

1 **Q. Page 1-4, lines 16-22: Please provide the details of all initiatives and the associated**
2 **cost savings of each initiative Newfoundland Power has implemented that produced**
3 **operating efficiencies in the period 2013-2015.**
4

5 **A. A. Operational Efficiency at Newfoundland Power**
6

7 Newfoundland Power achieves sustainable levels of long-term operating efficiency
8 through a number of initiatives. The Company's operating efficiency has the combined
9 effect of reducing costs and minimizing the rates charged to customers without
10 compromising the quality of service delivered to customers.
11

12 Newfoundland Power's approach to cost management is to employ prudent management
13 and sound engineering judgement to ensure that long-term cost control is reasonably
14 balanced with long-term quality of service. In the Company's annual capital budget
15 applications, well established economic analyses are used to justify expenditures aimed at
16 improving operational efficiency.
17

18 The Company's cost management involves a large number of initiatives of varying size,
19 which combine to reduce *overall* costs. Accordingly, in assessing operating efficiency,
20 the Company tends to focus on overall operating costs.
21

22 The Company does not maintain an exhaustive inventory of all initiatives which have the
23 tendency to improve operating efficiency. Nor does the Company perform *ex post facto*
24 assessments of every initiative it undertakes to measure success. Instead, the Company
25 looks to its overall cost performance as a primary measure of operational efficiency.
26

27 **B. 2013 to 2015 Operational Efficiency Initiatives**
28

29 ***General***

30 Newfoundland Power undertook a number of significant initiatives during the 2013-2015
31 period to improve operating efficiencies. Six of the most prominent of these are
32 described below.
33

34 The benefits of each of these initiatives in terms of cost efficiency or service
35 improvement will be passed on to customers in the 2016/2017 test period.
36

37 ***Automated Meter Reading***

38 AMR technology enables Newfoundland Power to read meters remotely using a digital
39 receiver without having to visit a customer premise to perform a visual read. Operating
40 cost savings from purchasing AMR meters for all meter replacements are achieved
41 through increased meter reading productivity. As the penetration of AMR meters
42 increases, so does the total number of meters than can be read per meter reading route,
43 therefore reducing the total number of meter reading routes and labour required.

1 For the years 2013 to 2014, the Company has reduced the total number of meter reading
2 routes by approximately 20% through the strategy of using route optimization and AMR
3 technology. Over the same period of time, the number of metered services has increased
4 by approximately 3%. In 2015, the Company conducted a review that has determined
5 that accelerating the replacement of electrical demand and energy meters provides a
6 reduction in operating costs.¹ This initiative is expected to reduce operating costs by
7 approximately \$380,000 in 2016 and \$650,000 in 2017.²

8
9 ***Electronic Billing***

10 Newfoundland Power continues to encourage customers to subscribe to the Company’s
11 electronic billing service, *eBills*, to reduce costs associated with producing and mailing
12 customer bills. Electronic billing of customers costs Newfoundland Power
13 approximately \$9.70/year per customer less than paper billing.³ From 2011 to 2014, the
14 number of Newfoundland Power customers that receive their electricity bills
15 electronically has increased by almost 60% to approximately 72,000⁴. By the end of
16 2015, the Company currently expects approximately 90,000 customers to be subscribed
17 to *eBills*.

18
19 ***Customer Service Technology***

20 Customers can contact Newfoundland Power through a variety of methods. This
21 typically consists of either a customer call to a customer service representative (“CSR”)
22 or a customer contact through an automated digital means. Customer contacts through
23 digital means tend to be much less expensive than those that cannot be appropriately
24 serviced through an automated process.⁵ As a result, Newfoundland Power has continued
25 to develop and improve upon ways it can adequately address customer inquiries through
26 technology initiatives.

27
28 Since 2013, Newfoundland Power commenced a number of initiatives to improve its
29 automated customer service technology. This has had the effect of reducing the customer
30 requirement to speak with CSRs. These initiatives include increasing the capacity of web
31 servers to allow for more simultaneous customer website visits during periods of high
32 call volume, launching a mobile-friendly website, enhancing customer outage messages
33 on the Integrated Voice Response system, and introducing a customer outage map on the
34 Company’s website. Newfoundland Power has also added new features to the

¹ This review was filed with the Board in the Company’s *2016 Capital Budget Application, Section 4.4: 2016 Metering Strategy*.

² See *Volume 1, Company Evidence, Section 2.2.3: Balancing Costs and Service*, page 2-9, lines 6-10.

³ This amount reflects avoided printing, paper, envelope and postage charges. It does not include embedded labour and equipment costs associated with printing bills as the Company is still required to incur those costs to provide paper bills to its customers.

⁴ Newfoundland Power currently has one of the highest proportions of electronically billed customers in the Canadian utility sector. In a November 2014 Canadian Electricity Association quick poll on eBilling, Newfoundland Power’s proportion of customers who are electronically billed was indicated to be second to BC Hydro.

⁵ For example, the average cost of a customer inquiry handled by a CSR is over \$8. By contrast, the cost of a customer contact handled by the Interactive Voice Response system costs just 20¢.

1 Company's website to help customers address overdue customer payments, receive status
2 updates on customer jobs, and to allow customers to report their own power outages.

3
4 In 2014, Newfoundland Power introduced a new SMS text messaging system that enables
5 the Company to send automated outage notifications to customers shortly after an outage
6 occurs at the customer's premise. This effectively reduces the number of calls received
7 by CSRs when an outage occurs.

8
9 ***Work Scheduling***

10 Over the 2013-2015 period, Newfoundland Power implemented centralized automated
11 scheduling and dispatch for line work throughout its service territory. This, in
12 combination with the implementation of an automatic vehicle location ("AVL") system
13 for line trucks has effectively replaced manual workflow management processes and
14 permitted greater optimization of daily crew schedules. This minimizes costs associated
15 with travel time between jobs and increases the efficiency of the Company's line crews.
16 It also provides customers with better service delivery and response times.⁶

17
18 ***Electrical System Automation***

19 Newfoundland Power continues to automate its electricity system to allow for additional
20 remote control from the Company's Supervisory Control and Data Acquisition system
21 (SCADA).⁷ From 2013 through 2015, Newfoundland Power expects its percentage of
22 automated distribution feeders to increase from 66% to 78%. All the Company's
23 distribution feeders are expected to be automated by 2019. Increased feeder automation
24 enhances the Company's flexibility in electrical operations and reduces the need for
25 Newfoundland Power personnel to respond directly to the equipment location. This
26 reduces labour costs and also improves the Company's response times.⁸

27
28 ***VOIP Telephone System***

29 Newfoundland Power began replacing the telephone systems in its Kenmount Road and
30 Duffy Place facilities with new voice over internet protocol, or VOIP, telephones in the
31 fall of 2015. Further deployment of VOIP telephones in the Company's area offices is
32 expected throughout 2016. Replacing the telephone system is expected to result in a
33 reduction in 3rd party telecommunications service provider costs of approximately
34 \$140,000 per year.⁹

⁶ See *Volume 1, Company Evidence, Section 3.3.3: Operations Outlook*, page 3-19, line 16 to page 3-20, line 10.

⁷ See *Volume 1, Company Evidence, Section 3.4: Emergency Preparedness*, page 3-23, lines 1-7.

⁸ 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.

⁹ See *Volume 1, Company Evidence, Section 3.5.1: Operating Costs*, page 3-28, footnote 43.

1 **C. Other Examples of Efficiency of Productivity Improvements**

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3 Please refer to the response to Request for Information PUB-NP-009 for further examples
4 of operating efficiencies achieved by the Company through effective management of
5 labour costs.