1 2 3	Q.	Re: Productivity initiatives throughout filing (e.g., reduced operating costs due to adoption of AMR identified at page 2-9, lines 9-10)
4 5		Please prepare a list of all initiatives and/or fortuitous developments identified in the filing that result in cost savings and show the values of savings identified in each
6		year from 2011 through 2017.
7		year from 2011 through 2017.
8	A.	Please refer to the responses to Requests for Information PUB-NP-009, PUB-NP-011, PUB-NP-012 and PUB-NP-030 for greater detail concerning Newfoundland Power's
10 11		operating efficiency over the period 2013 through 2017 and how that efficiency is consistent with the Company's fulfillment of its obligation to provide least cost reliable
12		service to its customers.
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14 15		The benefits of this operating efficiency and service improvement will be passed on to customers in the 2016/2017 test period.
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17 18		For the period prior to 2013, please refer to the record of Newfoundland Power's 2013/2014 General Rate Application including the following responses to Requests for
19		Information in that proceeding:
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21		Response to Request for Information PUB-NP-001 which is Attachment A
22		to this Request for Information.
24		Response to Request for Information CA-NP-128 which is Attachment B
21 22 23 24 25		to this Request for Information.
26		1
27		Response to Request for Information CA-NP-136 which is Attachment C
28		to this Request for Information.
29		
30		Response to Request for Information CA-NP-419 which is Attachment D
31		to this Request for Information.

2013/2014 General Rate Application Response to Request for Information PUB-NP-001 Q. Pg. 1-2, lines 10-11 - Please detail the operational efficiencies implemented in 2010 to 2012 that have reduced costs and improved productivity, indicating the cost savings and efficiencies with each initiative.

# A. A. Operational Efficiency at Newfoundland Power

Newfoundland Power identifies and pursues initiatives which permit the Company to achieve sustainable long-term operating efficiencies. This is consistent with stable customer rates.

Newfoundland Power's approach to cost management is to employ prudent management and sound engineering judgment to ensure that long-term cost control is reasonably balanced with long-term quality of service. In the Company's annual capital budget applications, well established economic analysis are used to justify all expenditures aimed at improving operational efficiency.

Newfoundland Power's cost management involves a large number of initiatives of varying size, which combine to reduce *overall* costs. Accordingly, the Company focuses on overall operating costs. The Company does not routinely do ex post facto assessments of every initiative it undertakes to measure success. Instead, the Company looks to its overall cost performance as a primary measure of operational efficiency.<sup>1</sup>

This focus has achieved substantial improvements in operating efficiency over the past 2 decades.<sup>2</sup>

### B. 2010 to 2012

The following initiatives improved Newfoundland Power's operational efficiency during the 2010 through 2012 period:

 1. Newfoundland Power has continued to increase the use of Automated Meter Reading ("AMR") technology. The number of serviced premises equipped with AMR capabilities increased by 50%, from approximately 30,000 in 2010 to approximately 45,000 by the end of 2011. From 2010 through 2011, the Company connected 10,209 new customers. The meter reading requirements of these additional customers would once have required the establishment of approximately 30 new meter reading routes. However, as a result of using route optimization measures and AMR technology for new customer connections, no additional meter reading routes were added due to customer growth in this period.

This focus on overall operating efficiency was, in part, a practical result of workforce reductions through the 12 years to 2005 which effectively reduced the workforce by over one third. The Company simply had fewer human resources and chose to devote those human resources primarily to engineered and customer operations.

<sup>&</sup>lt;sup>2</sup> Please refer to the Response to Request for Information PUB-NP-028.

Automated Meter Reading ("AMR") technology enables a meter to be read remotely via a handheld receiver, eliminating the need for a meter reader to approach the meter for a visual read.

Meanwhile, AMR technology also improves safety for the Company's meter readers.<sup>4</sup>

- 2. Newfoundland Power continues to promote participation in electronic billing, or *eBills*. The number of customers participating in *eBills* increased by 62%, from 28,056 at the beginning of 2010 to 45,389 at the end of 2011. Increasing customer participation in *eBills* reduces the cost of billing by approximately \$8 per customer per year.<sup>5</sup>
- 3. The Company has increased the electronic self-service options available to customers over this period by enhancing its website. In 2011, the number of website contacts exceeded customer service telephone contacts for the first time. Website improvements during the period that reduce costs include inquiry features that eliminate simple telephone inquiries, including a feature that allows landlords to check whether or not there is an active electrical service to rental properties they own, as well as features that automate certain customer service functions, including a feature that enables customers to set up payment arrangements for account arrears within defined criteria and a feature that allows customers to set themselves up on the Optional Seasonal Rate.
- 4. In 2011, the Company implemented work dispatch improvements. Scheduling software known as "Click" was deployed in the St. John's area to improve the way service crew work is organized and scheduled. This software assigns work based on location and skill set, optimizing field work and reducing the time associated with manual processes.
- 5. The SCADA system provides two essential means which Newfoundland Power employs to improve operating efficiency. First, real time SCADA data on electricity system operations can be used to make better, faster and more cost-effective decisions. Second, the capability to remotely operate the electricity system can, in some instances, eliminate the need to incur certain costs.<sup>7</sup>

Since 2001, the Company has used SCADA technology to automate remote monitoring and control of distribution feeders. Approximately 30 additional distribution feeders have been automated since 2010, a majority of which are in rural substations.

Details on the Company's AMR strategy can be found in response to Request for Information CA-NP-141.

For further information on *eBills*, please refer to responses to Requests for Information CA-NP-462 and CA-NP-464.

See *Volume 1, Application and Company Evidence, Section 2.2.1 Customer Operations*, page 2-6, Table 2-2. For example, when undertaking emergency repairs to a broken distribution pole after hours, the SCADA

operator can control the feeder remotely to provide the necessary worker protection guarantees. This reduces the number of technical support personnel required to complete the work.

Newfoundland Power does not track the individual cost savings of each operating efficiency initiative it implements. Accordingly, the cost savings and efficiencies associated with *each* of these initiatives are not available.

Cost savings and efficiencies achieved by the Company from 2010 through 2012 on an overall basis are available. At page 2-9 of the Company's evidence, it is indicated that Newfoundland Power's inflation adjusted operating cost per customer (excluding conservation) decreased by approximately 3.5% in the 2 years from 2010 to 2012.

The achievement of these cost efficiencies has not resulted in any reduction in service quality to customers. At page 2-5 of the Company's evidence it is indicated that electrical system reliability through the period 2007 to 2011 (excluding severe weather events) has marginally improved.<sup>9</sup>

Newfoundland Power achieved reasonable and sustainable operating efficiencies on an overall basis over the period 2010 through 2012.

### C. 2013 and 2014

The Company evidence filed in support of this Application indicates that Newfoundland Power intends to achieve further operating efficiencies in 2013 and 2014.

By year end 2014, Newfoundland Power expects to serve a total of 257,267 customers, an increase of 2.6% over the number of customers served in 2012. The Company's labour costs for 2013 and 2014 are 1% less than labour inflation in each year. So, by 2014, Newfoundland Power expects to serve 2.6% more customers with labour costs that are, in real terms, 2% less than 2012 costs.

The Company's labour cost efficiency assumptions represent approximately \$330,000 in 2013 and \$340,000 in 2014. These reductions have been included in the revenue requirements proposed in this Application. This means that customers served under the rates approved by the Board in this Application will receive the benefit of the efficiency assumptions, whether the Company succeeds in achieving these efficiencies or not.

This is consistent with Newfoundland Power's inflation adjusted operating labour cost per customer (excluding conservation) from 2008 through 2012, which decreased by approximately 7.7%, or approximately 1.9% annually. (See response to Request for Information CA-NP-419.)

Other measures broadly indicative of Company productivity including sales per FTE, customers per FTE, revenue per FTE, distribution kilometers per FTE, etc. can be found in response to Request for Information CA-NP-126.

This 1% per year efficiency assumption is consistent with that forecast by the Company at its 2010 general rate application.

2013/2014 General Rate Application Response to Request for Information CA-NP-128 Q. NP is proposing a 6% average rate increase effective March 1, 2013 (Application page 1-5, lines 9-10) and a significant increase in return on equity, from the current 8.8% approved only a few months ago by the Board for 2012 (Application page 1-5, line 23 and page 1-6, line 1), to 10.4% in this Application (September 14, 2012 letter to Board Re: 2013/2014 General Rate Application, page 3). In return for this sizeable increase in rates and return on equity, is NP proposing to:

- a. Take on increased risk to relieve the burden of risk currently taken on by customers?
- b. Commit to specific improvements in efficiency and cost reduction?
- c. Commit to specific improvements in customer service and quality of supply?

If proposing any of (a) through (c), please identify and provide details of the proposal and the source in the Application.

#### A. A. General

The 6% average rate increase in customer rates proposed in this Application results from a variety of factors, not just an increased ratemaking return on equity as this question implies. For example, approximately 2.6% of the increase in customer rates proposed in this application is attributable to increased supply costs from Newfoundland and Labrador Hydro.

The return on equity proposed by Newfoundland Power in this Application broadly reflects the return on equity proposed by the Company in its 2012 cost of capital application which was filed with the Board less than 6 months before this Application. At the time of the settlement of the Company's 2012 cost of capital in the 2<sup>nd</sup> quarter of 2012, it was known that the issue of ratemaking return on equity for 2013 would be revisited in the September application which the Board directed the Company to file.

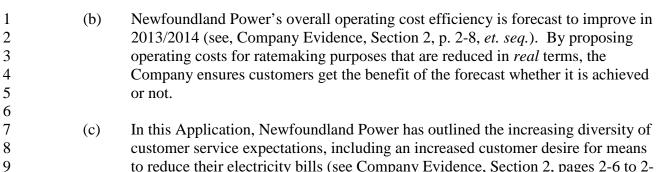
Newfoundland Power's proposed 2013/2014 return on equity of 10.4% in its September 2012 application is consistent with the 2012 return on equity proposed in its March 2012 application.

## **B.** The Specific Questions Posed

(a) In this Application, Newfoundland Power seeks a ratemaking return on equity for 2013/2014 of 10.4%. This is based upon the Company's longstanding business, regulatory and financial risks. (See, generally, Expert Evidence of Ms. Kathleen McShane and Dr. James Vander Weide). The Company is not proposing to recalibrate those risks in this Application. If this were to be done, Newfoundland Power's ratemaking return on equity would have to be recalibrated accordingly.

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customer service expectations, including an increased customer desire for means to reduce their electricity bills (see Company Evidence, Section 2, pages 2-6 to 2-8 and pages 2-12 et. seq.). The Company (i) continues to manage this diversity effectively and at a lower real cost per customer, and (ii) has proposed an expansion in customer energy conservation programming. These items improve the service received by Newfoundland Power's customers.

2013/2014 General Rate Application Response to Request for Information CA-NP-136

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- Please provide five cost saving programs that NP intends to implement in the next Q. three years and provide an estimate of the expected cost savings and benefit to cost ratios of each program.
- Newfoundland Power's cost management involves a large number of initiatives of A. varying size, combining to reduce overall costs. Newfoundland Power's approach to cost management is to employ prudent management and sound engineering judgment to ensure that long-term cost control is reasonably balanced with the long-term quality of service it is required to provide to its customers.

Part of Newfoundland Power's ability to effectively manage operating costs is related to the condition of its electrical assets. Newfoundland Power's approach to capital investment balances the maximization of asset lives with the proactive replacement of deteriorated or inefficient plant. This, in turn, enables Newfoundland Power to deliver tangible benefits for customers in terms of lower cost and improved service.

Five initiatives which involve cost savings that Newfoundland Power intends to implement in the next three years include:

- 1. The Pitmans Pond Hydro Plant Refurbishment project included in the 2013 Capital Budget Application ("2013 CBA") will replace the 53 year old turbine runner with a new energy efficient model. The annual increased production using the new runner is estimated at 0.7 GWh at a levelized cost of 6.9 ¢/kWh. The annual cost saving associated with replacing this amount of production at Newfoundland and Labrador Hydro's Holyrood Generating Station ("Holyrood") is \$132,000. Comparing the levelized cost of production associated with the capital cost of the project to the current cost of production at the Holyrood thermal generating station, the benefit to cost ratio for this project is 2.7.<sup>2</sup>
- 2. The New Chelsea Runner Replacement and Rewind project included in the 2013 CBA will replace the 56 year old turbine runner with a new energy efficient model. The annual increased production using the new runner is estimated at 1.0 GWh at a levelized cost of 1.4 ¢/kWh. The annual cost saving associated with replacing this amount of production at Holyrood is \$189,000.3 Comparing the levelized cost of production associated with the capital cost of the project to the current cost of production at Holyrood, the benefit to cost ratio for this project is 13.7.4

See footnote 2.

Annual cost savings are presented on a net present value basis. The savings are based on reduced production at Holyrood, assuming the current forecast oil price of \$118.80 will apply over the planning period used in evaluating the projects.

The benefit to cost ratio is calculated by dividing the current cost of producing electricity at Holyrood by the levelized cost of energy for the project. The current cost of production for Holyrood is estimated at 18.9¢/kWh. This is based upon a conversion efficiency of 630 kWh/barrel and oil price of \$118.80/barrel for 2012 as per Newfoundland and Labrador Hydro letter regarding the Rate Stabilization Plan - Fuel Price Projection dated March 31, 2012.

See footnote 1.

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- 3. The 2013 CBA, 2013 Capital Plan, Appendix A, identifies a 2014 project to increase production at Rocky Pond and Tors Cove plants through improvements at La Manche Canal. The annual increased production estimated from these improvements is 2.88 GWh at a levelized cost of 3.8 ¢/kWh. The annual cost saving associated with replacing this amount of production at Holyrood is \$544,000. Comparing the levelized cost of production associated with the capital cost of the project to the current cost of production at Holyrood, the benefit to cost ratio for this project is 5.0.
  - 4. The Applications Enhancements project included in the 2013 CBA includes two items under the Customer Service System Enhancements project that are characterized as cost savings programs. One of these is the introduction of customer call-back technology, which will provide an expected cost saving of \$182,000 over the 7 year life of the technology and a benefit to cost ratio of 1.53.
  - 5. The Applications Enhancements project included in the 2013 CBA includes a second item under the Customer Service System Enhancements project that can be characterized as a cost savings program. The enhancement planned for group billing will provide an expected cost saving of \$110,000 over the 5 year life of the enhancement and a benefit to cost ratio of 1.32.

See footnote 1.

<sup>&</sup>lt;sup>6</sup> See footnote 2.

2013/2014 General Rate Application Response to Request for Information CA-NP-419

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- Q. In the years 2008 to 2012 (f), which level of productivity improvements were forecast and what was achieved, as applicable.
- A. Newfoundland Power has historically provided for forecast operating labour productivity improvements in test year costs. No specific plan exists for how the operating labour productivity will be achieved. In the event the labour productivity is not achieved, customers are *not* disadvantaged, as the forecast labour productivity improvement is included in customer rates.

Newfoundland Power does not specifically track forecast versus achieved productivity improvements. A number of factors can influence costs in any given year. For example, the impact of storms tends not only to increase overall costs, but also to alter the mix of costs as operating priorities change. Operating costs are also influenced by the level of customer activity and growth in any particular year.

As a means of evaluating overall labour cost performance, the operating labour costs per customer provides for a broad indication of labour productivity.

Table 1 shows Newfoundland Power's operating labour cost per customer from 2008 through 2012F.

Table 1
Operating Labour Cost per Customer
2008 to 2012F
(\$)

	2008	2009	2010	2011	2012F
Labour Cost per Customer (excluding Conservation)		119	124	129	128
Inflation Adjusted (excluding Conservation) (\$2008) <sup>2</sup>	117	115	114	114	108

Over the period 2008 through 2012F, the inflation-adjusted labour cost per customer is forecast to decrease by approximately 7.7%, or 1.9% annually. Newfoundland Power considers this level of productivity improvement to be *reasonable*.

Operating labour cost per customer is calculated by dividing total operating labour costs (excluding conservation labour costs) by the number of customer accounts at year end. In 2011, the Company adopted the accrual method for OPEBs (see Order No P.U.31 (2010)). For consistency of presentation, cash OPEBs costs of approximately \$549,000; \$610,000; and \$793,000 are excluded from 2008, 2009 and 2010, respectively, in Table 1.

Labour costs are adjusted for inflation using Newfoundland Power's composite labour rate increases of 4.07% in 2009; 4.267% in 2010; 4.95% in 2011; and 3.71% in 2012.