

PowerStream Inc.

EB-2015-0003

Panel 1

General Issues

OEB Staff Compendium

November 20, 2015

1 II-2-Staff-32

2
3 Ref: E G/T2

4
5 The above reference is PowerStream's Consolidated Distribution System Plan.

6 Chapter 5 of the Filing Requirements states, "A DS Plan filing must demonstrate that distribution
7 services are provided in a manner that responds to identified customer preferences."

8 Please explain how PowerStream's DS Plan reflects customer preferences identified through
9 customer engagement.

10 **RESPONSE:**

11 PowerStream's experience with engaging customers on the development of options for the DS
12 Plan was that significant time and effort was required to educate customers on the distributions
13 System and the electricity system in general. Due to the high level of electricity literacy required
14 for customers to be able to provide meaningful feedback on specific plans and projects proposed
15 in the DS Plan, customers frequently felt that they did not know enough to be able to make
16 conclusions regarding the operational and capital spending decisions made by the utility. For
17 example, it was found that 58 per cent of those consulted felt that PowerStream's investment plan
18 was heading in the right direction. A further 35 per cent were unsure, or felt that they did not have
19 enough information or knowledge of the electricity system or of PowerStream to make a
20 determination.

21 PowerStream valued the input that was received from customers as it confirmed the level of
22 general support customers have for PowerStream's plans and approach to investment. Given the
23 level of acceptance PowerStream received from a representative and statistically significant
24 sample of its customers, the utility did not feel it necessary to deviate from its initial plan balanced
25 reliability and costs among our customers.

5.4.2 CAPITAL EXPENDITURE PLANNING PROCESS OVERVIEW

The information a distributor should provide includes, but need not be restricted to:

- a) a description of the distributor's capital expenditure planning objectives, planning criteria and assumptions used, explaining relationships with asset management objectives, and including where applicable its outlook and objectives for accommodating the connection of renewable generation facilities;
- b) if not otherwise specified in (a), the distributor's policy on and procedure whereby non-distribution system alternatives to relieving system capacity or operational constraints are considered, including the role of Regional Planning Processes in identifying and assessing alternatives;
- c) a description of the process(es), tools and methods (including where relevant linkages to the distributor's asset management process) used to identify, select, prioritise and pace the execution of projects in each investment category (e.g. analysis of impact of planned capital expenditures on customer bills);
- d) if not otherwise included in c) above, details of the mechanisms used by the distributor to engage customers for the purpose of identifying their needs, priorities and preferences (e.g. surveys, system data analytics, and analyses – by rate class – of customer feedback, inquiries, and complaints); the stages of the planning process at which this information is used; and the aspects of the DS Plan that have been particularly affected by consideration of this information; and
- e) if different from that described above, the method and criteria used to prioritise REG investments in accordance with the planned development of the system, including the impact if any of the distributor's plans to connect distributor-owned renewable generation project(s).

Capital Expenditure Planning Objectives

The capital expenditure planning objectives are detailed in Exhibit G, Tab 2, Section 5.3.3.

Identification, Selection and Prioritization of Projects

The identification, selection and prioritization of projects is detailed in Exhibit G, Tab 2, Section 5.3.3.

Customer Engagement - General

PowerStream provides electricity and energy related services to more than 370,000 customers throughout a large and diverse service territory, and has undertaken customer consultation

activities as part of specific outreach on this DS Plan. PowerStream routinely communicates frequently with customers through a number of communication methods, including:

- Customer transaction telephone survey;
- Key Accounts outreach and management;
- Customer Satisfaction Survey;
- Customer Experience Plan;
- Communications and Social Media;
- Enhanced Communication Activities – December 2013 Ice Storm Review; and
- Conservation and Demand Management outreach and activities.

Ongoing Customer Engagement

PowerStream interacts with its residential and commercial customers regularly through its normal business practices.

PowerStream's customers range from small residential customers to large commercial and industrial enterprises. PowerStream's service territory is home to some of the largest internet and banking data centres, as well as major manufacturers and commercial service providers.

Focusing on customers and striving to be efficient while providing optimum service, in a safe and reliable way is at the forefront of PowerStream's operating philosophy. PowerStream's interactions with customers occur most frequently within the Customer Service Department, as well as through the Conservation and Demand Management (CDM) and Corporate Communications groups.

In addition to the ongoing communication efforts, PowerStream engages with its customers when capital work is to be performed in their area in order to address and alleviate any potential stakeholder concerns. Town halls, presentations and focus groups are used to communicate with specific customer groups ahead of any major projects being conducted in their area to ensure transparency and to encourage the customer base to become more educated about any ongoing projects that may impact them.

1 Customer Transaction Telephone Survey

2 The OEB has established service quality measures and standards that all distributors must
3 meet. It is PowerStream's view that the OEB-regulated customer service requirements are a
4 minimum requirement. PowerStream seeks to provide customers with the best experience
5 possible when interacting with all LDC staff. Practices and procedures are reviewed based on
6 changing customer needs and preferences. Focus groups are used to review practices and
7 gather customer input in order to make revisions to the services provided.

8
9 In January 2014, a customer feedback process was implemented whereby customers are called
10 back seven days after they contact PowerStream's Call Centre. Approximately 800 residential
11 customers are contacted through this process on a weekly basis. Early results show that 79%
12 of customers are very or somewhat satisfied with their interaction with PowerStream.
13 PowerStream has moved from a reactive position to being proactive with customer needs by
14 learning from past situations and feedback surveys in order to mitigate the occurrence of similar
15 issues and deliver an exceptional customer experience.

16
17 Key Accounts

18 PowerStream's large commercial and industrial users are provided with a specialized service
19 designed to accommodate their unique needs. The Key Accounts team meet regularly with
20 these large users to provide an update on PowerStream's activities and to address any
21 concerns they may have. This feedback is shared internally and has led to targeted reliability
22 investments in areas that were experiencing higher levels of service disruptions. This program
23 also allows these customers to learn about CDM initiatives that may work to their advantage in
24 managing their energy consumption.

25
26 Customer Satisfaction Survey

27 Since 2007, PowerStream has engaged a consultant group to conduct a customer satisfaction
28 study in order to gather third-party feedback from customers with the objective of using this
29 information to develop process improvements, implement new service offerings, and to better
30 understand the needs and preferences of customers.

Focus groups are held annually for residential customers and in-depth interviews are conducted with key commercial account holders within the service territory. This research is conducted to supplement quantitative data from the UtilityPulse Study, Rehab Study, Customer Transaction Survey and an Online Customer Study.

In 2013, PowerStream's overall customer satisfaction score was 91 per cent, slightly above the average, and for PowerStream, higher than any of the previous four years. Each year, the results of the Customer Satisfaction Survey are used to develop and execute improvements. For 2014, based on the 2013 survey results, the top action areas were:

- Better communicate the extent to which PowerStream works with and assists local communities;
- work to ensure that customer newsletters are concise and address topics important to customers such as ways to keep electricity costs down through energy conservation;
- focused assistance for key account customers, such as online energy usage tracking; and
- reinforce with customers that PowerStream is community owned.

Customer Experience Plan

As part of its commitment to continuous improvement, PowerStream drafted a Customer Experience Plan in 2012 as a corporate initiative that touches all areas of the utility. Existing PowerStream work was leveraged for the plan, including PowerStream's corporate strategy, present customer satisfaction studies and customer segmentation work. The project involved extensive employee and stakeholder engagement, including:

- Interviews with executives, directors and managers;
- Interviews with senior Ontario Energy Board staff and an intervener;
- Completion of a survey by over 260 PowerStream staff;
- A Customer Experience Attribute Workshop;
- Focus Groups with front line staff; and
- Regular Steering Committee and Project Team meetings.

1 Prioritizing the customer experience, engaging with customers and ensuring accountability are
2 some of PowerStream's priorities coming out of the Customer Experience Plan. Near term
3 priorities focus on driving cultural change, while longer term priorities focus on developing the
4 tools and insights to effectively deliver and ensure that customer experience is a corporate
5 priority.

6 7 Communications and Social Media

8 PowerStream is committed to providing customer-focused communications and to reaching out
9 to customers in the ways in which they want to be communicated with and where and when they
10 want the conversations to take place. Social media helps PowerStream to better understand,
11 respond to and attract the attention of specific audiences. It enables interactive communication
12 – the exchange of information, perspective and opinion – among multiple audiences, effectively,
13 efficiently, and in places where those conversations are taking place. The use of social media
14 also enhances the ability to engage PowerStream's customers and offers greater accessibility to
15 them including being able to reach out to them on specific issues.

16 17 Enhanced Communication Activities – December 2013 Ice Storm Review

18 In the aftermath of the December 2013 Ice Storm, PowerStream initiated a review conducted by
19 a third-party consultant in order to revise the utility's ability to respond to major events. The task
20 force made 35 key recommendations in a number of categories including external
21 communications and customer care, emergency restoration, capital asset management, system
22 hardening, and technical considerations. In response to the findings of this review,
23 PowerStream took actions to implement these recommendations. The utility is committed to
24 maintaining a customer focus as a core part of its operating philosophy and is making
25 improvements to its customer communications strategy as a result of the report's
26 recommendations:

- 27 • Implemented a "live agent" option in the Outage Interactive Voice Response (Outage
28 IVR) system - previously, customers could only leave a message, but now can speak to
29 a Customer Service Representative (CSR) 365/24/7;
- 30 • CSRs are provided with better tools to assist customers with outages;

- 1 • Implemented a "One Number" solution where all published PowerStream phone
- 2 numbers will be routed to the same location. Customers have the choice to either report
- 3 an outage or speak to Customer Service to deal about typical issues (bill questions,
- 4 etc.). The system also has the capability for broadcast type messages to let customers
- 5 know about significant outages and updates in a given area;
- 6 • Developed a Crisis Communications Plan;
- 7 • Implemented a Customer callback option for customers who wish to receive a call after
- 8 their power has been restored;
- 9 • Created an Outage E-mail Notification Service;
- 10 • Developed an information package for Councils and municipal staff on utility operations
- 11 and Emergency Preparedness; and
- 12 • Began Implementing an out-of-province Call Centre to be deployed in the event of very
- 13 widespread outages.

15 Conservation and Demand Management

16 The Conservation and Demand Management team interacts with residential and business
17 customers. In addition to customer interviews and focus groups undertaken for specific
18 objectives, they participate in over 15 community events per year and hold events in retail
19 stores, reaching over 3,000 customers during events. PowerStream also engages customers
20 through the promotion of CDM programs by distributing handouts, placing print advertisements
21 in local newspapers, adding bill inserts, sending out direct mail pieces, GO Train Posters and
22 online advertisements.

24 The CDM group conducts ongoing market research studies to determine motivations, barriers
25 and satisfaction levels of our customers related to conservation program participation. They also
26 collect information related to preferred methods of communication. Through outreach surveys,
27 PowerStream discovered that a high proportion of customers indicated that their communication
28 preference is email. The CDM team therefore implemented an email marketing communication
29 system to deliver conservation program messages as a result of the learnings obtained through
30 the survey.

1 The CDM team has also undertaken a Residential Customer Segmentation Study in order to
2 classify PowerStream's residential customer base into distinct segments to further develop an
3 understanding of its customers and their needs. Over the course of this study, over 3,500
4 customer interviews were conducted. The segmentation work will assist in the utility's efforts to
5 tailor programs and services to the wants and needs of customers and will improve the
6 organization's understanding of customer perspectives on a number of topics, including:

- 7 • Consumption habits & understanding of the impact of their electricity consumption on
8 the environment;
- 9 • PowerStream as a local hydro company & level of trust;
- 10 • Customer Service Metrics; and
- 11 • General attitudes and behaviours including feelings towards conservation, social
12 pressures, and motivations and barriers towards participation.

13 14 **Customer Engagement - DS Plan**

15 PowerStream developed a customer engagement process with its residential and commercial
16 customers designed specifically to obtain feedback on this DS Plan.

17
18 In the spring of 2014, PowerStream engaged Innovative Research Group Inc. ("Innovative"), a
19 national research and strategy firm to assist in determining how to incorporate customer needs
20 and preferences into the DS Plan.

21
22 Throughout the summer and fall of 2014, PowerStream conducted a series of customer
23 engagement activities in preparation for completion of the DS Plan.

24
25 The activities were focused specifically on the DS Plan and were designed to determine
26 customer preferences related to PowerStream's proposed capital plans. The DS Plan specific
27 engagement plan responded to OEB expectations articulated in the RRFE report that distributor
28 plans should take customer preferences into account.

29
30 The DS Plan specific engagement activities are described below, as is PowerStream's response
31 to incorporating customer preferences into the DS Plan, per the Chapter 5 filing requirement.

1 Engagement Methods

2 There were four engagement methods.

3
4 i) Online DSP Primer

5 The primer developed for this consultation process was available online to all
6 PowerStream customers from November 17, 2014 to December 22, 2014.

7
8 ii) Residential and GS>50 Focus Groups

9 These consultation sessions were led by Innovative and were structured around the
10 themes of the primer. Primer booklets were distributed and participants were asked to
11 read and complete the feedback questions. A subsequent discussion of each section
12 was facilitated by the moderator.

- 13
14 • Barrie – November 17, 2014
15 • Markham – November 18, 2014
16 • Vaughan – November 19, 2014
17

18 iii) GS< 50 – Workshops

19 These sessions were structured around the content of the primer and the DS Plan.
20 PowerStream made a detailed presentation with customers having the opportunity to
21 pose questions to staff. Innovative then facilitated breakout groups where participants
22 were guided through the primer sections and then asked to fill in their answers to the
23 questions independently. A subsequent discussion of each section was facilitated by the
24 moderators.

- 25
26 • Barrie – December 9, 2014
27 • Richmond Hill – December 10, 2014
28

29 iv) Key Accounts – Presentation and Feedback

30 These sessions were structured around the content of the primer and the DS Plan.
31 PowerStream made a detailed presentation with customers having the opportunity to

pose questions to staff. Innovative then facilitated a feedback session where participants were guided through the primer sections and then asked to fill in their answers to the questions independently. A subsequent discussion of each section was facilitated by the moderator.

- December 10, 2014

PowerStream developed a primer to be used as the predominant consultation tool for the variety of engagement methods used in this process. The goal of the primer was to translate PowerStream's proposed plans for the distribution system into a plain language document that customers could relate to. The primer discussed the challenges the distribution system faces and how the utility intends to address them. Feedback was collected through relevant questions posed after each section of the primer with the intent of educating customers about the electricity distribution system and gathering their input on specific plans and projects proposed in the DS Plan.

Participants were generally satisfied with the service being provided by PowerStream, with 91 per cent reporting that they were either very satisfied (46 per cent) or somewhat satisfied (45 per cent), though many indicated that they were only somewhat familiar with the electricity system and PowerStream's services.

Rate Impacts

Proposed estimated bill impacts were presented for each rate class and major capital projects discussed to provide a background for PowerStream's proposed activities for 2016-2020.

Generally, customers accepted the proposed rate increases, but there was a concern from some business customers that PowerStream had not demonstrated that they had looked for internal efficiencies prior to going to customers for the increase. There was some discussion during focus groups of PowerStream paying for increased capital budget requirements through the company's profits.

1 The majority of customers surveyed online and in focus groups indicated that they were
2 supportive of the increase. These customers believe that the rate increase is reasonable and
3 that they support it, or that they don't like it but think that the rate increase is necessary:
4

5 Of 1,553 online survey respondents, 67 per cent were supportive of the increase, or which 19
6 per cent thought it was reasonable, and 48 per cent didn't like it but thought it was necessary.
7 26 per cent were opposed to the rate increase and thought it was unreasonable. Similar results
8 were seen in focus groups, however both key accounts and GS > 50 customers were slightly
9 less supportive, with greater numbers indicating that they opposed the increase.
10

11 PowerStream Focus

12 *System Reliability and Restoration Time*

13 PowerStream was pleased to discover that most customers are satisfied with the levels of
14 reliability they currently receive. This is consistent with the capital expenditure plan which is
15 designed to maintain current reliability levels (no degradation). Modest improvements due to
16 the remediation of worst performing assets are expected (refer to Exhibit G, Tab 2, Section
17 5.3.3 p.34). An example of remediation projects that will have a positive effect on system
18 reliability is cable remediation, described in Exhibit G, Tab 2, Section 5.2.3.
19

20 Approximately seven in ten customers identified that they have experienced at least one outage
21 during unusual weather and six-in-ten reported having experienced an outage excluding during
22 times of extreme weather situations. However, when asked to describe the length of their
23 outages, most reported having had their power restored within one hour and 29 per cent had
24 their power restored within 15 minutes. No serious concerns regarding current restoration times
25 were identified by the majority of customers.
26

27 Despite these results, some commercial customers expressed concerns about small,
28 momentary outages that can negatively affect sensitive machinery. A small number of key
29 accounts customers pointed to poor reliability as a serious concern for their businesses.
30 PowerStream addresses concerns these through the worst performing feeder assessments and
31 ongoing reliability committee discussions on problematic areas.

1 *Aging Infrastructure*

2 When presented with PowerStream's plans for addressing the concern of aging equipment, it
3 was found that customers generally accepted PowerStream's current practices for replacing
4 distribution assets. More than half of the participants in the online survey indicated that their
5 preference is to continue investing to reduce power outages as opposed to scaling back
6 infrastructure investment to reduce the impact on electricity rates.

7
8 *Investment in New Technologies*

9 Customers were able to see some benefits of investing in new technologies as they indicated a
10 desire for increased communication from the utility. At the same time, PowerStream received
11 some specific feedback regarding the implementation of the new CIS system. Some customers
12 were unable to see the added benefit of implementing a new system.

- 13 • GS < 50 customers in focus groups were most likely to question the need for the new
14 billing system. They reported consistently receiving bills and did not see how this
15 investment would improve their reliability.
- 16 • The results of the online primer survey indicated that 48 per cent of respondents view
17 investments in technology as important and should be a priority for PowerStream. Just
18 over a third (34 per cent) indicated that investments in new technology are more of a
19 luxury than a necessity and should therefore be a low priority for PowerStream.
- 20 • New technology was seen as a solution to improving communication for key accounts
21 customers. This particular customer class had 62 per cent of respondents who believed
22 that investments in new technology should be a priority for PowerStream.

23 There was a sense during the in-person focus group sessions that PowerStream had not made
24 the business case for this major investment and that the perceived value of implementing this
25 system was not shared across all customer classes. PowerStream has strengthened its
26 business case for this expenditure. Refer to Appendix A, Material Investments, for detailed
27 project information.

28
29 *Storm Hardening*

30 PowerStream customers had varying views on the need to prepare for extreme weather events.
31 Some see it as a necessary investment in order to ensure safety, however, because future

1 weather is seen as unpredictable, and past experiences during major events have been
2 generally positive, this is seen as an area in which major investments are not necessary.

3
4 PowerStream's approach to storm hardening is consistent with customer preferences because a
5 modest approach to investments is being taken in order to balance risks and cost.
6 PowerStream commissioned a review of the utility's response the 2013 Ice Storm. The purpose
7 of the review was to identify lessons learned and to develop action plans to enhance
8 performance should another major incident occur. The report outlined 15 recommendations, of
9 which four were chosen for capital projects, including a project to replace all rear lot supplies on
10 an annual basis until all are remediated.

11
12 Customers expressed concern related to the improvement of communication during outages.
13 Many participants in residential focus groups and the online survey indicated that better
14 communication from the utility was the main way that PowerStream could improve its service to
15 customers during extreme weather events. This was also identified as an area for improvement
16 coming out of the review conducted in 2014. As a result, PowerStream has made a number of
17 improvements to increase the volume and accuracy of communications to customers during
18 outages. Two of these process improvements are described below:

- 19
20 I. PowerStream has implemented an Outage Notification Service which allows customers
21 to register to receive emails when an outage occurs at their location. These notifications
22 include status updates if there are changes to the incident as well as a final notification
23 once power has been restored; and
24 II. A social media strategy has been developed in order to leverage best practices from
25 emerging communication technology to enable PowerStream to effectively address the
26 volume of messages and to provide the best information to customers.

27 PowerStream derived significant benefits from the enhanced level of customer engagement
28 conducted during the preparation of the DS Plan. The utility values input from customers and
29 was extremely pleased to confirm the level of general support customers have for the utility's
30 plans and approach to investment.

- 1 Refer to Appendix C to Appendix F for the materials used and the reports provided by
- 2 Innovative.
- 3
- 4

F-SEC-6

REF: EX. F-1, p.4

With respect to the excepted vs estimated product savings:

a. Please confirm that the estimated productivity savings set out in Table 2 are incremental savings per year, not cumulative savings.

b. Please revise Table 3 to only include savings for 2017-2020.

RESPONSE:

a) PowerStream cannot confirm this.

Exhibit F, Tab 1, Table 2 is a summary of the annual capital and OM&A estimated productivity savings. These totals are compared in Table 3 to the "OEB Expected Productivity Savings" which come from Table 1.

The "OEB Expected Productivity Savings" from Table 1 are annual targets, e.g. year two expected productivity savings are equal to the productivity savings, based on the X in the IRM IPI-X price cap formula for both years 1 and 2. The productivity factor under IRM reduces the revenue requirement collected in rates in year two by both the year 1 and the year 2 productivity reductions. The Table 1 annual amounts are cumulative.

The estimated productivity savings from OM&A in Table 4 and summarized in Table 2 have been calculated on the same basis. For example the OM&A productivity savings for 2020 of \$3.0 million are comparable to the OEB Expected Productivity Savings from Table 1 and Table 3 for 2020 of \$3.2 million, i.e. measured in terms of the impact on revenue requirement in the year.

In responding to this question PowerStream realized that the "Additional Productivity Savings from Capital" presented in Table 2 were not calculated on a revenue requirement basis and these amounts are incremental not cumulative. This must be restated for the capital productivity savings to be properly compared with the OEB Expected Productivity Savings based on the IRM X factor.

In the tables below, PowerStream has restated the capital savings to reflect the revenue requirement reduction rather than the capital savings. The amounts also reflect the pattern that the capital savings in 2016 reduce revenue requirement in years 2016 to 2020, capital savings in 2017 reduce revenue requirement in years 2017 to 2020 and so on.

Table F-SEC-6-1 is a restated version of Table 2 with the savings from capital calculated on a comparable basis to OEB Expected Productivity Savings.

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

Table F-SEC-6-2 is a restated version of Table 3 incorporating the revised estimated productivity savings from Table F-SEC-6-1.

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

Tables F-SEC-6-3 and F-SEC-4 show the calculation of the productivity savings from capital measured in terms of reduced revenue requirement.

Table F-SEC-6-3: Capital Savings Impact on Revenue Requirement (\$ Millions)

	2015	2016	2017	2018	2019	2020
Capital Savings	\$ 3.80	\$ 4.10	\$ 4.50	\$ 4.70	\$ 5.00	\$ 5.00
Cumulative savings	\$ 3.80	\$ 7.90	\$ 12.40	\$ 17.10	\$ 22.10	\$ 27.10
Reduced revenue requirement:						
Return on Rate base (WACC 6.0%)	\$ 0.23	\$ 0.47	\$ 0.74	\$ 1.03	\$ 1.33	\$ 1.63
Depreciation	\$ 0.08	\$ 0.18	\$ 0.28	\$ 0.38	\$ 0.49	\$ 0.60
Taxes	\$ 0.05	\$ 0.11	\$ 0.17	\$ 0.23	\$ 0.30	\$ 0.36

Decreased Revenue Requirement	\$ 0.36	\$ 0.76	\$ 1.19	\$ 1.64	\$ 2.11	\$ 2.59
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Note: Results from this table rounded to one decimal place in Table F-SEC-6-1 above.

**Table F-SEC-6-4: Capital Savings Impact on Revenue Requirement
– Tax Calculation (\$ Millions)**

	2015	2016	2017	2018	2019	2020
Equity (@40% of rate base)	\$ 1.52	\$ 3.16	\$ 4.96	\$ 6.84	\$ 8.84	\$ 10.84
Return on equity	8.93%	9.30%	9.30%	9.30%	9.30%	9.30%
Reduction to target net income	\$ 0.14	\$ 0.29	\$ 0.46	\$ 0.64	\$ 0.82	\$ 1.01
Taxes at 26.5%	\$ 0.04	\$ 0.08	\$ 0.12	\$ 0.17	\$ 0.22	\$ 0.27
Taxes with gross up	\$ 0.05	\$ 0.11	\$ 0.17	\$ 0.23	\$ 0.30	\$ 0.36

b) Table F-SEC-6-5 is an updated version of Table 3 presenting only the productivity savings for 2017 to 2020.

Table F-SEC-6-5: Expected vs. Estimated Productivity Savings (\$ Millions)

	2017	2018	2019	2020	Total
OEB Expected Productivity Savings	\$ 1.9	\$ 2.3	\$ 2.8	\$ 3.2	\$ 10.2
Estimated Productivity Savings	\$ 1.5	\$ 2.8	\$ 4.1	\$ 5.6	\$ 14.0
Over (under) achieved	-\$ 0.4	\$ 0.5	\$ 1.3	\$ 2.4	\$ 3.8

1 **PRODUCTIVITY**

2 **Guidance and Expectations**

3 At page 3 of the *Report of the Board, Renewed Regulatory Framework for Electricity*
4 *Distributors: A Performance-Based Approach* ("RRFE"), issued October 18, 2012, the Board
5 discusses its rate-setting policy and methods and states:

6 *"These rate-setting methods will provide choices suitable for distributors with varying*
7 *capital requirements, while ensuring continued productivity improvement."*

8 On page 12, the Board says:

9 *"To ensure that the benefits from greater efficiency are appropriately shared throughout*
10 *the rate-setting term between the distributor/shareholder and the distributor's customers,*
11 *the expected benefits will be taken into account in establishing the rate adjustment*
12 *mechanisms applicable to each rate method through the X factor."*

13 To understand the Board's expectations regarding productivity, PowerStream has considered
14 the Board's methodology for incorporating productivity into the Incentive Regulation rate setting
15 framework.

16 For the 4th Generation IR and Annual IR Index, there is an implicit productivity factor built into
17 the price cap IR formula of inflation less productivity, "IPI-X". The RRFE explains the
18 productivity part of the formula as follows:

19 *The productivity component of the X-factor is intended to be the external benchmark*
20 *which all distributors are expected to achieve. It should be derived from objective, data-*
21 *based analysis that is transparent and replicable. Productivity factors are typically*
22 *measured using estimates of the long-run trend in TFP growth for the regulated industry.*

23 *The stretch factor component of the X-factor is intended to reflect the incremental*
24 *productivity gains that distributors are expected to achieve under IR and is a common*
25 *feature of IR plans. These expected productivity gains can vary by distributor and*
26 *depend on the efficiency of a given distributor at the outset of the IR plan. Stretch factors*
27 *are generally lower for distributors that are relatively more efficient.*

28 *The Board has concluded that X-factors for individual distributors under 4th Generation*
29 *IR will continue to consist of an empirically derived industry productivity trend*

(productivity factor) and stretch factor, but will be based on Ontario Total Factor Productivity (TFP) trends.¹

The total productivity and stretch factors referred to by the Board in the above quote are discussed below.

Total Factor Productivity

The long-run Ontario electricity distribution industry total factor productivity (TFP) to be used in rate setting was updated by the Board in the *Report of the Board, Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors*, issued November 21, 2013 (EB-2010-0379) ("Rate Setting Report"). The resulting TFP estimate was based on an econometric analysis prepared for the Board by Pacific Economics Group (PEG) and informed by other expert evidence presented during the stakeholder consultations.

In the Rate Setting Report, the Board set the productivity factor to 0, saying:

*The Board has determined that the appropriate value for the productivity factor (Industry TFP) for Price Cap IR is zero. The Board believes that setting the productivity factor at zero reflects a reasonable balance of the estimated productivity trend in the sector over the last 10 years and a value that is reasonable to project into the future as an on-going external industry benchmark which all distributors should be expected to achieve.*²

Stretch Factor

The stretch factor is assigned based on a benchmarking exercise that compares a distributor's actual total costs (capital and OM&A) to the predicted cost based on an econometric model developed by PEG for the Board. The stretch factor is assigned based on a three year average of the percentage variance of a distributor's actual costs from predicted costs.

If a distributor's actual costs are below the costs predicted by the PEG model, then the distributor is deemed to be relatively more productive and a smaller stretch factor is assigned. If a distributor's actual costs are above the predicted costs then the distributor is deemed to have greater opportunities for productivity gains and a higher stretch factor is assigned.

¹Report of the Board, *Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach* (RRFE) page 17

²Report of the Board, *Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors*, November 21, 2013, page 17 [emphasis per Board report]

The stretch factors for the price cap IR for 2014 and 2015 are set based on 2010 to 2012 and 2011 to 2013 costs respectively. These 3 year averages show PowerStream's actual costs below predicted costs but within 10%. This has resulted in PowerStream being assigned a stretch factor of 0.3% in both years. Benchmarking of PowerStream's costs using Board's benchmarking methodology for setting of stretch factors is discussed further in Exhibit F, Tab 2.

The above review of the Board's price cap IR approach to productivity has been used to help inform PowerStream regarding the Board's expectations for productivity in Custom IR rate setting and to interpret the following statement from the RRFE:

The Board is satisfied that the Custom IR process will be sufficiently rigorous that an assessment of the adequacy of past and future productivity levels can be made and the results of that assessment can be incorporated into the distributor's future rates.³

Based on the Board's approach under price cap IR, PowerStream concludes that the Board's expectation would be for PowerStream to demonstrate annual productivity savings of 0.3% or greater.

Based on PowerStream's 2013 Board Approved Base Revenue Requirement of \$154.2 million, the expected productivity saving for 2014 is approximately \$0.5 million. By 2020 the expected productivity savings grow to \$3.2 million as illustrated in Table 1 directly below.

Table 1: Expected Productivity Savings (\$ Millions)

Productivity Savings Expected	2014	2015	2016	2017	2018	2019	2020	Total
Added in 2014	\$ 0.46	\$ 0.46	\$ 0.46	\$ 0.46	\$ 0.46	\$ 0.46	\$ 0.46	\$ 3.24
Added in 2015		\$ 0.46	\$ 0.46	\$ 0.46	\$ 0.46	\$ 0.46	\$ 0.46	\$ 2.78
Added in 2016			\$ 0.46	\$ 0.46	\$ 0.46	\$ 0.46	\$ 0.46	\$ 2.31
Added in 2017				\$ 0.46	\$ 0.46	\$ 0.46	\$ 0.46	\$ 1.85
Added in 2018					\$ 0.46	\$ 0.46	\$ 0.46	\$ 1.39
Added in 2019						\$ 0.46	\$ 0.46	\$ 0.93
Added in 2020							\$ 0.46	\$ 0.46
Total	\$ 0.46	\$ 0.93	\$ 1.39	\$ 1.85	\$ 2.31	\$ 2.78	\$ 3.24	\$ 12.95
Based on:								
2013 Board Approved Revenue Requirement	\$154.2	X Factor	0.30%	Annual savings requirement			\$ 0.46	

³ RRFE page 74

1

2 Expected vs. Estimated Productivity Savings

3 PowerStream has estimated its Productivity Savings as shown in Table 2 below.

4 **Table 2: Estimated Productivity Savings (\$ Millions)**

	2014	2015	2016	2017	2018	2019	2020	Total
Capital		\$3.8	\$4.1	\$4.5	\$4.7	\$5.0	\$5.0	\$27.1
OM&A	\$2.5	(\$0.8)	(\$1.0)	\$0.3	\$1.2	\$2.0	\$3.0	\$7.1
Total	\$2.5	\$3.0	\$3.1	\$4.8	\$5.9	\$7.0	\$8.0	\$34.2

5 Details in support of Capital and OM&A savings estimates are discussed later in this exhibit.

6 Table 3 directly below compares the Board's expected productivity savings with PowerStream's
7 estimated productivity savings.

8 **Table 3: 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	\$ 3.0	\$ 3.1	\$ 4.8	\$ 5.9	\$ 7.0	\$ 8.0	\$ 34.3
Over (under) achieved	\$ 2.0	\$ 2.1	\$ 1.7	\$ 2.9	\$ 3.6	\$ 4.2	\$ 4.8	\$ 21.3

9 The results indicate that PowerStream's capital and OM&A amounts underpinning its revenue
10 requirement proposals reflect productivity savings in excess of the Board's expectation under
11 the X factor. For each of the years 2014-2020, estimated productivity savings exceed the
12 Board's expected savings. For the entire period, the additional productivity savings over Board
13 expectations total \$21.3 million.

14 Operating Costs – Estimated Productivity Savings

15 PowerStream has used a top-down analysis of its operating costs (OM&A) to estimate the
16 magnitude of productivity savings reflected in its forecasted OM&A costs. This has been done
17 by a comparison of "Status Quo" OM&A to Forecasted OM&A.

18 Status Quo OM&A is an estimate of what OM&A would have been if the productivity initiatives
19 had not been undertaken. When PowerStream staff are preparing their capital and operating

1 budgets, they are basing these on the information and processes expected to be in place for the
2 budget period. They are not preparing two budgets, one based on the "old" way of doing things
3 and another based on the current budgeting assumptions. This is why the Status Quo analysis
4 is necessary.

5 Table 4 below compares the Status Quo OM&A and the Forecasted OM&A underpinning the
6 rate application.

7 **Table 4: Estimated Productivity Savings from OM&A (\$ thousands)**

				Custom IR Term				
"Status Quo" OM&A	2013 BA	2014	2015	2016	2017	2018	2019	2020
Prior year OM&A starting point	\$ 83,319	\$ 83,319	\$ 87,911	\$ 91,795	\$ 95,192	\$ 98,369	\$ 101,081	\$ 104,220
Inflation adjustment-(Table 5)		\$ 1,416	\$ 1,407	\$ 2,019	\$ 2,094	\$ 2,164	\$ 2,224	\$ 2,293
Customer growth adjustment (Table 5)		\$ 182	\$ 172	\$ 178	\$ 187	\$ 191	\$ 197	\$ 205
Net incremental new costs (Table6)		\$ 2,994	\$ 2,305	\$ 1,200	\$ 895	\$ 356	\$ 719	\$ 484
"Status Quo" OM&A	\$ 83,319	\$ 87,911	\$ 91,795	\$ 95,192	\$ 98,369	\$ 101,081	\$ 104,220	\$ 107,202
Historical and Forecasted OM&A in Application	\$ 81,192	\$ 85,454	\$ 92,558	\$ 96,216	\$ 98,112	\$ 99,920	\$ 102,195	\$ 104,193
Variance/Productivity savings		\$2,457	(\$763)	(\$1,024)	\$257	\$1,161	\$2,025	\$3,009

8 "Status Quo" OM&A is determined by taking the most recent 2013 Board Approved OM&A and
9 adjusting for significant cost drivers affecting OM&A costs such as inflationary wage and price
10 increases, growth and other identified cost drivers.

11 Forecasted OM&A costs are those contained in the rate filing and are derived from
12 PowerStream's budgeting process where budgeted costs are forecasted at a detailed level
13 within each business unit.

14 To arrive at the Status Quo costs, the previous Board Approved costs are adjusted for the
15 following: Changes in OM&A costs due to inflation and customer growth (Table 5) and changes
16 in net incremental new costs from changing requirements (Table 6).

17

Table 5: OM&A Adjustment Factors for Inflation and Customer Growth

Adjustment Factors	2014	2015	2016	2017	2018	2019	2020
Inflation	1.70%	1.60%	2.20%	2.20%	2.20%	2.20%	2.20%
Customer Growth adjustment factor:							
Customer Growth (A)	1.91%	1.71%	1.69%	1.72%	1.70%	1.70%	1.72%
Customer Growth effect on OM&A (B)	11.45%	11.45%	11.45%	11.45%	11.45%	11.45%	11.45%
Customer Growth adjustment (A*B)	0.22%	0.20%	0.19%	0.20%	0.19%	0.19%	0.20%

Table 6: Net Incremental New Costs for Changing Requirements (\$ thousands)

Net incremental new costs	2014	2015	Custom IR Term					2016-2020 Total
			2016	2017	2018	2019	2020	
New CIS incremental costs	\$1,349	\$1,310	(\$122)	(\$158)	(\$182)	\$1	\$1	(\$460)
Vegetation management	\$299	\$300	\$614	\$526	\$531	\$536	\$542	\$2,749
Compliance	\$262	\$185	\$132	\$18	\$18	\$18	\$19	\$205
Risk Management	\$330	\$757	\$518	\$485	(\$36)	\$138	(\$103)	\$1,002
Customer expectation	\$754	(\$248)	\$58	\$25	\$25	\$25	\$25	\$158
Total	\$2,994	\$2,305	\$1,200	\$895	\$356	\$719	\$484	\$3,654

The net incremental cost table above ties to the OM&A cost drivers in Appendix 2-JB in Exhibit J tab 1, except it does not include the compensation, growth or asset management cost drivers as these are captured in the inflation and customer growth adjustment factors above.

Capital – Estimated Productivity Savings

PowerStream plans to rehabilitate 140 kilometres of end-of-life or beyond underground cable in 2015 and each year during the 2016 to 2020 IR plan term.

PowerStream has managed to achieve significant savings in the costs of rehabilitating underground cable through the use of cable injection instead of replacement. Injection costs less than 10% of the cost of replacement. Injected cable has an estimated useful life of 20 years or 40% compared to 50 years for replacement cable. Taking into account the shorter life, this represents a cost of 40% for injected cable versus replacement cable.

1 Based on PowerStream's experience with cable injection, it has been determined that the
2 amount of cable replacement for 2015 to 2020 can be reduced by 22 kilometers per year as this
3 cable can now be injected rather than replaced. This translates into the savings summarized in
4 Table 7 below.

5 **Table 7: Additional Productivity Savings from Capital (\$ Millions)**

	2015	2016	2017	2018	2019	2020
Replacement cost savings	\$ 10.3	\$ 11.0	\$ 12.0	\$ 12.6	\$ 13.3	\$ 13.5
Injection Cost	\$ 0.9	\$ 0.8	\$ 0.8	\$ 0.8	\$ 0.9	\$ 0.9
Net Savings	\$ 9.4	\$ 10.2	\$ 11.2	\$ 11.7	\$ 12.4	\$ 12.6
Adjust for 40% life	\$ 3.8	\$ 4.1	\$ 4.5	\$ 4.7	\$ 5.0	\$ 5.0

6 These additional productivity gains related to a recent change in the cable injection program are
7 described under the heading Continuous Productivity Improvement, directly below.

8 **Continuous Productivity Improvement**

9 PowerStream applies a broad and holistic approach to improvement. This balanced approach
10 is multidimensional as it realizes that overall improvement can only be sustained by considering
11 and initiating change that yields a mix of benefits. For greatest value, a combination of hard and
12 soft improvements is required. PowerStream's stakeholders who include customers, rate payers
13 and shareholders desire an organization that continues to improve its operations. Below are
14 some of the many initiatives that PowerStream has undertaken to drive productivity
15 improvements.

16 *Customer Information System (CIS)*

17 In its 2013 Cost of Service Application, PowerStream provided information with regard to
18 initiating a new CIS Project. This project is scheduled to go live in the second quarter of 2015.
19 The implementation of the new CIS replaces a 30 year old legacy system which does not meet
20 current and expected customer needs and operational demands. In modernizing the CIS
21 architecture, Customer Service is updating the backbone information system for future
22 requirements.

1 The benefits of modernization are significant including the movement to a cross functional
2 pooling of staff resources versus sequential and silo work assignment and scheduling, the
3 availability of Wikipedia type information for shared use, real time workload balancing,
4 optimization of capacity, the setting and electronic tracking of Key Performance Indicators,
5 enhanced cycle time with the elimination of low value activity and process gaps and improved
6 customer service and experience with an enhanced self-serve option.

7 Critical to realizing the full value of the new CIS is business processes that mirror system
8 functionality. Workload balancing achieved through pooling is anticipated to increase capacity in
9 the Customer Service area. This additional capacity has been incorporated into this rate
10 application, the outcome of which can be demonstrated by the ability of Customer Service to
11 continue to provide more value to more customers without increasing headcount.

12 *Work Force Management (WFM)*

13 Operations and Construction is planning to initiate Work Force Management in 2015 which will
14 be phased over 4 years. The implementation of Work Force Management (WFM)/Mobile
15 Dispatch will improve capacity through automated end to end planning and scheduling which
16 integrates all departments along the project lifecycle (i.e. Engineering → Materials → Metering
17 → Lines). The various benefits which will be realized include:

- 18 • Increased value added work time through decreased travel time and movement between
19 jobs through enhanced route planning
- 20 • Decreased administration time through the simplification of document and information
21 flow
- 22 • Increased schedule adherence by meeting planned job start dates
- 23 • Introduction of additional key metrics to track performance

24 The anticipated increased capacity upon full implementation of WFM has been incorporated into
25 the rate application. The anticipated capacity increase will allow Operations and Construction to
26 advance and/or do more planned and unplanned work, as well as build and maintain an
27 increasing infrastructure with little or no increase in work hours.

28

1 *Cable Injection*

2 PowerStream uses two rehabilitation options to rehabilitate cable segments that are aged and
3 are in deteriorated condition. The options are cable replacement and cable injection.
4 PowerStream's initial cable injection program (pre 2015) excluded the older cable population
5 (31 years and older). In 2014, in an effort to find methods of improving reliability while working
6 within a constrained budget, PowerStream consulted with cable injection service providers and
7 other utilities to obtain broader information. PowerStream also completed additional research by
8 determining the effectiveness of cable injection on older cables and deteriorated cables which
9 previously would have been replacement candidates. This work, combined with the past
10 success of PowerStream's cable injection program, led PowerStream to make the decision to
11 expand the cable age group for cable injection.

12 Beginning in 2015, PowerStream will be injecting cables in the range of 31 to 39 years and thus
13 deferring the high cost of cable replacement, for this new range of cables, by 20 years. This
14 new approach allows PowerStream to rehabilitate more cable segments with the same amount
15 of capital funding. As well, the new approach is more expedient as it makes it possible to
16 address potential reliability problems faster. PowerStream is one of the few utilities in Canada
17 that have fully embraced a new and innovative way to rehabilitate cable segments that are aged
18 and in deteriorated condition. This new program demonstrates PowerStream's success in
19 developing innovative solutions to improve reliability while working within a constrained budget.

20 *In House Cable Testing*

21 PowerStream is one of the few (if not only) electricity utilities in Canada to have its own in-
22 house Cable Testing Program. This program ensures replacement decisions are made in the
23 most cost effective and efficient manner. Operating cost savings occur because it is less costly
24 for PowerStream to do its own in-house testing than it would be to have external contractors do
25 cable testing for PowerStream.

26

1 *Pole Reinforcement Program*

2 PowerStream has a significant Pole Replacement Program due to the quantity of wood poles in
3 service (approx. 40,000). In 2014, PowerStream completed an engineering evaluation and pilot
4 project using pole reinforcement technology to reinforce poles rather than replacing poles.
5 Based on the successful completion of the pilot, PowerStream has embraced pole
6 reinforcement as a new and innovative way to reduce capital costs associated with wood pole
7 replacements. It should be noted that PowerStream is one of the first Local Distribution
8 Companies in Ontario to embrace Pole Reinforcement Technology.

9 *PI Enterprise software to manage real-time data and events*

10 PI Enterprise software, introduced to PowerStream, provides notification capability for certain
11 Transformer conditions as well as Circuit Breaker status. This new software allowed
12 PowerStream to migrate from time based maintenance to a more proactive maintenance model
13 based on condition and risk. Notification capability acquired with the implementation included
14 equipment alarms, peak loads, oil temperatures, fire alarms, etc. PowerStream's new proactive
15 based maintenance model, enabled by the new software notification capability, has already
16 resulted in PowerStream successfully avoiding future costs on several occasions, one of which
17 resulted in PowerStream avoiding the two million dollar expenditure to replace a transformer.

18 **Non-Quantifiable Benefits**

19 PowerStream's initiatives often have several purposes, such as improved customer service,
20 better operational information and decision making. These initiatives provide benefits that are of
21 direct or indirect value to customers but may not provide any productivity savings. The
22 operational improvements may result in other savings.

23 An example is the purchase and use of PI Enterprise software to monitor transformer stations
24 and municipal substations. This operational improvement has already provided timely warning
25 to avert a capital replacement cost of \$2 million and avoid customer outages. PowerStream was
26 able to remedy the situation with a repair costing approximately \$100,000.

1 **II-1-Staff-13**

2
3 **Ref: E F/T1/pp.6-7**

4
5 At the above reference the productivity changes arising from PowerStream's plans to rehabilitate
6 140 kilometres of end-of-life or beyond underground cable in 2015 and each year during the 2016
7 to 2020 IR plan term.

- 8
9 a) Please confirm that this is the only capital program that PowerStream is including in
10 determining its estimated productivity savings from capital or if not please explain.
11
12 b) Please state the criteria used by PowerStream to determine that a particular capital
13 program produced productivity savings versus those programs which did not produce such
14 savings.
15

16 **RESPONSE:**

- 17 a) PowerStream confirms that cable injection is the only program that was included in the
18 calculation of productivity savings from capital. The pole reinforcement program was
19 discussed but the savings from this program were not calculated nor included in the
20 estimated productivity savings.
21
22 b) PowerStream is continually working to improve its processes to be more effective and
23 efficient as evidenced by its Organization Effectiveness department, Journey to Excellence
and Innovation initiatives.

24 PowerStream has not attempted to measure the productivity of all capital programs. This is
25 a very difficult task as no two capital projects are the same – there are always many
26 different factors. For example pole line replacement projects will have differing pole
27 heights, number of circuits and differences in terrain and other work conditions that
28 significantly impact the cost of the project and any resulting metric such as cost per pole or
29 cost per kilometre of line.

30 PowerStream selected the cable injection program to demonstrate the work PowerStream
31 has been doing in productivity improvements as the program has significant costs with
32 substantial productivity savings. By the use of this innovative program PowerStream has
33 managed to extend the life of underground cables at a fraction of the cost of replacement.
34 Other capital projects may also contain productivity savings but PowerStream has not
35 attempted to measure these.

OPERATIONS, MAINTENANCE AND ADMINISTRATION ("OM&A") EXPENSES

PowerStream has a detailed planning process for OM&A expenses which involves collaboration among all business units in the organization. The budget planning starts with a top down approach where budget targets are reviewed by the Budget Working Group and reviewed and approved by the Executive Management Committee and Board of Directors. A bottom up approach follows whereby the Corporate Finance team works with the business units to build a detailed OM&A budget for each year of the Custom IR term which includes future operational and business needs over the five year period. Please refer to Exhibit C for more information on Budget Assumptions.

PowerStream has attached summaries of OM&A expenses using the following OEB Chapter 2 Appendices, in the supplemental electronic information.

J-1-1: Appendix 2-JA, Summary of Recoverable OM&A Expenses

J-1-2: Appendix 2-JB, Recoverable OM&A Cost Driver Table

J-1-3: Appendix 2-JC, OM&A Programs Table

J-1-4: Appendix 2-L, Recoverable OM&A Cost per Customer and per FTE

J-1-5: Appendix 2-M, Regulatory Cost Schedule

J-1-6: Appendix 2-N, Shared Services

There have been no changes to the pricing methodology for the shared service agreements since PowerStream's 2013 Cost of Service filing.

Net incremental new costs from changing requirements

PowerStream has presented the cost drivers for net incremental new costs resulting from changing requirements in Table 1, below. This table highlights extraordinary events which have occurred that have increased OM&A expenses.

Delivered: February 24 2015

Table 1: Net Incremental New Costs for Changing Requirements and Extraordinary items

Total OM&A (\$000's)	2013 Actual	2014 Actual	2015 Bridge Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year	2020 Test Year	2013 Actuals to 2015 Bridge Year	2016 to 2020 Test Years
Opening Balance *	82,941	80,849	85,454	92,558	96,216	98,112	99,920	102,195	82,941	92,558
Compensation	(204)	538	2,508	1,136	267	745	787	901	2,842	3,837
Asset Management	(922)	1,949	579	472	578	364	416	369	1,605	2,199
Risk Management	(109)	330	757	518	485	(36)	138	(103)	978	1,002
Growth	(73)	59	144	369	140	232	87	106	131	935
Customer Expectation	95	754	(248)	58	25	25	25	25	602	158
Compliance	(361)	262	185	132	18	18	18	19	86	205
Other	(2,390)	929	1,464	482	15	110	265	139	4	1,011
Closing Balance- Business as usual	78,977	85,670	90,844	95,724	97,745	99,571	101,657	103,650	89,188	101,904
Year over year (\$)		6,693	5,173	4,881	2,021	1,826	2,086	1,993	Note 1	Note 2
Year over year (%)		8.5%	6.0%	5.4%	2.1%	1.9%	2.1%	2.0%		
Extra-ordinary items										
Vegetation Management	1,872	(1,565)	403	614	526	531	536	542	710	2,749
CIS Implementation	-	1,349	1,310	(122)	(158)	(182)	1	1	2,659	(460)
Closing Balance- Business with Extra- ordinary items	80,849	85,454	92,558	96,216	98,112	99,920	102,195	104,193	92,558	104,193
Year over year (\$)		4,605	7,104	3,659	1,896	1,808	2,275	1,999		
Year over year (%)		5.7%	8.3%	4.0%	2.0%	1.8%	2.3%	2.0%		

* The opening balance for the 2013 actual is 2013 OEB approved amount of \$80,000,000 plus the inclusion of the joint services expenses of \$2,941,000 that were not included in the 2013 OEB approved OM&A. In 2013 the net of joint services revenues and expenses were reported as Revenue Offsets. In this application the expenses are reported in OM&A and the full revenue in Revenue Offsets. Accordingly the 2013 Approved revenue offsets have also increased by \$2,941,000.

Note 1: The change from 2013 to 2015 is 2% per year.

Note 2: The change from 2016 to 2020 is 1.6% per year.

Background information on the extraordinary incremental costs is set out below:

1 New Customer Information System ("CIS")

2 A new CIS was implemented in 2015 by CGI Inc. CGI was also chosen to provide the maintenance
3 on the new CIS based on the results of due diligence process including a pricing proposal;
4 discussions with other out of province utilities who had used CGI for maintenance; and discussions
5 with other LDCs.

6 There are \$2,000,000 in incremental costs related to the maintenance agreement to support the new
7 CIS and \$1,392,000 in training costs. The maintenance costs are initially higher than the cost to
8 support and maintain the former T&W Billing System however there is some reduction in cost over
9 the term of the Custom IR plan.

10 Vegetation Management

11 In December 2013 there was a major ice storm that damaged a number of trees and increased
12 OM&A expenses in 2013 by \$1,809,000. As a result of the ice storm PowerStream changed its
13 vegetation management policies for rear yards and heavily treed front yards from a 5 year tree
14 trimming cycle to a 2 year cycle. Further, rural areas now have a 4 year tree trimming cycle where
15 previously they were not part of the tree trimming cycle.

16 In addition to the change in policy after the ice storm, PowerStream changed its annual tree trimming
17 cycle from 5 years to 3 years for urban areas in December 2012.

18 With the implementation of these changes, incremental costs for vegetation management have
19 correspondingly been higher.

20 Below is some background information on other incremental costs:

21

1 Compliance

2 The evolution in a number of regulatory requirements, including the implementation of the smart grid
3 that PowerStream is required to implement, has resulted in higher incremental costs, primarily prior
4 to the term of the Custom IR plan.

5 Risk Management

6 Risk Management activities impact work management (pre-hiring/apprentices, new headcount) and
7 associated costs. Trending information cannot be provided for such incremental costs as it can be in
8 other cost categories, because year to year changes are program-specific.

9 Customer Expectations

10 The increases relate to the expanded focus on customer expectations following the Board's RRFE
11 Report, including surveys and activities associated with the development of the Distribution System
12 Plan. There were significant incremental costs in 2014 and 2015 but the incremental costs post
13 2015 are in fact negative.

14 Compensation

15 The increases in compensation relate to cost of living wage adjustments for union and management
16 and merit and step increases. Cost of living adjustment is based on the Collective Bargaining
17 Agreement. The cost of living adjustment under the Collective Agreement was 2.5% for 2013 and
18 2.75% for 2014-2015.

19 Growth

20 By the end of 2020, PowerStream expects its total customer base to have grown to 394,508, an
21 increase of 14% from 2013, resulting in higher incremental costs.

22 Asset Management

23 Asset Management activities impact maintenance programs (Inspections, patrol testing, switchgear
24 and insulator cleaning, accidents and vandalism and poles and hardware). Trending information
25 cannot be provided for such incremental costs as it can be in other cost categories, because year to
26 year changes are program-specific.

II-1-Staff-12

Ref: E F/T1/p.6/Table 6 and E J/T1/p.2/Table 1

The first of the above references, Table 6, provides the derivation of the net incremental new costs category shown in Table 4. These costs are from the second reference Table 1 which is entitled "Net Incremental New Costs for Changing Requirements and Extraordinary Items," specifically the "Compliance," "Risk Management," and "Customer Expectation" categories from the "Business as usual" section of Table 1 and the "Vegetation Management" and "CIS Implementation" categories from the "Extra-ordinary items" section of Table 1.

- a) Please state why "Vegetation Management" and "CIS Implementation" would be considered as "Extra-ordinary items" while the remaining categories would be "Business as usual." Please discuss in the context of vegetation management and CIS costs being ongoing business as usual costs for most distributors.
- b) Please state what the "Other" category in Table 1 consists of.
- c) Please state for Table 1 whether all work force-related costs were separated out into the "Compensation" category from the other categories in the table such as "Vegetation Management" and "CIS Implementation" and how this was done, or if not please state which workforce-related costs remain in the other categories.

RESPONSE:

- a) Vegetation management and CIS implementation are extra-ordinary because of their significant incremental impact on OM&A. The Vegetation management program in particular new and came about as a result of the 2013 ice storm, as described in detail in the answer to Section III, Tab 1, Schedule 1, J-CCC-61.
- b) "Other" captures activities or costs that are not easily attributable to individual work programs or work areas. Included in this category are incremental contract consulting, training, legal fees and miscellaneous expenses.
- c) Included in the compensation driver is merit and step increases related to all business units. New hires and overtime are included in the other cost drivers in which they relate.

1 MR. DAVIES: Thank you. The next question would
2 relate to interrogatory II 1 Staff 12, and I think we
3 discussed this a bit before, but in this interrogatory in
4 Part A you were asked to state why vegetation management
5 and CIS implementation would be considered as extraordinary
6 items, while the remaining categories would be business as
7 usual.

8 And your response was that these two items are
9 extraordinary because of their significant incremental
10 impact on OM&A.

11 I am just wondering -- could you describe in a bit
12 more detail how you would determine a significant
13 incremental impact?

14 MS. CLARKE: Well, the two items that we listed, which
15 is the CIS and the vegetation management, had a -- was a
16 significant driver in our OM&A costs.

17 So because it was a significant driver, we identified
18 those as extraordinary. There is no real threshold around
19 the dollar value in relation to determining extraordinary.
20 It's just they were the largest cost driving the increase
21 in OM&A.

22 MR. DAVIES: So it's more of a qualitative judgment
23 call than a quantitative?

24 MS. CLARKE: Correct.

25 MR. DAVIES: Thank you. The next question also
26 relates to this interrogatory, but part C. And part C was
27 discussing whether all -- the issue of where all workforce
28 related costs were separated out into the compensation