

December 14, 2015

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street
26th Floor, Box 2319
Toronto, ON M4P 1E4

Dear Ms. Walli,

**Re: PowerStream Inc. (Licence ED-2004-0420)
2016 - 2020 Electricity Distribution Rate Application EB-2015-0003
Argument-in-Chief**

PowerStream respectfully submits two copies of its Argument-in-Chief which are attached to this letter.

This document has been filed on the Board's Regulatory Electronic Submission System.

Yours truly,

Original signed by Tom Barrett

Tom Barrett
Manager, Rate Applications

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

AND IN THE MATTER OF an Application by PowerStream Inc. for an Order approving rates and other service charges for the distribution of electricity for the years 2016 through 2020

**ARGUMENT-IN-CHIEF OF POWERSTREAM INC.
DELIVERED DECEMBER 14, 2015**

A. INTRODUCTION

1. PowerStream Inc. (“PowerStream”) is incorporated under the Ontario *Business Corporations Act* (the “OBCA”) and is the electricity distributor for eleven municipalities in York Region and Simcoe County including Alliston, Aurora, Barrie, Beeton, Bradford West Gwillimbury, Markham, Penetanguishene, Richmond Hill, Thornton, Tottenham and Vaughan. PowerStream serves about 360,000 customers in those communities, making it the second largest municipally owned distributor in Ontario.
2. PowerStream is owned by The Corporation of the City of Markham (34.2%), The Corporation of the City of Vaughan (45.3%) and The Corporation of the City of Barrie (20.5%).
3. PowerStream initiated an advance settlement process with OEB Staff and the intervenors of record from its 2013 Cost of Service application on December 15, 2014. A rate proposal was submitted to the intervenors on February 24, 2015 and this was followed by interrogatories, a Technical Conference and a Settlement Conference. This process ended in early May 2015 with no settlement being reached.
4. On May 22, 2015, shortly after the conclusion of the advance settlement process, PowerStream filed its 2016 – 2020 Custom IR distribution rate application (the “Application”) with the Ontario Energy Board (the “Board”). Included in the pre-filed evidence in the Application was the material arising out of the advance settlement process (with the exception of certain material that was the subject of a request for confidential treatment). The material from the advance settlement process included the PowerStream rate proposal, responses to 470 intervenor interrogatories, and responses to 40

undertakings given during the Technical Conference conducted on April 21, 2015 as part of the advance settlement process.

5. In Procedural Order No. 1, issued on July 10, 2015, the Board provided for Interrogatories from Board Staff and further interrogatories from Intervenors, and set dates for a Technical Conference and Settlement Conference. PowerStream filed its responses to those interrogatories, along with an update to its Application, on August 21, 2015. This update reflected recent Board direction regarding a new default working capital allowance of 7.5%; the requirement that customers be moved to monthly billing as of January 1, 2017; and the transition of Residential distribution rates to a fully fixed monthly charge over a four-year period.
6. In its updated Application, PowerStream sought approval to charge rates effective January 1, 2016 to recover a base revenue requirement of approximately \$187.0 million. PowerStream also sought interim approval of the base revenue requirements for 2017 to 2020 of \$210.3 million, \$221.4 million, \$232.0 million and \$241.6 million respectively, subject to an annual adjustment and update process.
7. A Technical Conference was held on September 9, 2015, and PowerStream filed responses to the 14 Undertakings given during that Technical Conference.
8. A Draft Issues List was created by Board Staff. The parties agreed on all issues with the exception of whether an issue relating to the consolidation among PowerStream, Enersource Hydro Mississauga Inc., Horizon Utilities Corporation, and Hydro One Brampton Networks Inc. announced in April of this year should be included in the Issues List. The Board made the question of whether such an issue should be included a Threshold Question and issued its Decision on October 6, 2015. Among the Board's findings in that Decision were that "cost impacts of a potential merger are not relevant to its determination in this proceeding", and that "evidence on potential cost savings due to the merger regardless of substance, is outside the scope of this proceeding."¹

¹ Decision on Threshold Question and Procedural Order No. 5, October 6, 2015, at pages 3 and 8, available at:
<http://www.rds.ontarioenergyboard.ca/webdrawer/webdrawer.dll/webdrawer/rec/499251/view/>

9. A Settlement Conference was held from October 19 to 21, 2015. Despite the efforts of the parties, no settlement was reached.
10. An oral hearing was held on November 20, 23 and 26, 2015.

B. Application Summary

11. The following table summarizes the revenue requirement sought for the Test Years 2016 to 2020 in millions of dollars.²

	Board Approved	Historic Actual		Bridge Year ¹	Test Years ¹				
	2013	2013	2014	2015	2016	2017	2018	2019	2020
Return on Rate base	\$49.7	\$50.0	\$52.2	\$57.6	\$60.7	\$66.4	\$71.5	\$75.9	\$80.1
Operating costs ²	\$80.0	\$80.8	\$85.5	\$92.6	\$96.2	\$101.8	\$103.7	\$106.1	\$108.2
Depreciation	\$33.8	\$32.8	\$35.7	\$40.3	\$46.1	\$50.2	\$52.8	\$55.7	\$58.9
Derecognition expense	\$1.4	\$1.5	\$2.1	\$1.5	\$1.3	\$1.3	\$1.3	\$1.3	\$1.3
IFRS PP&E Amortization	(\$2.4)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Income Taxes	\$1.5	\$1.6	\$0.4	(\$4.9)	(\$4.7)	\$3.3	\$4.9	\$5.9	\$6.2
Sub-total	\$164.1	\$166.6	\$175.8	\$187.1	\$199.6	\$223.0	\$234.2	\$244.9	\$254.7
Revenue Offsets ²	(\$9.8)	(\$13.5)	(\$14.0)	(\$12.5)	(\$12.6)	(\$12.7)	(\$12.8)	(\$12.9)	(\$13.1)
Revenue Requirement	\$154.2	\$153.1	\$161.8	\$174.6	\$187.0	\$210.3	\$221.4	\$232.0	\$241.6

1. Bridge and Test Years are forecasted values

2. Operating Costs and Revenue offsets for 2013 Board Approved are lower by \$2.9M due to netting of costs with revenue

12. The change in revenue requirement is driven mainly by PowerStream's capital spending requirements, which are summarized in the following table in thousands of dollars. See Section D, Distribution System Plan (DSP) and Capital Budget, below, for more details.³

² Interrogatory Responses, August 21, 2015, Section A, Tab 1, Schedule 1, page 2, Table A-2.

³ Application, May 22, 2015, Section II, Tab 1. Exhibit G, Tab 2, page 2, Table 1 with 2016 General Plant increased by \$3 million for billing system changes related to monthly billing as per Interrogatory Responses, August 21, 2015, Section A, Tab 1, Schedule 1, page 1.

CATEGORY	2011 - 2015 Total	2016 - 2020 Total	Change \$	Change %
System Access	\$ 108,711	\$ 146,855	\$ 38,144	35%
System Renewal	\$ 132,946	\$ 257,643	\$ 124,698	94%
System Service	\$ 116,987	\$ 150,299	\$ 33,312	28%
General Plant	\$ 101,030	\$ 89,202	-\$ 11,828	-12%
Total	\$ 459,674	\$ 644,000	\$ 184,326	40%

13. There are significant bill impacts in 2016 for Residential customers. However, most of the increases are due to the net impact of two matters that will affect Residential electricity customers across the province and which are beyond PowerStream's control. Specifically, while the Debt Retirement Charge (DRC) will cease to apply to Residential customers as of December 31, 2015 (it will continue to apply to other customer classes), the Province is ending the Ontario Clean Energy Benefit (OCEB) as of December 31, 2015. The 2016 bill impact for a typical Residential customer consuming 800 kWh of electricity per month is an increase of 10%, or \$13.17 per month. \$9.03 of that change consists of an increase of \$14.63 from the elimination of the OCEB, partially offset by a decrease of \$5.60 from the removal of the DRC; an increase of \$4.11 for distribution charges, and an increase of \$0.03 in taxes and other charges.
14. Total bill impacts for 2017-2020 for the typical Residential customer are currently estimated to average 0.8%, or \$1.10 per month, and are presented in the Table 1 below.

Table 1: Total Bill Impacts - Residential Rate Class

Year	Total Bill Impact	
	%	\$
2017	2.5%	\$ 3.67
2018	0.6%	\$ 0.83
2019	(0.2%)	\$ (0.26)
2020	0.1%	\$ 0.18
Average 2017-2020	0.8%	\$ 1.10

15. The bill impact for the typical General Service < 50 kW customer consuming 2,000 kWh of electricity per month in the PowerStream service territory is an increase of 14.7%, or

\$47.05 per month in 2016. Most of the increase is due to the elimination of the OCEB, which is beyond PowerStream’s control and will affect GS < 50 kW electricity customers across the province. More specifically, the change consists of an increase of \$35.51 from lost OCEB, an increase of \$9.72 from distribution charges and an increase of \$1.82 from taxes and other charges.

16. Total bill impacts for 2017-2020 for the typical GS < 50 customer are currently estimated to average 1.1%, or \$4.10 per month, and are presented in the Table 2 below.

Table 2: Total Bill Impacts – GS < 50 Rate Class

Year	Total Bill Impact	
	%	\$
2017	1.9%	\$ 7.09
2018	0.9%	\$ 3.18
2019	0.8%	\$ 2.92
2020	0.8%	\$ 3.21
Average 2017-2020	1.1%	\$ 4.10

17. PowerStream proposes to defer the start of the four-year transition to fully fixed rates for Residential customers to January 1, 2017. While the transition alone does not create a significant bill impact, the cumulative impact of the transition and other adjustments mentioned in Paragraph 13, above, will exceed the Board’s 10% bill impact threshold for the 10th percentile of Residential customers in 2016. Please see PowerStream’s August 21, 2015 Interrogatory Responses, Section A, Tab 1. Schedule 1, page 8 ff. for more information.

C. Custom IR and RRFE

18. PowerStream last filed a Cost of Service application in 2012 for 2013 rates (EB-2012-0161). PowerStream filed an Incentive Rate Mechanism (IRM) application for 2014 rates (EB-2013-0166) that included an Incremental Capital Module (ICM) to help fund capital spending requirements. Under the terms of the Settlement Agreement in EB-2013-0166, PowerStream agreed to ICM thresholds for 2015 and 2016 that were designed to preclude

another ICM request and required further capital funding to be considered in a rebasing application.⁴

19. PowerStream has filed a Custom IR plan for five years for 2016 to 2020 in order to fund its capital spending and operational requirements. It is based on a comprehensive DSP, and detailed capital spending and operating budgets for the plan term.
20. PowerStream's Application has addressed the four outcomes of the RRFE: customer focus, operational effectiveness, public policy responsiveness and financial performance, as discussed in the following paragraphs.

- **Customer Focus**

21. PowerStream strives to provide its customers with excellent service. To determine their preferences and how PowerStream is performing, a number of activities are undertaken which include customer satisfaction surveys, customer focus groups, web-based surveys, transactional surveys (call centre follow-up contact) and the customer engagement processes with respect to the DSP underpinning this Application. For more details regarding customer engagement please see Application Section II, Tab 2, Exhibit G, DSP section 5.4.2. and Section VI, Tab 3, Appendix 2-AC. PowerStream seeks to provide customers with cost effective rates and has included only the necessary operating costs and capital expenditures to maintain the expected levels of service and reliability.

- **Operational Effectiveness**

22. PowerStream strives for operational effectiveness through its Organizational Effectiveness department, participation in the Excellence Canada program (Gold Level certification) and the use of the Board's and internal scorecards to monitor performance. PowerStream has a reliability committee that meets regularly to review system reliability performance. Please see Application Section II, Tab 1, Exhibit F, Tab 1 for more information.
23. PowerStream has provided details of its productivity initiatives and an analysis that demonstrates 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. Please see

⁴ <http://www.rds.ontarioenergyboard.ca/webdrawer/webdrawer.dll/webdrawer/rec/424567/view/>

Application Section II, Tab 1, Exhibit F, Tab 1 and Section III, Tab 1, Exhibit F, response to F-SEC-6 for more information.

- **Public Policy Responsiveness**

24. PowerStream's commitment to public policy responsiveness can be seen in its involvement in OEB and industry working groups and with government to ensure that legislated changes are effectively implemented. PowerStream actively supports renewable energy, smart grid and conservation and demand management initiatives. An example of this can be found in the response to Undertaking J3.9, which discusses some of the smart grid projects that PowerStream is carrying out in partnership with the Ministry of Energy.

- **Financial Performance**

25. PowerStream endeavours to earn the Board allowed return on equity, which requires managing its business so that efficiencies are found and sustained. PowerStream has maintained an A credit rating from DBRS and Standard and Poor's.

- **Benchmarking**

26. PowerStream has used the PEG benchmarking tool adopted by the Board to determine cohorts and assign stretch factors. PowerStream's evidence shows that its forecasted costs remain within the cohort 3 band. Please see Application Section II, Tab 1, Exhibit F, Tab 2 for more information.
27. PowerStream has used the OEB's Yearbook of Electricity Distributors and benchmarked its OM&A per customer and it is well below the average for Ontario electricity distributors, even with the removal of Hydro One and Toronto Hydro as shown in the response to interrogatory F-VECC-9 (Application, Section III, Tab 1).
28. PowerStream compares its Residential, General Service less than 50 kW and General Service greater than 50 kW distribution rates to a sample of 25 Ontario electricity distributors and its rates have consistently been in the lowest quartile (Application, Section II, Tab 1, Exhibit F, Tab 2, page 6). In Interrogatory F-Energy Probe-10 (Application, Section III, Tab 1), PowerStream was asked to add another seven Ontario electricity distributors to the comparison and PowerStream's rates remained in the lowest quartile.

29. 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.
30. PowerStream is proposing certain annual adjustments to its rates and customer bills as described in its response to Undertaking J1.8.
31. PowerStream submits that its Application complies with the requirements for a Custom IR plan under the Board's RRFE policy. The Application clearly demonstrates that PowerStream's capital needs require a Custom IR plan. PowerStream has provided robust evidence of its costs and revenue forecasts over a five year horizon and detailed infrastructure investment plans over the same period, including a DSP in accordance with Chapter 5 of the Board's *Filing Requirements for Electricity Transmission and Distribution Applications* (the Filing Requirements), as discussed in the next section of this submission. The proposed capital plan is designed to pace spending to maintain reliability at the levels desired by customers and prevent further deterioration in reliability. PowerStream has provided evidence that its plan exceeds the Board's expectation for productivity under the "X" factor and that its costs will remain within the Cohort 3 range of predicted cost.

D. The PowerStream DSP and Capital Budget

32. PowerStream has compiled its consolidated DSP in accordance with Chapter 5 of the Board's Filing Requirements. The DSP reflects PowerStream's integrated approach to planning, prioritizing and managing assets and includes regional planning, local stakeholder consultations, renewable generation connections and smart grid considerations. PowerStream submits that it has completed this DSP with a consideration for customer preferences and operational effectiveness while achieving optimal value for its capital spending.
33. The DSP includes the items listed below:
 - a description of the Asset Management Process;
 - a coordinated planning section that provides all relevant details with respect to regional planning initiatives;

- a description of the Customer Engagement activities;
 - a system capability assessment;
 - information for renewable energy generation connections;
 - forecasted smart grid development; and
 - a comprehensive five-year capital expenditure plan for the term of this Custom IR application, 2016-2020; and proposed spending for the bridge year 2015 and historical spending of the previous five-years.
- **Capital Spending Summaries**

34. The following table compares the capital spending (\$ thousands) by category for the five years 2011 to 2015 with the five years of the Custom IR rate plan (2016 to 2020)⁵.

CATEGORY	2011 - 2015 Total	2016 - 2020 Total	Change \$	Change %
System Access	\$ 108,711	\$ 146,855	\$ 38,144	35%
System Renewal	\$ 132,946	\$ 257,643	\$ 124,698	94%
System Service	\$ 116,987	\$ 150,299	\$ 33,312	28%
General Plant	\$ 101,030	\$ 89,202	-\$ 11,828	-12%
Total	\$ 459,674	\$ 644,000	\$ 184,326	40%

35. The following table provides the capital spending (\$ thousands) by category for the five years 2011 to 2015.⁶

	2011	2012	2013	2014	2015	
CATEGORY	Actual	Actual	Actual	Actual	Projected	Total
System Access	\$ 21,007	\$ 19,888	\$ 17,030	\$ 26,641	\$ 24,145	\$ 108,711
System Renewal	\$ 11,527	\$ 16,974	\$ 22,254	\$ 39,802	\$ 42,388	\$ 132,946
System Service	\$ 22,885	\$ 13,770	\$ 34,780	\$ 18,229	\$ 27,322	\$ 116,987
General Plant	\$ 7,877	\$ 24,200	\$ 19,593	\$ 24,816	\$ 24,545	\$ 101,030
Total	\$63,296	\$74,832	\$93,657	\$109,488	\$118,400	\$459,674

36. The following table provides the capital spending (\$ thousands) by category for the five years of the Custom IR rate plan 2016 to 2020.⁷

⁵ Application, May 22, 2015, Section II, Tab 1. Exhibit G, Tab 2, page 2, Table 1 with 2016 General Plant increased by \$3 million for billing system changes related to monthly billing as per Interrogatory Responses, August 21, 2015, Section A, Tab 1, Schedule 1, page 1.

⁶ *Ibid*, Table 2.

	2016	2017	2018	2019	2020	
CATEGORY	Plan	Plan	Plan	Plan	Plan	Total
System Access	\$ 28,232	\$ 28,470	\$ 29,561	\$ 28,726	\$ 31,867	\$ 146,855
System Renewal	\$ 48,715	\$ 51,500	\$ 52,052	\$ 52,971	\$ 52,406	\$ 257,643
System Service	\$ 38,322	\$ 32,072	\$ 29,920	\$ 26,963	\$ 23,022	\$ 150,299
General Plant	\$ 20,631	\$ 19,558	\$ 13,967	\$ 16,841	\$ 18,206	\$ 89,202
Total	\$ 135,900	\$ 131,600	\$ 125,500	\$ 125,501	\$ 125,500	\$ 644,000

37. The above tables show the significant increases in capital spending required over the Custom IR term. The proposal represents a 40% increase in capital spending over 2016-2020 compared to the 2011-2015 period.

38. These increases are discussed below in the context of each of the four OEB expenditure categories.

- o **System Access**

39. PowerStream is required to perform system access work in accordance with the Distribution System Code. System access spending will increase by 35% due to the combination of the addition of more customers and road authority work as a result of the Provincial *Places to Grow* framework and the VIVA transitway in PowerStream's southern territory and the reduction of capital contributions based on the Board's change to the economic evaluation calculation in which PowerStream can no longer collect upstream charges. This is addressed in detail in the Application at Section II, Tab 2, Exhibit G, DSP section 5.4.5, page 2.

- o **System Renewal**

40. System renewal spending will increase by 94% as PowerStream continues to implement its comprehensive asset management process. This process commenced in 2007 with transformer station assets, and expanded in 2010 to the distribution system. Each year since 2010, PowerStream continues to consider additional discrete assets. PowerStream makes assessments on whether an aged asset is suited for refurbishment or replacement based on criteria that are pertinent to a given asset class. PowerStream has several asset

⁷ *Ibid*, Table 3

remediation programs for maintaining distribution system and general plant integrity. This is addressed in detail in the Application at Section II, Tab 2, Exhibit G, DSP section 5.4.5, page 8.

41. PowerStream's system renewal program for the distribution system has been designed to maintain reliability at a constant level (no degradation), strike a balance between affordable spending and tolerable risk and result in the levelling of capital reactive spending (emergency replacements). This is addressed in detail in the Application at Section II, Tab 2, Exhibit G, DS Plan section 5.3.3, page 38.
42. PowerStream has incorporated system hardening within the system renewal category. Following the December 2013 ice storm, PowerStream investigated ways to effectively harden the distribution system against severe storms of this nature, and severe storms in general. PowerStream retained a consultant to review weather patterns, the current distribution system and to propose recommendations to harden the system. Of the fifteen recommendations provided, four were adopted and are reflected within the capital plan. The majority of the monies included in system hardening are to rebuild rear lot serviced residential properties. These assets are either at or approaching end of life as shown in the Application at Section IV, Tab 2, TCQ-2 G-SEC-19, Appendix B, Page 119 of 131 - Rear Lot Priority List 2015-2029.
43. There has been no fundamental change in the manner in which PowerStream has set its renewal criteria since 2010. PowerStream has continued to improve its methods for data collection and prioritizing asset renewal.
 - **System Service**
44. PowerStream is required to perform system service work in accordance with the Distribution System Code. System service spending will increase by 28% due to system needs for capacity delivery. Coordinated regional planning resulted in the planned construction of a new Vaughan Transformer Station #4 for meeting capacity in the south service territory, as well as capacity additions to municipal substations in the north service territory. This is addressed in detail in the Application at Section II, Tab 2, Exhibit G, DSP section 5.4.5, page 21.

- **General Plant**

45. General plant spending will decrease by 12% as the major expenditure related to the Customer Information System (CIS) system replacement was completed in 2015. This is addressed in detail in the Application at Section II, Tab 2, Exhibit G, DSP section 5.4.5, page 28.

- **Asset Management Process**

46. PowerStream commenced asset condition assessment studies in 2007 starting with the assets that have the potential to affect the largest number of customers in the case of a failure. Over time this assessment process has expanded to include most of the distribution assets. PowerStream also incorporates asset inspection and condition reporting in its asset assessment and management processes. This is discussed in detail in the Application at Section II, Tab 2, Exhibit G, DSP section 5.3.1.

47. PowerStream gathers considerable information regarding the condition and age of its assets that it uses to identify what needs to be performed to maintain system reliability and service existing and new customers. This information is the basis for the projects that are proposed and considered in the capital budgeting process as described below. This is discussed in detail in the Application at Section II, Tab 2, Exhibit G, DSP sections 5.3.2 and 5.3.3.

- **Capital Budgeting Process**

48. PowerStream's annual Capital Investment Process incorporates a ten-year forward-looking plan. Business units that have major capital expenditures assemble their own ten-year departmental capital expenditure plans and five-year budgets. The business units' ten-year capital expenditure plans are summarized into a Corporate Ten Year Capital Expenditure Plan. The process is summarized below and discussed in detail in the Application at Section II, Tab 2, Exhibit G, DSP section 5.3.3, page 16.

49. The Capital Investment Process commences with a request to all business units at PowerStream to prepare ten-year capital expenditure plans and five-year budgets. Project leads enter their project information (costs, year of expenditure, rationale etc.) into the Capital Budget system and answer a series of questions about each project/program. The

questions posed are aligned with PowerStream's corporate goals and risk matrix. Business cases, as appropriate, are also created.

50. Copperleaf's C55 optimization tool assists PowerStream to identify the optimal value of projects and programs to form the capital budget for the five-year plan across all four categories. Projects are scored based on value, risks and cost and are aligned with PowerStream's strategic corporate objectives.
51. The current configuration of PowerStream's Value Function used in the optimization process is summarized below:
 - Each of the Value Measures is calibrated to the same scale (1 value point approximately equal to \$1000). Consequently, within the Value Function, each of the Value Measures (except Project Cost) is weighed with the same value of +1. As Project Cost is a negative contributor to Project Value it is weighted with a cost of -1.
 - All Value Measures are computed on an annual basis (e.g. the financial benefits for 2017 can be specified as being different than 2018). The stream of benefits (or costs) is converted to a single value for the Value Measure, by taking the Present Value of the stream back to the beginning of the current fiscal year. The PV calculation uses the system defined discount rate.
 - The Value of Risk Mitigation in all risk categories is computed using the same methodology. The project owner specifies the Baseline Risk and the risk present if the project is not completed.
 - Residual Risk: The risk present if the project is completed. The value of Risk Mitigated is computed as the difference between Baseline Risk and Residual Risk.
 - For each risk the project owner specifies both the consequence and the probability of the consequence
 - Projects in the following categories have been identified as Mandatory as PowerStream is mandated to complete these investments:
 - Emergency Restoration;
 - Road Authority Projects;
 - Emerging Development Capital;
 - Customer renewable generation connection; and

- New connections - Residential Subdivisions, Commercial subdivisions, industrial and commercial connections and layouts.
52. PowerStream runs the optimization for various levels of capital spending based on constraints or an “envelope” suggested by the Corporate Finance Department’s analysis. As part of the optimization process, the system subtracts the mandatory projects from the constraint amount reducing the amount of money available for other competing projects and programs.
 53. The results of the various scenarios are presented and reviewed by a multi-departmental senior optimization team. Members of the senior optimization team include key leaders from each of the business units who have major capital expenditures across the corporation, as well as Rates & Regulatory department and Organizational Effectiveness department representatives. Optimization scenarios are run until the senior optimization team is satisfied that the portfolio of capital projects and programs represents an appropriate level of risk and value for the company and for its customers, with regard to customer rate impacts.
 54. The multi-year results and constraints are reviewed and approved by PowerStream’s Executive Management Team (EMT) before going to the Audit and Finance Committee of PowerStream’s Board of Directors for approval prior to approval by the Board of Directors.
 55. PowerStream has provided comprehensive evidence in support of its capital related revenue requirement request for the years 2016-2020 through its Application, including the DSP; through the material filed during both the advance settlement and post-filing interrogatory processes and Technical Conferences; and during the oral hearing.
 56. The optimization process resulted in adjustments to the spending on programs in some years. While PowerStream showed adjusted levels of spending that reflected the optimization process, it inadvertently did not update the quantities to correspond with the changed spending level. This led to some confusion regarding unit costs as discussed in the hearing. PowerStream provided Undertaking J2.10 to correct this information. As indicated in J2.10, the corrected numbers are in line with the proposed budget.

57. The Customer Engagement Activities Summary⁸ states that customers indicated a desire for increased reliability and a concern with outages but also expressed a concern with cost. Some customer groups expressed greater concern with reliability than cost. PowerStream was also able to confirm, by way of the information provided, that priorities are aligned with customer preferences in a number of areas including system reliability, weather hardening and asset remediation. Customers endorsed a balanced approach between risk and cost, the approach indeed taken and reflected in the DSP PowerStream has prepared and filed with the Board.
58. PowerStream submits that it has filed a complete DSP that complies with all Chapter 5 Filing Requirements. PowerStream has a comprehensive asset management system, and a well-developed process to prioritize and optimize its capital spending including a thorough internal review and approval process. PowerStream has used these tools to arrive at the appropriate balance among the needs to maintain reliability, manage risk and limit distribution rate increases.

⁸ Application Section II, Tab 2, Exhibit G, DSP Appendix F.

E. Rate Base and Return

59. The following table summarizes the rate base and return in millions of dollars from the last Board Approved amounts in 2013 up to and including the Custom IR Plan term⁹.

Rate Base & Return	Board Approved	Historic Actual		Bridge Year	Test Years				
	2013	2013	2014	2015	2016	2017	2018	2019	2020
Net Fixed Assets	\$ 719.3	\$ 710.0	\$ 761.1	\$ 837.7	\$ 921.9	\$ 1,001.5	\$ 1,079.2	\$ 1,148.8	\$ 1,217.0
Working Capital Allowance (WCA):									
Cost of Power	\$ 857.8	\$ 880.2	\$ 925.3	\$ 1,034.1	\$ 1,053.1	\$ 1,101.9	\$ 1,147.6	\$ 1,172.5	\$ 1,194.6
OM&A	\$ 80.0	\$ 80.8	\$ 85.5	\$ 92.6	\$ 96.2	\$ 101.8	\$ 103.7	\$ 106.1	\$ 108.2
Subtotal	\$ 937.8	\$ 961.0	\$ 1,010.8	\$ 1,126.7	\$ 1,149.3	\$ 1,203.7	\$ 1,251.3	\$ 1,278.6	\$ 1,302.8
WCA %	13.0%	13.0%	13.0%	13.0%	7.5%	7.5%	7.5%	7.5%	7.5%
Working Capital Allowance	\$ 121.9	\$ 124.9	\$ 131.4	\$ 146.5	\$ 86.2	\$ 90.3	\$ 93.8	\$ 95.9	\$ 97.7
Rate Base	\$ 841.2	\$ 834.9	\$ 892.5	\$ 984.2	\$ 1,008.1	\$ 1,091.8	\$ 1,173.0	\$ 1,244.7	\$ 1,314.7
IFRS PP&E	-\$ 9.6								
GEA Additions	\$ 0.5								
Adjusted Rate Base	\$ 832.1	\$ 834.9	\$ 892.5	\$ 984.2	\$ 1,008.1	\$ 1,091.8	\$ 1,173.0	\$ 1,244.7	\$ 1,314.7
Cost of Capital	5.98%	5.98%	5.85%	5.85%	6.02%	6.08%	6.10%	6.10%	6.10%
Return	\$ 49.7	\$ 50.0	\$ 52.2	\$ 57.6	\$ 60.7	\$ 66.4	\$ 71.5	\$ 75.9	\$ 80.1

60. The growth in rate base is mainly attributable to the need for greater capital spending. This growth is exacerbated by the longer useful lives under Modified International Financial Reporting Standards (MIFRS) whereby lower accumulated depreciation is subtracted from fixed assets compared to the previous accounting method. The increase is offset in part by the reduction in the Working Capital Allowance (WCA) percentage factor from 13% (used in PowerStream's 2013 Cost of Service application) to the Board's new default value of 7.5%.

F. Operating Expenditures

- **Operating, Maintenance & Administrative (OM&A) Expense Planning Process**

⁹ Compiled from Application Section II, Exhibit G, Tab 1, tables 1 and 2, and Interrogatory Responses, August 21, 2015, Section A, Tab 2, Schedule 1, Updated Revenue Requirement Workforms.

61. PowerStream has a detailed annual OM&A expense planning process that involves all the business units in the organization. The planning process begins by reviewing and confirming corporate strategy and objectives. This in turn sets the parameters for the development of a six-year plan, 2015 to 2020. The business planning process begins in late March and results in a six-year Budget/Outlook that is ultimately delivered to PowerStream's Board of Directors for approval in December. This is discussed below and in more detail in Application Section II, Tab 1, Exhibit C.
62. Initial overall budget targets are set for operating and capital expenditures based on a "top down" approach considering corporate strategy, business needs and financial impact. As a means of ensuring PowerStream manages OM&A costs, the initial top down target for the 2015 non-labour budget was derived based on a three year historical average of actual costs (2011-2013) indexed by 1% for cost increases. Targets for the years after 2015 used the prior year budget and were indexed by 1% for cost increases.
63. The "bottom up" OM&A budget is led by the Corporate Finance department which communicates the targets so the business units can develop detailed budgets. Business units consider corporate, divisional and business needs when developing their individual budgets. These factors are evaluated against the historical activity and it is determined whether the historical volume or cost levels are relevant to the future budget costs. Individual business areas assess changes in costs based on business specific drivers that impact their area (i.e. new contracts, price escalation factors, changes in business operations).
64. Each operating and maintenance project or program is also reviewed during the detailed budget build process. Various factors are considered by the business units during this bottom up process. Some notable factors are Asset Condition Assessment studies, reliability standards, historical failure rates, and environment, health and safety requirements, regulatory and operating standards (i.e. cyclical maintenance requirements). Every effort is made to manage within the target.
65. To enhance the Business Plan and Budget review process, in 2013, a Budget Working Group was created. Their mandate is to review the OM&A rate drivers such as

headcount, OM&A cost pressures and capital requirements in order to prioritize and manage costs based on the corporate strategy, objectives and business needs. When cost pressures cannot be managed within targets, these cost drivers, whether internal or external, are assessed by the Budget Working Group in order to determine the criticality of incorporating the cost increase in the budget.

66. After the Budget Working Group review, the updated budget is presented to the Executive Operating Committee where it is approved and then delivered to PowerStream's Board of Directors for approval in December.

- **Cost Drivers**

67. There are three extraordinary cost drivers for OM&A in 2015 and the five-year Custom IR plan period as noted below – the new Customer Information System (CIS); increased vegetation management activities; and the costs related to monthly billing. These are considered extraordinary due to the significant incremental impact on OM&A.

- **New CIS**

68. A new CIS was implemented in 2015 with support from a system integrator, CGI Inc. CGI was also chosen to provide the maintenance on the new CIS based on the results of a due diligence process including a pricing proposal, discussions with other out of province utilities who had used CGI for maintenance and discussions with other Ontario LDCs.
69. There is \$2 million in incremental costs related to the ongoing annual maintenance for the new CIS. While the system went into service in 2015, PowerStream considers the maintenance related to the CIS to represent an incremental new OM&A cost throughout the Custom IR period. The new CIS is expected to provide longer-term productivity efficiencies that will be gained from the new functionality and ease of use of the new software. Examples of productivity as noted in the application in Section II Tab 1 Exhibit F, Tab, page 7 ff. include the ability to provide more value to customers through increased functionality.

- **Vegetation Management**

70. Vegetation management costs increased by \$300,000 in 2015 from 2014; and additional work is budgeted which increases the budget by \$600,000 in 2016 over 2015; and is forecast to increase \$500,000 per year from 2017 to 2020. These increases are the result of PowerStream implementing system hardening measures which include increasing the tree clearance cutback around lines, complete removal of any limbs overhanging lines (referred to as “blue-skying”), removal of hazard trees located close to a power line where failures of the tree could pose a hazard to the line, and implementing vegetation management around secondary wires on customer properties. These changes were based on a study commissioned by PowerStream to review the impacts of the December 2013 ice storm which led to the “Hardening the Distribution System Against Severe Storms” report by CIMA. CIMA is an engineering consulting firm with expertise in the energy, environment and infrastructure fields. These reports can be found in the Application at Section IV, Tab 2, TCQ-2 G-SEC-19, Appendix A and B.

Monthly Billing

71. The incremental on-going OM&A cost of providing the Board requirement to move to monthly billing starting in 2017 is \$3.6M to \$4M per year over the 2017 to 2020 period. Included in this cost is labour, postage, printing, etc. Savings are also included for e-billing and bad debt expense. For more detail please see Interrogatory Responses, August 21, 2105, Section A, Tab 1, Schedule 1, page 2.

G. Depreciation

72. PowerStream’s methodology for depreciation and amortization is discussed below and in more detail in the Application, Section II, Tab, Exhibit J, Tab 3.
73. PowerStream has used the same useful lives as approved in its 2013 COS application (EB-2012-0161), with the addition of new classes for the underground rehabilitated cable (20 years) and the new CIS (10 years).
74. PowerStream has used the same depreciation methodology as approved in its 2013 COS in-service basis for actual additions and an estimate of half-year depreciation on forecast additions.

H. Taxes /PILs

75. The calculation of taxes is discussed below and in more detail in the Application, Section II, Tab, Exhibit J, Tab 4.
76. PowerStream has used the Board's PILs model and revised this model to accommodate five test years, replicating the same calculations and methodology. The updated model can be found in the Interrogatory Responses, August 21, 2015, Section A, Tab 2, Schedule 6.
77. PowerStream has followed the Board's guidance in completion of the tax model. PowerStream has provided the benefit of the tax loss in 2016 as a reduction to revenue requirement to mitigate rates.

I. Other Revenue

78. The forecast of other revenues is discussed below and in more detail in the Application, Section II, Tab, Exhibit I, Tab 1.
79. Other operating revenue is defined as sources of utility revenue other than Distribution Revenue. PowerStream includes other operating revenue into four main categories: Specific Service Charges, Late Payment Charges, Other Distribution Revenues, which includes Standard Supply Service Charges and Retail Service Charges and Other Income or Deductions, which includes joint service revenue. PowerStream's accounting practices are consistent with OEB accounting guidelines and have not changed since the last cost of service application.
80. With the exception of other income and deductions, the amounts are budgeted using the average of the previous three years.
81. Other income and deductions includes PowerStream's joint service agreement revenue, cost recovery and markup, on services that PowerStream provides to its related companies.

J. Load and Customer Forecasts

82. In the Settlement Agreement in PowerStream's 2009 Cost of Service Application¹⁰, the parties agreed that PowerStream's forecasting methodology could be improved in the future to have class specific consumption data. Striving for continuous improvement, in the current Custom IR proceeding PowerStream developed class-specific regression models to forecast load, customers and connections that underpin this Application. This is discussed below and in detail in the Application at Section II, Tab 1, Exhibit H.
83. The class specific approach, developed in MetrixND, forecasts class-specific sales based on multifactor regression models. Monthly rate class sales models incorporate economic drivers that are most relevant to the specific customer class. The primary economic drivers of the regression models are all statistically significant at or over 95% level of confidence. The estimated class-specific regression models are both theoretically and statistically strong. Modeling sales at the rate class level allows PowerStream to account for differences in sales trends across customer classes and capture what truly drives sales growth (or decline) in the individual rate classes.
84. PowerStream's customer and connections forecasts are also developed based on rate class-specific regression models. The monthly models relate the number of customers/connections to factors strongly correlated with historical customer growth. The estimated class-specific customer/connection forecast models are statistically sound and track historical customers and connections well.
85. PowerStream believes that forecasting sales, customers and connections at the rate class level results in improved estimation of billing determinants which leads to improved accuracy of rate setting for each rate class. Given the regression model's performance, PowerStream is confident and submits that the class – specific forecasting approach to load, customers and connections is appropriate, and the forecasting results are reasonably accurate.
86. The load forecasts have been adjusted to reflect the future impacts of anticipated CDM activity. The impacts of all past CDM program activity including measure persistency are

¹⁰ Available at:
http://www.rds.ontarioenergyboard.ca/webdrawer/webdrawer.dll/webdrawer/rec/127898/view/PwrStrm_SettlementP_20090529.PDF, at page 16 of 32 (EB-2008-0244).

embedded in the actual sales data and captured in the regression models. The load forecasts for the rate plan years were only adjusted by the estimated future CDM impacts based on PowerStream's 2015 – 2020 CDM plan approved by the IESO.

K. Cost Allocation and Rate Design

- **Cost Allocation**

87. Cost allocation is discussed below and in more detail in the Application, Section II, Tab, Exhibit L, Tab 1.
88. PowerStream has completed a Cost Allocation model for each year of the Custom IR rate plan, 2016 to 2020. The updated models can be found in the Interrogatory Responses, August 21, 2015, Section A, Tab 2, Schedule 7.
89. PowerStream has used the latest Board model incorporating its new approach to Street Lighting and followed the Board's instructions for completion of the models.
90. The cost allocation model revenue-to-cost ratios were outside the Board's prescribed ranges for two classes: Large Use and Street Lighting.
91. The revenue-to-cost ratio for the Large Use class was below the threshold value of 85%. PowerStream determined the amount of additional revenue to be allocated to this class to bring it to the threshold value.
92. The revenue-to-cost ratio for the Street Lighting class was above the threshold value of 120%. PowerStream determined the amount of the reduction in revenue allocated to this class to bring it to the threshold value of 120%.
93. These two adjustments left a shortfall in revenue allocation. This shortfall was allocated to the rate classes with revenue-to-cost ratios below 100%, including the Large Use class. The shortfall was allocated pro-rata based on the preliminary revenue allocation to minimize the impacts on these classes. A summary of the adjustments is provided in the Interrogatory Responses, August 21, 2015, Section A, Tab 2, Schedule 7.

- **Fixed and Variable Rate Design**

94. As discussed in the Application in Section II, Tab 1, Exhibit M, Tab 1, PowerStream used the same methodology as in its 2009 and 2013 cost of service applications to allocate the revenue into the portions to be recovered from the fixed monthly service charge (MSC) and the variable distribution rate.
95. The current approved MSCs were compared to the MSC ceilings in the cost allocation model (schedule O2, Minimum System with PLCC Adjustment). If the current approved MSC was above the MSC ceiling, the current approved rate was used as the proposed MSC. Otherwise, the proposed MSC was set to the lower of the preliminary MSC and the MSC ceiling.
96. Once the MSC rates were set, these were used to calculate the fixed portion of revenue from each class. The variable portion was determined as the total class revenue allocation less the fixed portion and the variable rate determined by dividing this amount by the class billing determinants.
97. In its August 2015 update, PowerStream addressed the Board's recent direction to transition Residential customers to a fully fixed monthly service charge over 4 years starting in 2016, with limited exceptions.
98. PowerStream determined the 2016 bill impacts to be 10% for a typical Residential customer using 800 kWhs per month. As noted previously, the largest part of the bill increase is related to the ending of the Ontario Clean Energy Benefit at the end of 2015.
99. Increasing the fixed portion would cause the bill impacts for Residential customers with lower consumption levels, such as those at the 10th percentile level of 309 kWh per month, to be considerably higher than 10%.
100. As a result, PowerStream proposes to transition Residential customers to a fully fixed monthly service charge over 4 years beginning January 1, 2017 to mitigate the bill impact on those customers, and particularly on the 10th percentile of Residential customers, in 2016. As shown in Appendix 2-PA (Interrogatory Responses, August 21, 2015, Section A, Tab 2, Schedule 7b) PowerStream has increased the fixed portion of the Residential class revenue allocation in even steps in calculating the proposed rates for 2017 through 2020.

- **Bill Impacts**

101. Copies of Appendix 2-W - Bill Impacts based on the Application as updated in August 2015 are provided in the Interrogatory Responses, August 21, 2015, Section A, Tab 2, Schedule 2.

102. The following table summarizes the total monthly bill impacts and includes the impact of the January 1, 2016 changes related to the discontinuation of both the Ontario Clean Energy Benefit (OCEB) and the Debt Retirement Charge (DRC). Because the bill impact of the removal of the OCEB is greater than the bill impact of the removal of the DRC, there is a net increase on customer bills.

Customer Class	Billing Determinant	Consumption per Customer (kWh)	Load per Customer (kW)	Total bill				
				2016	2017	2018	2019	2020
Residential	kWh	800		10.0%	2.5%	0.6%	(0.2%)	0.1%
GS<50 kW	kWh	2,000		14.7%	1.9%	0.9%	0.8%	0.8%
GS>50 kW	kW	80,000	250	3.1%	1.4%	(0.3%)	0.7%	0.6%
Large Use	kW	2,800,000	7,350	1.9%	0.9%	0.6%	0.6%	0.6%
Unmetered Scattered Load	kWh	150		5.2%	4.1%	1.7%	1.5%	1.3%
Sentinel Lights	kW	180		6.2%	5.1%	0.8%	1.8%	1.7%
Street Lighting	kW	280		2.3%	1.3%	(0.9%)	0.9%	0.6%
Average				6.2%	2.5%	0.5%	0.9%	0.8%

103. The following table shows the impacts on the distribution portion of the bill.

Customer Class	Billing Determinant	Consumption per Customer (kWh)	Load per Customer (kW)	Distribution Component				
				2016	2017	2018	2019	2020
Residential	kWh	800		14.8%	9.4%	1.6%	(1.4%)	(0.0%)
GS<50 kW	kWh	2,000		15.5%	8.1%	3.3%	2.4%	2.9%
GS>50 kW	kW	80,000	250	34.4%	11.4%	(3.7%)	4.5%	3.9%
Large Use	kW	2,800,000	7,350	36.7%	12.9%	5.7%	5.3%	4.6%
Unmetered Scattered Load	kWh	150		15.6%	11.5%	4.5%	4.1%	3.3%
Sentinel Lights	kW	180		18.7%	14.1%	1.7%	4.4%	3.8%
Street Lighting	kW	280		0.8%	4.6%	(8.7%)	4.7%	2.2%
Average				19.5%	10.3%	0.6%	3.4%	3.0%

104. PowerStream has mitigated bill impacts in 2016 by factoring the benefit of the tax loss in 2016 into rates, asking for disposition of deferral and variance recovery balances over two years rather than one year and deferring the start of the Residential four year transition to fully fixed rates until 2017.

L Deferral and Variance Accounts

105. PowerStream is requesting disposition of variance and deferral accounts totalling \$10.7 million net recoverable from customers. Global adjustment, in the amount of \$10.4 million recoverable from customers, accounts for most of this net amount. Please see the Application, Section II, Tab 1, Exhibit N for further details.
106. PowerStream has followed the Board's guidance and methodology in arriving at the amounts for disposition and the associated rate riders with two exceptions as discussed below.
107. To help mitigate rate impacts in 2016, PowerStream has proposed to collect the gross amount recoverable from customers, totalling \$12.98 million recoverable, over two years (2016 and 2017); and to refund balances in other accounts that are payable to customers, totalling \$2.3 million, to customers over one year (2016).
108. Due to the timing of the Application, PowerStream used a model that did not include adjustments related to wholesale market participants ("WMP"). Staff raised this issue in Staff interrogatories I-Staff-5 and I-Staff-7, and at the Technical Conference. PowerStream has agreed to use the Board's recent model incorporating the appropriate treatment of WMP when filing its Draft Rate Order.
109. PowerStream has not requested disposition of the Other Post Retirement Benefit deferral account approved in its 2013 COS application to capture the impact of actuarial revaluations. The annual amount when spread out over the average remaining service life of employees is immaterial.
110. Account 1508 CGAAP-CWIP, approved in the 2013 COS application has been excluded as its rate riders continue to December 31, 2016 and are expected to recover the remaining balance.
111. In this Application, Account 1575 IFRS-CGAAP PP&E Transition Amount, has been excluded from setting of base rates. PowerStream proposes to refund the remaining balance of \$2.4 million credit to customers over one year starting in 2016.

112. PowerStream has calculated a true-up amount regarding the smart grid rate adder collected in 2014 and proposes to refund the balance of \$0.5 million credit to customers over one year starting in 2016.

M. Conclusion

113. For all of the foregoing reasons, PowerStream submits that its Application, as updated on August 21, 2015, presents the appropriate revenue requirements for the Custom IR plan term as supported by its evidence, as well as appropriate, just and reasonable distribution rates for each year of the term, subject to the potential adjustments contemplated in the Application, as updated, and requests that the Board approve the Application as updated.

114. A Schedule of Rates and Charges setting out PowerStream's proposed rates and charges effective January 1, 2016, may be found in the Interrogatory Responses filed August 21, 2015 at Section A, Tab 2, Schedule 3.

ALL OF WHICH IS RESPECTFULLY SUBMITTED THIS 14TH DAY OF DECEMBER, 2015.

Borden Ladner Gervais LLP
Per:

Original signed by James C. Sidlofsky

James C. Sidlofsky
Counsel to PowerStream Inc.