Cost of Service approach represents a significant shortcoming in the application that justifies the Board not setting rates for a 5 year period.

Hydro One asked the OEB to approve a 5 year Custom IR for rates for each of the years 2015 to 2019. The Board denied Hydro One's request and instead set rates for 3 years using a cost of service methodology. The Board determined that Hydro One's approach lacked the key features of the RRFE based on a number of shortcomings. AMPCO submits PowerStream's approach is most like Hydro One's approach. Accordingly, AMPCO submits that the shortcomings discussed in the Board's Decision as to why Hydro One's Custom IR did not meet the objectives of the RRFE also apply to PowerStream and support AMPCO's position that the Board should deny PowerStream's 5 year Custom IR and set rates for 2016 only. AMPCO, however, does not support setting rates for PowerStream on a three year basis i.e. for 2016, 2017 and 2018 as PowerStream's current circumstances are very different than Hydro One's.

The Board expects Custom IR rate setting to include expectations for benchmark productivity and efficiency gains that are external to the company.

⁴ Report of the Board Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach dated October 18, 2012 Page 13

⁵ A-CCC-6

⁶ Hydro One Networks Inc. Decision EB-2013-0416/EB-2014-0147 March 12, 2015 Page 13

Hydro One embedded cost savings from productivity improvements in cost forecasts, and indicated that the company would bear the risk of failing to achieve these savings. The OEB determined that it does not equate Hydro One’s embedded annual savings in its forecast budgets with productivity and efficiency incentives.⁷

PowerStream’s application also embeds annual capital & OM&A savings in its forecast budgets based on expected inflation and productivity gains. PowerStream did not build a custom productivity factor into its capital budget.

PowerStream provided details of its productivity initiatives and an analysis to demonstrate that the forecasts used in the Application deliver productivity savings that exceed the X factor of 0.3% for cohort 3 to which PowerStream is assigned. As shown in the Table below, PowerStream expects to deliver \$15.8 million in productivity savings (54% from capital & 46% from OM&A) compared to \$13 million under the price cap IR approach over the years 2014 to 2020⁸, which results in \$2.9 million more in savings.

Table F-SEC-6-2: Expected vs. Estimated Productivity Savings (\$ Millions)

	2014	2015	2016	2017	2018	2019	2020	Total
OEB Expected Productivity Savings	\$0.5	\$0.9	\$1.4	\$1.9	\$2.3	\$2.8	\$3.2	\$13.0
Estimated Productivity Savings	\$2.5	(\$0.4)	(\$0.2)	\$1.5	\$2.8	\$4.1	\$5.6	\$15.8
Over (under) achieved	\$2.0	(\$1.4)	(\$1.6)	(\$0.4)	\$0.5	\$1.3	\$2.4	\$2.9

PowerStream focused on achieving OM&A productivity improvements through projects such as Work Force Management, new Customer Information System and its Journey to Excellence program.⁹ PowerStream confirmed that cable injection is the only program that was included in the calculation of productivity savings from capital. Productivity savings from the pole reinforcement was not calculated nor included in the estimated productivity savings. Other capital projects may contain productivity savings but PowerStream has not attempted to measure those.¹⁰ Productivity savings from pole reinforcement (compared to pole replacement) are not reflected in the forecast capital budget. PowerStream’s estimated productivity for capital and OM&A are shown in the table below.

⁷ Hydro One Networks Inc. Decision EB-2013-0416/EB-2014-0147 March 12, 2015 Page 8

⁸ F-SEC-6

⁹ April 2015 Technical Conference Undertaking #3 re: A-CCC-8

¹⁰ Section B Tab 2 Schedule 1 Page 7 II-1-Staff-13(a)

Table F-SEC-6-1: Estimated Productivity Savings (\$ Millions)

	2014	2015	2016	2017	2018	2019	2020	Total
Capital		\$0.4	\$0.8	\$1.2	\$1.6	\$2.1	\$2.6	\$8.6
OM&A	\$2.5	(\$0.8)	(\$1.0)	\$0.3	\$1.2	\$2.0	\$3.0	\$7.2
Total	\$2.5	(\$0.4)	(\$0.2)	\$1.5	\$2.8	\$4.1	\$5.6	\$15.8

PowerStream indicates that it needs to do more to address productivity.¹¹ PowerStream further explained that during the budgeting process, it did not specifically require staff to identify productivity reductions in their budgets. PowerStream indicates this will be incorporated into the budgeting process going forward.

In summary, similar to Hydro One, PowerStream's Custom Cost of Service application lacks a custom productivity factor and a stretch factor resulting in insufficient incentives to drive efficiencies and continuous improvement. AMPCO submits this deficiency warrants the Board's denial of PowerStream's Custom IR. It is not sufficient to embed savings in cost forecasts.¹²

Customer Focus

PowerStream undertook consultation with its customers at an additional cost to customers after it had developed its plan. PowerStream indicates that as a result of its consultation with customers it did not change its capital and operating spending proposals.

AMPCO acknowledges that PowerStream's customer consultation efforts are evolving but has concerns that PowerStream did not actively seek targeted input from customers on key capital and OM&A programs with significant incremental budgets over the plan such as storm hardening. Had it done so, AMPCO submits the proposed forecasts may have been different.

PowerStream's capital program is designed to hold system failures and maintain reliability at a constant level.¹³

A comparison of PowerStream's SAIDI and SAIFI results to other CEA urban utilities shows that PowerStream's reliability results are better.¹⁴ This information was not shared with customers.

¹¹ April 2015 Technical Conference Undertaking #3 re: A-CCC-8

¹² Hydro One Networks Inc. Decision EB-2013-0416/EB-2014-0147 March 12, 2015 Page 14

¹³ Exhibit G Tab 2 Page 30

¹⁴ Exhibit G, Tab 2 5.2.3 Page 15

Benchmarking

The RRFE expects that each rate setting method will be supported by benchmarking.¹⁵ Benchmarking will be used to assess distributor performance and will assist the Board in assessing distributor infrastructure investment plans in order to determine appropriate cost levels in rates associated with those plans.

PowerStream used the PEG benchmarking tool adopted by the Board to derive future values of predicted costs to compare to actual and forecasted costs and determined that PowerStream's costs remain within +/- 10 percent of predicted cost and PowerStream remains in cohort 3¹⁶ with a stretch factor of 0.3%. PowerStream also relies on the Board's annual Year Book of Electricity Distributors to provide the comparison to other utilities. PowerStream compares its 2013 OM&A cost per customer to the average and median costs and concludes that its cost is the 13th lowest and is 4% of the average and 84.7% of the median OM&A cost per customer for 73 LDCs in the Yearbook.

PowerStream also provided evidence is that it is experiencing a decline in efficiency over time beginning in 2013 to 2017, and then improving slightly to 2020.

Given that PowerStream's operational effectiveness is worsening, AMPCO submits an Efficiency Adjustment Mechanism is appropriate as it would protect ratepayers over the term of the plan, should the Board approve rates beyond one year. An Efficiency Adjustment Mechanism was approved as part of Horizon's Custom IR. AMPCO submits the same mechanism would apply to PowerStream.

Performance Measurement and Continuous Improvement

With respect to Measuring Performance, the RRFE expects distributors to develop performance measures that link directly to the RRFE's four performance outcomes, and report annually on these key performance outcomes.

The Board's RRFE defines Operational Effectiveness as achievement of continuous improvement in productivity and cost performance, and utilities deliver on system reliability and quality objectives.

To facilitate performance monitoring and distributor benchmarking, the Board has implemented a scorecard approach to link directly to the performance outcomes. Distributors are required to report their progress against the scorecard on an annual basis.

¹⁵ RRFE Page 10

¹⁶ Exhibit F Tab 2 Page 2

PowerStream proposes to use of the Board’s Scorecard and internal scorecards to monitor performance.

PowerStream believes that the Board’s scorecard and RRR reporting processes provide satisfactory reporting for monitoring of PowerStream’s performance. PowerStream submits that the Board’s reporting processes are the most appropriate means of reporting and monitoring performance.¹⁷

PowerStream’s Custom IR includes seven performance measures as follows

1	System Average Interruption Duration Index (SAIDI)	$SAIDI = \frac{\sum \text{Customer Minutes of Interruption}}{\text{Total Number of Customers Served}}$
2	System Average Interruption Frequency Index (SAIFI)	$SAIFI = \frac{\sum \text{Total Number of Customers Interrupted}}{\text{Total Number of Customers Served}}$
3	Customer Average Interruption Duration Index (CAIDI)	$CAIDI = \frac{\sum \text{Customer Minutes of Interruption}}{\text{Total Number of Customers Interrupted}}$
4	Momentary Average Interruption Frequency Index (MAIFI)	$MAIFI = \frac{\sum \text{Total Number of Customer Momentary Interruptions}}{\text{Total Number of Customers Served}}$
5	DS Plan Spending Progress Report	$\frac{\$ \text{ spent in a year}}{\text{budget in a year}} \text{ plus } \frac{\$ \text{ spent cumulative over n years (n=1 to 5)}}{\$ \text{ cumulative budget over n years (n=1 to 5)}}$
6	Work Order Closing Variances	percentage of WOs that close within prescribed policy limits
7	Cable Failure Rates	comparison pre-remediation vs post remediation for cable projects

AMPCO notes SAIDI, SAIFI, CAIDI and MAIFI are well established industry metrics. SAIDI and SAIFI and Distribution System Implementation Progress (%) (i.e. DS Plan Spending Progress Report %) are reported on the Board’s annual Scorecard. AMPCO supports these metrics in that they measure improvement over time, however, they do not speak directly to PowerStream’s incremental and extraordinary budget increases.

AMPCO submits that the metric number of outages per year could be an easier metric than SAIFI for customers to understand in terms of absolute outages and trends in order to assess the value of PowerStream’s spending over 5 years, i.e. are the annual number of outages increasing, decreasing or staying the same over time as intended by PowerStream.

¹⁷ PowerStream AIC 20151214 Page 8

PowerStream has proposed two performance measures not on the scorecard: Work Order Closing Variances and Cable Failure Rates.

AMPCO takes no issue with the Work Order Closing Variance but considers it to be more of an internal performance metric than a metric that demonstrates long term value for customers from the plan.

AMPCO sees Cable Failures Rates as a more appropriate custom measure as it demonstrates PowerStream's improvement over time with respect to its Cable Remediation programs.

AMPCO submits that distributors seeking rates under a Custom IR to address significant capital and operating budget increases over a 5 year term should also propose performance measures unique to their circumstances in order to assess continuous improvement and value for customers related to the significant budget increases requested.

In AMPCO's view, PowerStream's performance metrics are weak do not effectively measure continuous improvement and value for customers given PowerStream's significant capital and OM&A spending level requests. The proposed metrics do not allow Power Stream to demonstrate whether the planned outcomes are achieved.

If the Board decides to set rates for PowerStream for more than one year, AMPCO submits that the Board should consider additional metrics beyond those on the Board's Scorecard and proposed by PowerStream in order to link specific capital and OM&A spending priorities in its plan to outcomes. An example would be a reduction in Tree Contact Failures if the Board approves PowerStream's new Storm Hardening initiatives related to rear lot remediation and incremental vegetation management work. AMPCO submits additional work is required to develop meaningful metrics for this plan and future plans.

Ratepayer Protection Features

If the Board decides to set rates for 5 years or a period of more than 1 year, AMPCO submits the Board should implement the same features approved in the Horizon and Hydro Ottawa Custom IR applications. These include an Earnings Sharing Mechanism, an Efficiency Adjustment Mechanism and an asymmetrical Capital Variance Account. Given the uncertainty discussed below within the four capital cost components: System Access, System Service, System Renewal and General Plant, AMPCO submits that the Board should require PowerStream to track costs within each of these four components separately.

Without these features, AMPCO submits PowerStream's application lacks an appropriate sharing of benefits between the utility and its customers.

AMPCO supports Energy Probe's request that the asymmetrical capital variance account should also be applied to any underspending in 2015.

Capital

PowerStream proposes to spend \$644 million on capital over the five year period 2016 to 2020. This represents a 40% increase compared to \$469,650 that was spent during the previous 5 year period 2011 to 2015.¹⁸

CATEGORY	Historical				Forecast (Planned)					
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	Actual	Actual	Actual	Actual	Plan	Plan	Plan	Plan	Plan	Plan
Rate Base	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000
System Access	21,007	19,888	17,030	26,229	24,145	28,232	28,470	29,561	28,726	31,867
System Renewal	11,527	16,974	22,254	39,186	42,388	48,715	51,500	52,052	52,971	52,406
System Service	22,885	13,770	34,780	17,946	27,322	38,322	32,072	29,920	26,963	23,022
General Plant	7,877	24,200	19,593	26,148	24,545	20,631	19,558	13,967	16,841	18,206
Sub-Total	63,297	74,832	93,657	109,509	118,400	135,900	131,600	125,500	125,501	125,500
Non-Rate Base	2,278	1,196	2,628	1,364	2,489	-	-	-	-	-
Grand Total	65,575	76,028	96,285	110,873	120,889	135,900	131,600	125,500	125,501	125,500
System O&M	2,055	2,438	2,523	2,627	3,290	3,825	4,365	4,909	5,459	6,015

PowerStream's capital spending increases significantly from 2015 onwards. 2015 represents a 10% increase over 2014 and for the period 2015 to 2020, PowerStream's capital plan increases by 49% compared to 2011 to 2014.¹⁹

Variance 2014 to 2015	Variance 2015 to 2016	2011-2014 AVG	2015-2020 AVG	% Increase
-	2,084	21,039	28,500	35.5%
3,202	6,326	22,485	50,005	122.4%
9,376	11,000	22,346	29,604	32.5%
-	-	-	-	-
1,603	3,913	19,454	18,958	-2.6%
8,891	17,500	85,324	127,067	48.9%

¹⁸ Undertaking JTC1.5_App.2-AB_20150911

¹⁹ KT2.3 Page 2

Specifically, over the period 2015 to 2020, on average PowerStream proposes to spend:

- 35.5% more on System Access;
- 32.5% more on System Service;
- 122.4% more on System Renewal; and
- 2.6 % less on General Plant.²⁰

In June 2013, as part of PowerStream's 2014 IRM application, PowerStream provided a 10 year Capital Plan. AMPCO notes that PowerStream now proposes to spend \$47 million more for the years 2015 to 2020 compared to what was contemplated in 2013. The material differences can be attributed in part to system hardening and a new CIS system.

AMPCO submits that the five year investment plan proposed by PowerStream is excessive, uncertain and should be reduced. AMPCO's position is based on the following reasons which are discussed in detail below:

- PowerStream has a history of underspending on its capital plan
- PowerStream did not have an independent third party review its capital plan
- The asset quantities proposed for replacement exceed the ACA results
- The proposed pace of work is not reasonable given historical actuals
- General Plant spending is uncertain and may not occur as proposed
- Proposed CIS spending is uncertain
- The capital budget has been overestimated

In addition, AMPCO has concerns regarding the following issues.

- Capital budget lacks productivity and efficiency incentives
- Customer input on new projects that drive cost increases was not appropriately sought
- Performance outcomes of the capital plan are missing
- Unit cost evidence is confusing

History of Underspending

- Historically, PowerStream has underspent on the delivery of its capital program: 9% less in 2011; 6% less in 2012; and 16% less in 2013.²¹ On aggregate over the years 2011 to 2014, PowerStream has underspent by 7.4%.

²⁰Exhibit K2.3 Page 2

²¹ Section B Tab 2 Schedule 1 Page 46 II-2-taff-34

(000's)	2011	2012	2013	2014	2015 (YTD)
Planned	69,731	76,685	111,984	108,238	118,400
Actual	63,297	74,832	93,657	109,509	45,107
Deviation (\$)	-6,434	-1,853	-18,326	-1,271	-73,293
Deviation (%)	-9%	-2%	-16%	1%	-62%

Note: 2015 YTD shown is for the period ending June 30th

The Board's approval of an asymmetrical Capital Variance Account, discussed above, would protect rate payers in the event PowerStream underspends on its capital budget. AMPCO submits the asymmetrical Capital Variance Account should also be applied to any underspending in 2015.

Lack of Third Part Review of Capital Plan

The Board's RRFE indicates that the Board sees merit in receiving the evidence of third party experts as part of a distributor's application, or retaining its own third party experts, in relation to the review and assessment of distributor asset management and network investment plans (along with other evidence filed by the distributor).²²

PowerStream did not have a third-party assess its DSP.²³

AMPCO submits an independent review of PowerStream's DSP to assess the level, timing and prioritization of the work would have been a useful tool in this proceeding.

AMPCO submits the Board should require that PowerStream have an independent third party expert review its DSP as part of its next application.

Asset Quantities Proposed for Replacement Too High

PowerStream is proposing to spend \$257.6 million on System Renewal from 2016 to 2020 compared to \$132.9 million in 2011 to 2015, a 94% increase.

PowerStream's evidence is that its Asset Condition Assessment (ACA) results form the basis of its renewal plan, however, as seen below, AMPCO provides examples of programs where the asset quantities proposed for renewal are too high and inconsistent with the results of the ACA

²² RRFE Page 37

²³ Transcript Volume 2_20151123 Page 102

and the asset replacement levels identified in other capital programs.

AMPCO submits the determination of the optimal timing of when an asset should be replaced in order to derive the maximum value of the asset is critical. Replacing an asset too soon and ahead of an optimal intervention time risks wasting the remaining useful life of the asset.

PowerStream was assisted by and BIS Consulting in 2009 and Kinectrics in 2009 and earlier to develop an ACA. Since then, PowerStream alone has made revision versions to the original 2009 ACA report. Revision 1 on March 8, 2012; Revision 2 on November 27, 2012 and Revision 3 on December 31, 2014. PowerStream's 2016 to 2020 investment plan is based on its own 2014 ACA.

PowerStream did not have its ACA prepared or reviewed by an independent party for this application. AMPCO submits parties would have benefited from Kinectrics involvement (or other third party) in the preparation or review of PowerStream's latest ACA.

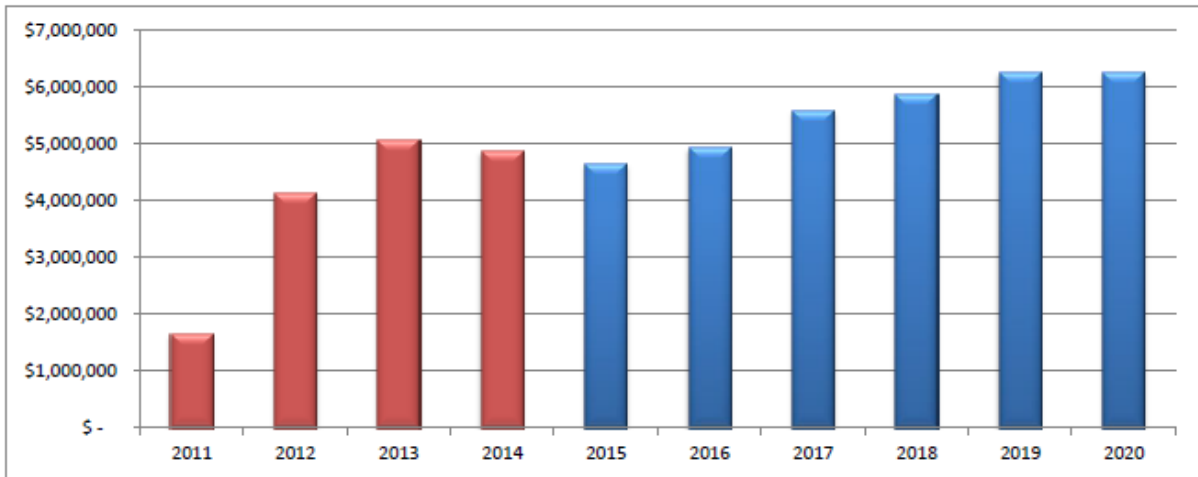
Below AMPCO provides examples where PowerStream is proposing to replace too many assets.

Pole Replacement Program

PowerStream proposes to increase spending on pole replacement from \$4.9 million in 2016 to \$6.2 million by 2020.²⁴

²⁴ Investment Summary #100867 Page 4

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
\$1,638,822	\$ 4,111,507	\$ 5,045,992	\$ 4,872,277	\$ 4,645,383	\$ 4,933,143	\$ 5,570,700	\$ 5,870,246	\$ 6,241,483	\$ 6,244,377



Asset	2014 Pop	Condition			
		Good	Fair	Poor	N/A (1)
Wood Poles	38,070	29,872	7,064	1,134	0
		78.47%	18.56%	2.98%	

PowerStream’s evidence is that it proposes to replace or reinforce only those poles in poorest condition under this Program.²⁵ PowerStream’s ACA identifies 1,134 poles in poor condition or 2.98%.

PowerStream’s plan is to remediate approximately 400 poles per year under its planned Pole Replacement program which consists of replacing 370 poles/year and reinforcing 30 poles/year. Over the 2015 to 2020 period the total proposed replacement is 2,400 poles, more than two times the poor condition poles.

AMPCO wishes to note that in undertaking J2.10-2, PowerStream updated the number of poles proposed for replacement under the Pole Replacement Program to 2,559, as a result of optimization. The increase in units keeps unit costs below a 3% year over year increase.

²⁵ Investment Summary #100867 Page 3

In addition to this program, PowerStream has budgeted to replace poles under other budget line items.

PowerStream has budgeted to replace poles on a reactive basis to address poles in a failed condition.²⁶ PowerStream's emergency budget reflects the replacement of 35 poles per year in the south and 7 poles per year in the north for a total of 42 additional poles per year (consistent with historical averages)²⁷, or 252 in total for the 2015 to 2020 period.²⁸ It is reasonable to expect that some poles replaced on a reactive basis will be in poor condition.

PowerStream's capital budget also includes funding to replace poles as a result of storm damage.²⁹ PowerStream's storm damage budget includes the replacement of 30 poles per year or the replacement of an additional 180 over the 2015 to 2020 period. AMPCO notes for the 2011 to 2014 period, the average number of poles replaced each year under the storm damage budget was only 24.³⁰ AMPCO submits PowerStream has not justified the additional quantities.

Under the above three programs (planned and reactive), the total number of pole replacements is 2,832³¹, an additional 432 poles.

Poles are also replaced on an annual basis as part of other capital programs under System Access and System Service meaning the number of replaced poles due to the rebuilding of pole lines will further add to the total number of poles replaced and it is likely that some of the poles replaced under these programs will be poles in poor condition. PowerStream was unable to provide the total number of poles to be replaced under all of its capital programs for the period 2015 to 2020.³²

AMPCO undertook a scan of the evidence and identified other programs under System Service and System Access where PowerStream is proposing pole work that includes the replacement and rebuild of poles as follows:

- Unforeseen Projects Initiated by PowerStream; Project Code 101355 (north & south)
- Storm Hardening and Rear Lot Supply; Project Code 103659 (north & south)
- Add one 27.6 kV Cct on Steeles Ave From Jane St to Keele St by Rebuilding Existing 2 cct Pole line into 4 ccts; Project Code 100912

²⁶ Unscheduled Replacement Failed Equipment; Project Code 101824 (south) & Project Code 101860 (north)

²⁷ G-AMPCO-24; G-AMPCO-25

²⁸ Exhibit K2.3 Page 22

²⁹ Storm Damage; Project Code 101800 (south); Project Code 101860 (north)

³⁰ G-AMPCO-20; G-AMPCO-21

³¹ 2,400 + 252 + 180 = 2,832

³² Transcript Volume 2 Page

- Build double ccts 27.6kV pole line on 19th Ave between Leslie St and Bayview Ave; Project Code 101480
- Install 2x13.8kV ccts Pole Line on Leslie St from Wellington St to St.John's Sdrd; Project Code 102372
- Install Double Cct Pole Line on Major Mackenzie - Hwy 27 to Huntington Rd; Project Code 100904 (rebuild pole line)
- Install Double Ccts 27.6 kV Pole Line on 16th Ave from 9th Line to Reesor Road; Project Code 100237
- Install one 44kV cct on Mapleview Drive West - Essa to Veterans; Project Code 103651
- Install two additional 27.6 kV ccts on Hwy 7 from Jane St to Weston Rd; Project Code 100924
- Installation of two new circuits on Leslie Street - 19th Ave to Stouffville Sideroad; Project code 102546
- New 27.6kV Pole Line on 19th Ave from Leslie to Woodbine Ave; Project code 102545
- New 44 kV Feeder (13M7) Barrie TS X Huronia & Big Bay Pt. Rd; Project code 100959
- Pole Line Installation Double Cct on Major Mack - Huntington Rd to Hwy 50; Project code 100913 (new pole)
- Rebuild 27.6 kV pole line for 4 Ccts on Warden Ave from Major Mack to Elgin Mills; Project code 100909 (rebuild existing pole)
- Rebuild 27.6 kV pole line into 4 Ccts on Warden Ave from Hwy 7 to 16th Ave; Project code 100905 (rebuild existing line)
- Rebuild 27.6 kV pole line on Warden Ave into 4 ccts from 16th Ave to Major Mack; Project code 100229
- Rebuild Pole Line on 14th Ave into 4 cct -From Warden Ave to Kennedy Rd; Project code 101499
- Two Ccts on Birchmount Rd from ROW to 14th Ave; Project code 102547 (new pole line) 2020 \$1,502,063
- Two Ccts on Birchmount Rd from ROW to Enterprise; Project code 102548 (new pole line)
- Vaughan TS#4 Feeder Integration - Part 1; Project code 100336 (new)
- Vaughan TS#4 Feeder Integration - Part 2; Project code 102,352 (new & rebuild)
- Vaughan TS#4 Feeder Integration - Part 3; Project code 100340
- 27.6 kV Pole Line on 14th Ave from Hwy 48 to 9th Line; Project code 100632 (rebuild)
- 27.6 kV Pole Line on Reesor Rd from Hwy 7 to 14th Ave; Project code 100405 (new)
- Double Circuit existing 23M8 Circuit from Bayfield & Livingstone to Little Lake MS; Project code 101572 (rebuild)
- Highway Crossing Remediation - Hwy 400/ Brock St.; Project code 102460 (replace)
- Highway Crossing Remediation - Hwy 407/ East of Dufferin; Project code 102459

AMPCO submits it is essential to consider all of the projects that involve pole replacement to assess if the quantity proposed to be replaced on a planned basis is reasonable. This is important to customers because the average cost to replace a pole over the 2016 to 2020 period is over \$13,000 each.

In considering the above, AMPCO submits that PowerStream’s planned pole replacement rate and forecast budget in 2016 and beyond is inconsistent with its ACA and does not take into consideration the various other programs where poles are replaced, and should be reduced accordingly.

PowerStream has identified 1,134 poles in poor condition as at December 31, 2014. 377 poles were replaced in 2015³³, leaving 757 in poor condition. AMPCO proposes that under the Pole Replacement program, funding be included for the replacement of 150 poles per year for the years 2016 to 2020. The table below shows AMPCO’s proposed reductions for each year.³⁴

Pole Replacement Program

	2016	2017	2018	2019	2020	Total
# Poles Replaced	150	150	150	150	150	750
Unit Cost	\$12,618	\$12,908	\$13,201	\$13,500	\$13,801	
Proposed Budget	\$1,892,700	\$1,936,200	\$1,980,150	\$2,025,000	\$2,070,150	\$9,904,200
Original Budget	\$4,933,143	\$5,570,700	\$5,870,246	\$6,241,483	\$6,244,377	\$28,859,949
Proposed Reduction	\$3,040,443	\$3,634,500	\$3,890,096	\$4,216,483	\$4,174,227	\$18,955,749

AMPCO submits that continued spending on planned pole replacement at the 2014 ICM level has not been sufficiently justified in PowerStream’s application. AMPCO submits its proposed rate of replacement is more appropriate as it reflects a pace that is consistent with the worst condition poles.

AMPCO notes that in the DSP PowerStream calculates 400 poles as 1% of 40,000 poles = 400 poles. PowerStream only has 38,070 poles so 1% = 380. This distinction is important when setting budget levels. On this basis PowerStream alone has overstated its annual forecast for pole replacement by 20 and \$260,000 using an average pole replacement of \$13,000.

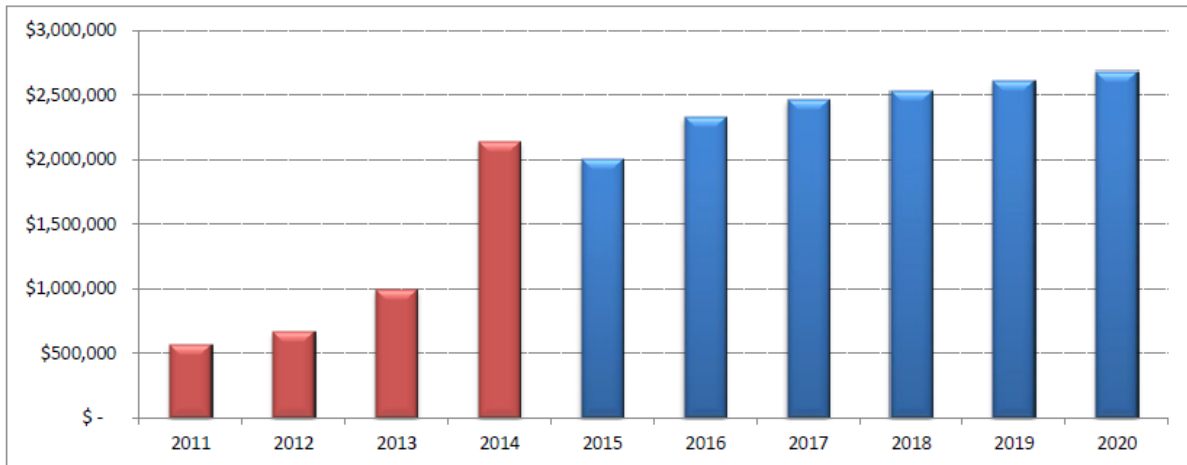
³³ J2.10-2

³⁴ J2.10-2

Switchgear Replacement Program

PowerStream proposes to spend \$12.611 million on its Switchgear Replacement Program over the 2016 to 2020 period.³⁵

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
\$ 566,295	\$ 662,337	\$ 990,400	\$ 2,138,988	\$ 2,003,445	\$ 2,327,404	\$ 2,462,129	\$ 2,533,373	\$ 2,606,624	\$ 2,681,945



PowerStream’s Project Investment Summary #100859 indicates that switchgear units that have a “Poor” health index condition are proposed for replacement.

PowerStream proposes to replace 31 switchgears in 2015 and 36 for each of the years 2016 to 2020 for a total of 211 replaced switchgears between 2015 and 2020.³⁶

The ACA identifies 0 in very poor condition and 180 switchgears in poor condition (9.7%).³⁷

In addition to proactive switchgear replacement, PowerStream replaces switchgears on a reactive basis.³⁸ PowerStream’s evidence is that an additional 37 switchgears per year for the years 2015 to 2020 (222 total) will be reactively replaced. AMPCO calculates that under these two programs, a total of 433 switchgears will be replaced out of a 2014 switchgear population of 1,847 or 23%. It is reasonable to expect that some switchgear replaced on a reactive basis will include switchgears in poor condition.

³⁵ Ex G Tab 2 Appendix A Project Code 100859

³⁶ Exhibit K2.3 Page 14

³⁷ Exhibit K2.3 Page 10

³⁸ Distribution Lines – Emergency/Reactive Replace Capital Budget

AMPCO submits PowerStream's proposed replacement rate (23%) for switchgears is excessive, not supported by the ACA, and not sufficiently justified by PowerStream.

At the hearing, PowerStream indicated that over time assets in fair condition move to poor condition becoming candidates for replacement, however there is no evidence in this proceeding on the rate at which this occurs. PowerStream confirmed at the hearing that it has not undertaken any studies to determine the average rate that assets move from fair condition to poor condition in any given year.³⁹

PowerStream has 105 switchgears are in fair condition. Even if PowerStream replaced all of the switchgears in fair condition in addition to those in poor condition from 2015 to 2020 (180 + 105 = 285), PowerStream's proposed replacement of 433 switchgears from 2015 to 2020 exceeds this amount by 50%. It is not reasonable to accept the condition deterioration that PowerStream is proposing.

Further, AMPCO notes that PowerStream's proposed reactive switchgear replacement rate of 37 per year for the years 2015 to 2020 is 50% greater than the average historical actuals of 24 per year.⁴⁰ The basis for the increase in the forecast of reactive replacement of switchgears is not evident. As discussed below, AMPCO submits the forecast reactive replacement quantities should reflect historical quantities.

In addition to planned and reactive switchgear replacement spending, AMPCO notes that additional switchgears are proposed to be replaced under other investment projects such as Stations/P&C - Asset Replacement (System Renewal)⁴¹ related to the planned and planned and unscheduled replacement of switchgear as well as the following:⁴²

- Project Code #101355
- Project Code #103659
- Project Code #102730 , +8
- Project Code #102732, +8
- Project Code #100420
- Project Code#100924
- Project Code #102548, +2

³⁹ Transcript Volume 3 Page 99

⁴⁰ G-AMPCO-22

⁴¹ Exhibit G Tab 2 5.4.5 Justifying Capital Expenditures Page 21

⁴² Ex G Tab 2 Appendix A

AMPCO submits it is reasonable to expect that switchgears replaced under other projects will include switchgears in poor condition.

In considering the above, AMPCO submits that it is important to consider the full picture of projects that include switchgear replacements in order to determine the appropriate quantity to be replaced under a planned switchgear replacement program that targets those switchgear in poor condition. This is important to customers because the average cost to replace a switchgear over the 2016 to 2020 period is over \$70,000 each.

PowerStream has identified 180 switchgear in poor condition as at December 31, 2014. 31 poor condition switchgear have been replaced in 2015⁴³, leaving 149 poor condition switchgear. AMPCO proposes that PowerStream’s planned Switchgear Replacement program for the years 2016 to 2020 be funded to replace 30 switches per year instead of 36 per year. The table below shows AMPCO’s proposed reductions for each year.⁴⁴

Switchgear Replacement						
	2016	2017	2018	2019	2020	Total
# Replaced	30	30	30	30	30	150
Unit Cost	\$66,468	\$68,392	\$70,371	\$72,406	\$74,498	
Proposed Budget	\$1,994,040	\$2,051,760	\$2,111,130	\$2,172,180	\$2,234,940	\$10,564,050
Original Budget	\$2,327,404	\$2,462,129	\$2,533,373	\$2,606,624	\$2,681,945	\$12,611,475
Proposed Reduction	\$333,364	\$410,369	\$422,243	\$434,444	\$447,005	\$2,047,425

With respect to the Reactive Capital budget, AMPCO submits the quantities proposed for switchgear replacement (37/year) should be reduced by 13 to 24/year to reflect historical actuals.

At an average cost of \$70,000 per switchgear, AMPCO submits Reactive Capital budget line should be reduced by \$910,000 each year.⁴⁵

PowerStream indicates the majority of the switchgear will be replaced with industry standard SF6 insulated switchgear units. PowerStream indicates that the SF6 switchgear require minimal maintenance as all of the compartments are sealed.⁴⁶ AMPCO submits PowerStream’s maintenance costs should be reduced to reflect this change over time.

⁴³ J2.10-3

⁴⁴ J2.10-2

⁴⁵ J2.10-2; \$70,000 x 13 = \$910,000

⁴⁶ Ex G Tab 2 Appendix A Project Code 100859 Page 2

Mini-Rupter Switch Replacement Program

The replacement of Mini-Rupter Switches is a new program in 2014 where 21 switches were replaced in 2014 at a cost of \$22,982 per switch. PowerStream proposes to replace 90 switches (21%) over the 2015 to 2020 period or 15 switches per year.⁴⁷

Mini-Rupter Switch Actual Replacement 2011 - 2014												
	Actual data											
Year	2011		2012		2013		2014					
Classification	# of Units	\$	# of Units	\$	# of Units	\$	# of Units	\$				
Mini-Rupter Replacement	-	-	-	-	-	-	-	-	21	482,622		

Mini-Rupter Switch Planned Replacement 2015 - 2020												
	Planned data											
Year	2015		2016		2017		2018		2019		2020	
Classification	# of Units	\$	# of Units	\$	# of Units	\$	# of Units	\$	# of Units	\$	# of Units	\$
Mini-Rupter Replacement	15	577,736	15	592,267	15	607,090	15	622,214	15	637,649	15	653,406

PowerStream indicates that the locations and priority are determined based on the results from the ACA⁴⁸ in order to replace the worst units/year.

PowerStream's ACA indicates that 8.78% or 38 of the population of 433 switches are in poor condition. The majority of Mini-Rupter switches are in fair to very good health.⁴⁹

In 2015, PowerStream is forecast to replace 15 switches, leaving 23 switches in poor condition.

AMPCO submits the proposed replacement rate for Mini-Rupter Switches is inconsistent with the ACA. A replacement rate of 5 per year, 25 in total, is more appropriate.

From the table above, the cost to replace a Mini-Rupter Switch in 2015 compared to 2014 increases by 68% to \$38,516 per switch. The reason for the increase in unit costs is unclear.

Based on the replacement of 5 Mini-Rupter switches per year at an average cost of \$41,400 to replace a switch, AMPCO proposes an annual reduction of \$414,000 for the years 2016 to 2020.

⁴⁷ G-AMPCO-11

⁴⁸ Exhibit G Tab 2 5.4.5 Justifying Capital Expenditures Page 14

⁴⁹ Exhibit G Tab 2 5.3.2 Overview of Assets Managed Page 48

AMPCO notes that UMS Group undertook a soft assessment of PowerStream’s asset management program that is detailed in a report dated February 6, 2013. UMS recommended that PowerStream tighten up the connection between the ACA’s and the current capital investment portfolio optimization process.⁵⁰

AMPCO submits its proposed asset quantity reductions tightens up the connection between the ACAs and the proposed capital spending.

Storm Hardening

In December 2013 PowerStream experienced a significant ice storm. The cost of the 2013 ice storm was \$1.8 million, primarily OM&A costs to repair the lines that came down. There were limited equipment failures such as poles or transformers that required capital expenditures.⁵¹ In June 2014, twelve poles were damaged on Warden Ave due to a micro-burst in the Markham area.

As a result of these incidents, PowerStream wanted to consider ways to effectively “harden” its distribution system against ice storms of this nature and storms in general.

PowerStream concern is based on a probability that these types of events will occur more frequently in the future. The CIMA report, which made 15 recommendations on storm hardening, says the storm frequency of these types of events will increase from every 17 years to 14 years.

PowerStream’s developed a storm hardening plan that includes \$43.75 million in new funding over the 2015 to 2020 period.

CIMA did not include a review of Ontario distributors in its review. AMPCO is not aware of other Ontario distributors that experienced the ice storm implementing similar storm-hardening measures on their systems.

PowerStream’s proposed storm hardening plan includes the following capital and OM&A budgets:

Table : New Storm Hardening Budget (\$ 000’s)

	2015	2016	2017	2018	2019	2020	Total
Capital	3,500	7,900	8,000	7,500	6,900	7,200	41,000
OM&A Vegetation Mgmt		614	525	531	536	541	2,747
		8,514	8,525	8,031	7,436	7,436	43,747

⁵⁰ Section III Tab 2 G-AMPCO-5b Appendix D Page 5

⁵¹ Ex G Tab 2 Appendix A Project Code 103659 Page 1

AMPCO has concerns regarding PowerStream’s proposed storm hardening plan.

Firstly, the \$1.8 million cost of the 2013 ice storm is for OM&A costs, yet PowerStream is proposing a \$41 million capital program storm hardening response just for the years 2015 to 2020; work is expected to continue at this pace until 2030 and possibly beyond. This in itself is a hard proposition for customers to accept.

Secondly, PowerStream has an annual capital budget for storm damage and even though it is proposing to undertake significant storm hardening investments, it is not proposing a decrease to these budgets in 2016 -2020. In fact, PowerStream has increased its average annual spend from approximately \$710,000 over the 2011 to 2014 period to \$1,005,000 over the 2015 to 2020 period, an increase of 42%.⁵² The investment summary

**Storm
Damage**

2011	2012	2013	2014	2011 - 2014	2015	2016	2017	2018	2019	2020	Total 2015-2020
297,226	306,122	671,963	1,158,364	2,433,675	789,848	790,569	793,430	793,082	795,943	796,130	4,759,002
131,192	176,789	95,186	1,686	404,853	209,937	209,663	212,173	212,542	214,409	214,029	1,272,753
428,418	482,911	767,149	1,160,050	2,838,528	999,785	1,000,232	1,005,603	1,005,624	1,010,352	1,010,159	6,031,755
				709,632							1,005,293
											42%

2013 and 2014 actuals of \$767,149 and \$1,160,050 reflect the ice storm and the micro-burst years but PowerStream appears to have budgeted for a major weather event each year, knowing the risk is low, once every 14 years⁵³. PowerStream will also seek a Z factor for a storm, if it meets the Z factor criteria for storm damage.⁵⁴

PowerStream has not undertaken a comprehensive cost benefit analysis to demonstrate the benefits of this significant investment to customers. PowerStream’s plan is to put things in place to better protect the system against the impact of these types of storm events yet PowerStream admits it’s very difficult to estimate the precise impact of any type of weather event.⁵⁵ Storm Hardening is one of PowerStream’s three capital programs that address reliability. PowerStream has not developed a performance metric for this program that ties to

⁵²

⁵³ Transcript Volume 3, Page 82

⁵⁴ Transcript Volume 1 Page 152

⁵⁵

reliability.

\$6 million per year of the budget is for rear lot remediation. AMPCO notes the CIMA report's review included PSEG – New Jersey where the final settlement included mostly elements of a hardening plan that dealt with issues related to funding. The final settlement was considerably pared down to from the original proposal that included additional items such as relocation of rear lot supplies.⁵⁶ AMPCO submits affordability was likely a factor.

Storm Hardening is a key cost driver in PowerStream's investment plan yet PowerStream has not completed a customer engagement survey specifically for rear lot remediation.⁵⁷ Given the magnitude of the investment for storm hardening and the fact it is a new expenditure, AMPCO submits customer input is critical and required to be consistent with the Board's RREF.

AMPCO notes that questions regarding weather hardening were asked at mid-market workshop sessions held in Simcoe County (Barrie) on December 9th, 2014 and York Region (Richmond Hill) on December 10th, 2014 with the outcome that planning for extreme weather is not seen as a priority for most. Neither group saw investments in planning for extreme weather as a priority. Since overall system reliability was seen positively, most customers did not believe it was necessary to plan for events that would 'happen regardless'.⁵⁸ These comments underscore the need for PowerStream to seek customer input on rear lot remediation as a storm hardening initiative.

If the rear lot project is not undertaken, PowerStream expects reliability and customer service to suffer. AMPCO submits there is no evidence on the record to support this claim.

PowerStream indicates its approach to storm hardening is consistent with customer preferences because a modest approach to investments is being taken in order to balance risks and cost. AMPCO does not agree with PowerStream's proposition. This is not a modest investment and customers have not been given the opportunity to consider the risks, costs and benefits of PowerStream's Storm Hardening proposal.

Another shortcoming of PowerStream's proposal is the lack of analysis of other alternatives. PowerStream indicates the alternatives to the storm hardening project include "do nothing" and only replace distribution system plant reactively when it fails. PowerStream has not provided any other alternatives and the costs and benefits of the "do nothing" alternative have not been evaluated against the storm hardening proposal.

In considering the above, AMPCO does not support PowerStream's proposed funding for storm hardening. AMPCO submits there is insufficient evidence to assess if this program will mitigate the impact of future storms. AMPCO submits further analysis is required to better quantify and

⁵⁶ Section IV Table 2 TCQ-2 G-SEC-19 Appendix B Page 45

⁵⁷ Section B Tab 2 Schedule 1 Page 71 II-2-Staff-47(b)

⁵⁸ Rate Proposal Exhibit G Tab 2 Appendix F: Customer Consultation Report Page 75

qualify the risks and benefits of the project, customer preferences and alternatives to the project. As a result, AMPCO is proposing a \$6 million reduction in storm hardening for the years 2016 to 2020.

Storm Damage budget should be reduced by \$300,000 per year to be in line with historical actuals that include 2 major events in 2013 and 2014. AMPCO submits PowerStream has not provided adequate justification for the level of budget proposed.

Other Reductions^{59 60}

AMPCO has identified budget line items that by the very nature of the work result in uncertainty in the forecasts and in AMPCO's view PowerStream has not provided adequate justification to increase the forecasts for 2016 to 2020 above historical averages. For these budget line items, AMPCO submits the budget forecasts should be reduced accordingly.

AMPCO has utilized PowerStream's 2011 to 2014 budget (Undertaking JTC 1.5_App. 2-AA 2011_2014_21050911) and 2015 to 2016 to 2020 budget (Undertaking JTC 1.5_App. 2-AA 2015-2020_21050911) to calculate the proposed capital reductions.

PowerStream acknowledged at the hearing it put in a placeholder amount in its budget, for New Commercial Subdivision Development at \$1.6 million a year, with a note on the budget "may not happen every year". Historical averages for the years 2011 to 2014 show spending of \$980,000 per year. AMPCO submits PowerStream has not justified the proposed placeholder amount in its application and submits that the placeholder amount should reflect the historical average. AMPCO proposes that the budget for New Commercial Subdivision development be reduced by \$820,000 per year.

PowerStream's rate of growth over the Custom IR is slowing.⁶¹ AMPCO has concerns that PowerStream's budget for New Residential Subdivisions is overstated. PowerStream's forecast budget is \$56.33 million over the Custom IR. For the 2011 to 2014 period, AMPCO believes the amount spent was \$26.7 million.⁶² Given the declining trend in growth and PowerStream's experience that this program is difficult to forecast, AMPCO submits that the New Residential Subdivision Development budget should be reduced by 50% to reflect historical spending. On this basis AMPCO proposes a \$5.6 million reduction each year.

PowerStream's Emergency Work as Required for Facilities budget also appears to have a placeholder amount that ranges from \$398,168 in 2016 to \$417,027, given the uncertain nature

⁵⁹ Undertaking JTC 1.5_App. 2-AA 2011_2014_21050911

⁶⁰ Undertaking JTC 1.5_App. 2-AA 2015-2020_21050911

⁶¹ Transcript Volume 2_20151123 Page 115

⁶² Undertaking JTC 1.5_App. 2-AA 2011_2014_21050911

of the work. Historical amounts show \$128,000. AMPCO submit the average historical amount should be used. AMPCO proposes that the budget for Emergency Work as Required for Facilities should be reduced by \$272,000 per year.

PowerStream’s LIS – Unscheduled Replacement (end of useful life) Distribution Equipment budget on an annual average basis for the years 2016 to 2020 (\$317,000) is 2.5 times the average (\$128,000). AMPCO submit the historical amount should be used as the basis for the forecast spend. AMPCO proposes that the budget for LIS – Unscheduled Replacement (end of useful life) Distribution Equipment be reduced by \$190,000 per year.

For Unforeseen Projects Initiated by Customer the historical average is \$623,259. PowerStream budgets \$786,802 in 2016 increasing annually to \$1,414,541. AMPCO submits the historical average should be the budget. This change results in capital reductions as follows:

- 2016: \$458,000
- 2017: \$600,000
- 2018: \$751,000
- 2019: \$927,000
- 2020: \$1,086,000

Under System Service, PowerStream is forecasting the purchase of Mobile Unit Station in 2020 for \$885,481 and a Land Purchase in 2020 for \$481,500. Given the uncertainty that under a merged entity a Mobile Unit Station and Land Purchase will still be needed in 2020, AMPCO submits that these amounts should be reduced by 50%.

AMPCO’s proposed reductions for the programs discussed above is summarized below.

Proposed Reductions	2016	2017	2018	2019	2020	Total
New Commercial Subdivision Development	0.820	0.820	0.820	0.820	0.820	4.100
New Residential Subdivision Development	5.600	5.600	5.600	5.600	5.600	28.000
Emergency as Required for Facilities	0.272	0.272	0.272	0.272	0.272	1.360
LIS - Unscheduled Replacement Distribution	0.190	0.190	0.190	0.190	0.190	0.950
Unforeseen Projects Initiated by Customer	0.458	0.600	0.751	0.927	1.086	3.822
Purchase of a Mobile Unit Station					0.443	0.443
Markham TS #5 - Land Purchase					0.240	0.240
Total	7.340	7.482	7.633	7.809	8.651	38.915

General Plant

PowerStream indicates that if a merger were to occur, the capital cost category affected would be the General Plant category of the capital budget.⁶³

Over the 2016 to 2020 period, particularly for the years 2019 and 2020, PowerStream proposes large capital investments under General Plant. AMPCO submits under a merger it is questionable whether some of these investments will proceed at all or as intended on a cost and timing basis. Aside from this reality, AMPCO submits that some of the IT projects are not well supported in the evidence and lack clear outcomes for customers.

	2016	2017	2018	2019	2020
General Plant	(\$ 000)	(\$ 000)	(\$ 000)	(\$ 000)	(\$ 000)
Enterprise Content Management	-	-	-	-	624,309
IVR Replacement	-	-	-	-	540,350
Client Computing	400,000	425,000	425,000	441,667	454,167
Customer Web Portal, Integrated Self-Serve & Mobile Applications	267,500	374,500	-	-	107,000
Finance Emerging Projects	219,000	241,000	266,000	293,000	323,000
GIS Emerging Projects	158,000	166,000	175,000	184,000	194,000
JD Edwards Application Upgrade	-	-	-	2,396,800	-
JD Edwards High Availability Design Planning	214,000	-	10,700	-	-
JD Edwards System Hardware Upgrade (2019)	-	-	-	-	605,733
JDE Workload Automation	97,263	-	-	-	-
JD Edwards Enhancements	133,750	101,650	133,750	100,045	200,090
MSBPI	10,000	60,000	899,999	50,000	10,000
OM&A Budget Development (database & optimization process)	86,456	510,090	-	-	-
Phone System enhancement Upgrade	-	-	-	50,500	908,999
Printer & Copier Fleet Replacement	200,000	250,000	40,000	40,000	40,000
Security - Additions & Enhancements	200,090	200,090	200,090	200,090	200,090
Server Refresh	319,999	340,000	360,000	380,000	400,000
Softphone Technology	-	-	-	-	108,070
SQL Expansion	100,000	-	50,000	-	100,000
CASCADE System Interface to New Operations Work Management System	-	86,456	-	-	-
CMMS Mobile Application Upgrade (Tablet solution)	85,171	-	-	-	-

⁶³ Section B Tab 1 Schedule 2 I-AMPCO-1 (a)

Purchase PI Enterprise Agreement	-	-	-	-	457,505
Storage Expansion (Data)	300,000	300,000	300,000	1,000,000	400,000
Technology changes in Control Room.	-	-	-	-	272,877
Third Party Contact Centre Systems Integration- Day to Day	-	432,280	-	-	-
Upgrade of the Electronic Visual Display Wall (EVDW) to LED Light Engines - Phase 1	-	-	-	175,546	175,789
Upgrade OMS to Advanced Distribution Management System (ADMS)	-	-	-	-	223,925
Bucket Trucks	-	-	-	-	1,391,000
Bucket Trucks	-	-	2,193,500	-	-
Bucket Trucks	-	-	-	1,605,000	-
Pickups and misc light duty vehicles	-	-	-	-	888,100
Pickups and misc light duty vehicles	-	-	-	829,250	-
Total	2,791,231	3,487,066	5,054,040	7,745,897	8,625,005
50%	1,395,615	1,743,533	2,527,020	3,872,948	4,312,503

AMPCO submits that given the uncertainty and lack of analysis to support these projects, a 50% reduction in these General Plant expenditures is appropriate.

Customer Information Service (CIS)

The final cost of PowerStream's CIS reflects an \$8.3 million (24% cost overrun); \$42.8 million compared to the original estimate of \$34.5 million. This amount will hit rate base in 2015.

The CIS project was the most complex project PowerStream had ever undertaken and the complexities of the project were not well understood or anticipated by PowerStream. The project lacked a comprehensive risk assessment which contributed to the cost overrun. AMPCO submits 25% of the cost overrun, \$2 million should be disallowed in 2015.

In addition, the capability for monthly billing was not built into the original project and customers are now being asked to pay an additional \$3 million in 2016 to build this feature in. AMPCO submits the Board should disallow this cost in 2016 on the basis that this capability should have been anticipated by PowerStream and included in the original design.

For the 2016 to 2020 period, Powerstream proposes to spend \$20.984 in CIS modifications.

	2015	2016	2017	2018	2019	2020
General Plant	\$	\$	\$	\$	\$	\$
CIS Modifications	1,403,400	3,884,100	6,708,900	2,996,000	2,996,000	2,996,000

For the same reasons discussed, AMPCO questions whether this additional spending on CIS will be needed at this level over the next 5 years. As such, AMPCO proposes a 50% reduction to PowerStream’s CIS Modifications budget.

	2015	2016	2017	2018	2019	2020
General Plant	\$	\$	\$	\$	\$	\$
CIS Modifications	1,403,400	3,884,100	6,708,900	2,996,000	2,996,000	2,996,000
50%	701,700	1,942,050	3,354,450	1,498,000	1,498,000	1,498,000

Overestimation of Capital Budget

PowerStream indicates at the oral hearing that its capital budget is based on PowerStream resources undertaking the work and that the cost of having contractors undertake the work is 97% contractor versus PowerStream’s internal costs which reflects a 3% decrease in costs. PowerStream is not taking this into account when budgeting.⁶⁴

PowerStream indicates the proportion of the capital plan to be carried out using contractors is as follows:⁶⁵

2016	2017	2018	2019	2020
46%	50%	52%	56%	55%

AMPCO submits that PowerStream’s capital budget should be reduced to reflect the decrease in contractor costs.

AMPCO calculates the following reductions:

	2016	2017	2018	2019	2020	Total
Proposed Capital \$	135.9	131.6	125.5	125.5	125.5	644
Contractor %	46%	50%	52%	56%	55%	
Contractor Budget \$	62.5	65.8	65.3	70.3	69.0	332.9
Contractor Decrease (3%) \$	1.9	2.0	2.0	2.1	2.1	10.0

⁶⁴ Transcript Volume 2

⁶⁵ G-SEC-27(c)

Summary of Proposed Reductions (\$000's)

AMPCO's total proposed reductions result in 20% reduction in capital over the 5 years.

Proposed Reductions	2016	2017	2018	2019	2020	Total
Pole Replacement	3.040	3.634	3.890	4.216	4.174	18.954
Switchgear Replacement	0.333	0.410	0.422	0.434	0.447	2.046
Mini-Rupter Switches	0.414	0.414	0.414	0.414	0.414	2.070
Storm Hardening	6.000	6.000	6.000	6.000	6.000	30.000
Storm Damage	0.300	0.300	0.300	0.300	0.300	1.500
Other Reductions	7.340	7.482	7.633	7.809	8.651	38.915
General Plant	1.395	1.743	2.527	3.871	4.312	13.848
CIS	3.701	1.942	3.354	1.498	1.498	11.993
Capital Budget Overestimation	1.900	2.000	2.000	2.100	2.100	10.100
Total	24.423	23.925	26.540	26.642	27.896	129.426
% Capital Budget	18%	18%	21%	21%	22%	20%

Pacing of Capital Expenditures

The Board's RRFE expects pacing and prioritization of capital investments to promote predictability in rates and affordability for customers to be a primary goal in a distributor's capital plan.

AMPCO submits generally its proposed reductions reflect a pace of work that is more consistent with PowerStream's ACA and historical spending. In AMPCO's view, the capital plan proposed by PowerStream was unreasonable, contained uncertain expenditures and was not affordable for customers.

2016 Rate Base

The Board should not approve PowerStream's proposal to include a land purchase (\$3.2 million) in 2016 opening rate base that will not be in service until the transformer station is built and put into service in 2017.

Operations, Maintenance & Administration (OM&A)

PowerStream’s 2013 Actuals (COS year) are \$80.849 million. In 2016, PowerStream’s forecast OM&A is \$96.216 million. This reflects a 6% in 2014 followed by an 8% increase in 2015 and a further 4% increase in 2016. 2017 is forecast to increase by another 6% followed by 2% increases for each of the years 2018, 2019, 2020. By 2020, the total increase in OM&A over 2013 is 34%.

OM&A (\$000's)									
2012 Actual	2013 Board Approved	2013 Actual	2014 Actual	2015 Actual	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year	2020 Test Year
82.792	82.941	80.849	85.454	92.558	96.216	101.808	103.724	106.109	108.228
		-2.5%	6%	8%	4%	6%	2%	2%	2%
									34%

AMPCO has concerns regarding the level of PowerStream’s proposed OM&A increases in 2016 and over the plan and submits the Board should not approve the OM&A forecasts proposed by PowerStream.

AMPCO submits the Board should set the 2016 budget and then if the Board approves rates beyond one year, the OM&A budget for subsequent years should be based on a formula that incorporates incentive rate making and not a cost of service approach as proposed by PowerStream.

AMPCO has reviewed Energy Probe’s detailed submissions on OM&A and supports Energy Probes proposal.

AMPCO makes submissions on the following OM&A programs regarding potential budget reductions.

The three key drivers of the increases in OM&A are monthly billing, CIS and Vegetation Management. A significant increase in OM&A over the period is due to PowerStream’s proposed changes to Vegetation Management which it characterizes as Storm Hardening and one of its Extraordinary budget items. AMPCO does not support PowerStream’s proposed changes to its Vegetation Management Program.

Vegetation Management

Over the 5 year period 2016 to 2020, PowerStream proposes a \$2.749 increase in vegetation management. The change reflects PowerStream's response to the 2013 ice storm which had OMA& costs of \$1.809. For the years 2014 and 2015 PowerStream underspent its OM&A Storm Budget (23% in 2014 and 65% in 2015).⁶⁶

By 2020, PowerStream's Vegetation Management spending level is forecast to be \$4.809 million a year, a \$3.29 million (330%) increase compared to 2013 actuals of \$1.461 million.⁶⁷

PowerStream proposes to undertake new activities such as "blue-skying" tree removal and change the vegetation management policies for rear yards and heavily treed front yards from a 5 year trimming cycle to a 2 year trimming cycle. The annual trimming cycle for urban areas was changed from 5 years to 3 years in 2012.⁶⁸ The annual cost of this change was \$565,000 per year.⁶⁹ PowerStream is proposing to clear secondary wires on customer properties which is an activity Navigant recommended customers undertake themselves; Recommendation 26: Encourage customers to proactively perform tree trimming on their properties.⁷⁰ The effect of PowerStream's increases in Vegetation Management due to Storm Hardening is to drive unit costs per km from \$2,247.74 in 2013 to \$5,239.55 by 2020.⁷¹

With respect to changing the tree trimming cycle in rear lots from 5 years to 2 years, PowerStream indicates that benchmarking values for a tree trimming cycle for rear lots in similar utilities is not available.⁷²

PowerStream has not proposed an OM&A performance metric and target tied to this program given the significant spend such as reduction in number of outages or reduction in tree contact outages. PowerStream indicates it does not have sufficient data available for expected reliability improvements to be broken down by rear-lot and front-lot.⁷³

PowerStream's indicates its increase for Storm Hardening OM&A is to manage the risks of severe storms and mitigate the impact of future storms.⁷⁴ When asked if the proposed work would have materially prevented the impact of the ice storm, PowerStream responded that it's very difficult to estimate the precise impact of any type of weather event which is why it is such

⁶⁶ Section IV Tab 1 Page 1 TCQ#1

⁶⁷ F-Energy Probe-7 (b)

⁶⁸ Part II Section II Exhibit J Tab 1 Page 3

⁶⁹ J-VECC-32

⁷⁰ Navigant Independent Assessment of Ice Storm April 2014 Appendix

⁷¹ Section B Tab 1 Schedule 6 III-AMPCO-21

⁷² Section B Tab 1 Schedule 6 II-2-Staff-53 (e)

⁷³ Section B Tab 1 Schedule 6 II-Staff-53 (d)

⁷⁴ Transcript Volume 1 Page 147

a difficult question to answer.⁷⁵ AMPCO notes that PowerStream’s Custom IR includes a \$6.985 storm budget (\$5.032 capital & \$1.953OM&A) which has not been reduced due to the proposed storm hardening activities.⁷⁶

Given the significant spend, there is no guarantee this type of work will prevent severe impacts from future storm events. AMPCO submits PowerStream has not sufficiently justified the significant increases in vegetation management and \$2.749 million over the plan term should not be approved.

Vacancy Rate

The Table below shows PowerStream’s historical and forecast FTEs and unfilled positions.

FTEs	2013 BA	2013 Actual	2016	2020
Exec	15.20	13.67	16.00	16.00
Mgmt	54.00	49.52	56.75	57.00
Professional	50.00	50.33	54.25	55.75
Non-Union	54.00	48.17	59.50	64.00
Union	340.60	318.29	338.85	342.60
Temp & Students	36.85	53.12	41.52	27.52
TOTAL	550.65	533.10	566.87	562.87
Variance		-17.55	33.77	-4.00

As of June 30, 2015 PowerStream had 30 vacancies.⁷⁷

PowerStream has built a vacancy rate of 6.6 FTEs into its budget. Historically, PowerStream had an average vacancy rate of 13.7 for the years 2012 to 2014.⁷⁸

With 68% of compensation costs allocated to OM&A, AMPCO submits a vacancy rate of 9.3 FTEs should be used in the plan instead of 6.6.

Overtime Costs

AMPCO submits improvement in PowerStream’s management of overtime costs is warranted. Historically PowerStream has overspent on its overtime costs by 86% in 2011 to \$4.175 million,

⁷⁵ Transcript Volume 1 Page 151

⁷⁶ Section III Tab 1 Schedule 1 Page 14 A-CCC-11

⁷⁷ II-VECC-3

⁷⁸ II-SEC-9

38% in 2012, 16% in 2013 and 70% in 2014. January to June actual in 2015 show overtime costs at 45% greater than budgeted.⁷⁹

PowerStream could consider an OM&A metric such as overtime costs within 10% of budgeted costs. This would incent continuous improvement with respect to budgeting and managing overtime costs.

Trade-Off in Spending: Capital Vs. Operating & Maintenance

PowerStream does not expect Operating and Maintenance costs to decrease over the 5 year term of the plan and in fact PowerStream anticipates an increase.⁸⁰ Given the level of capital spending proposed which is a significant increase over the past 5 years, AMPCO submits this proposal is not reasonable. PowerStream identified in its ICM and DSP that maintenance savings are expected from replacing assets such as switchgear. In particular, AMPCO submits spending on unplanned (reactive) maintenance should decrease over the plan term given the quantities of assets to be renewed on a planned basis and replaced under other programs.

Costs

AMPCO requests that it be awarded 100% of its reasonably incurred costs. AMPCO worked collaborated with other intervenors in this proceeding to ensure complete coverage of the issues with minimum duplication. AMPCO worked with the School Energy Coalition in the preparation and cross examination of Panels 1 and 2.

⁷⁹ Section B Tab 4 Schedule 2 IV-AMPCO-26

⁸⁰ Exhibit G Tab 2 Page 30