1 2 3	Q.	Page 1-4, line 10: Please describe in detail the practices or initiatives Newfoundland Power relies on for sound cost management. In the response provide cost savings, if any, associated with each practice or initiative in the period 2016-2018F.
4 5	٨	A Cost Managamant at Nawfoundland Powar
5	А.	A. Cost Management at NewToundiand Fower
7		Newfoundland Power's approach to cost management is to ensure that long-term cost
8		control is reasonably balanced with service quality.
9		
10		The Company employs prudent management and sound engineering judgment in its
11		annual capital budget applications. Well established economic analyses and competitive
12		procurement processes are used to ensure capital expenditures are consistent with the
13		least-cost delivery of reliable service.
14		
15		The Company's approach to operating cost management involves a number of initiatives
16		of varying size, which combine to reduce <i>overall</i> costs. A focus on overall cost
17		management minimizes rates charged to customers and is consistent with the Company's
18		statutory obligation to deliver reliable service at least cost.
19		
20		Over the last 20 years, Newfoundland Power has achieved sustained reductions in
21		operating costs per customer. At the same time, the Company's service reliability has
22		improved and customer satisfaction has remained reasonably consistent. Further details
23		of the Company's long-term performance on cost management, service reliability and
24		customer satisfaction are provided in response to Request for Information PUB-NP-003.
25		
26		Newfoundland Power does not maintain an exhaustive inventory of all initiatives that
27		contribute to cost management. However, the Company completed a number of
28		initiatives over the 2016 to 2018 timeframe that contribute to overall cost management.
29		Examples of these initiatives are provided below.
30		
31		B. Cost Management Initiatives: 2016 to 2018
32		
33		Automated Meter Reading ("AMR")
34		Newfoundland Power substantially completed the automation of its meter reading
35		function in 2017. Meter reading is necessary to facilitate accurate customer billing. At
36		year-end 2017, there were approximately 254,000 customer meters in Newfoundland
37		Power's service territory.
38		
39		AMR technology enables the Company to read meters remotely using a digital receiver.
40		This avoids the need to visit each customer's property and allows Newfoundland Power
41		to read meters more efficiently. As a result of the completed deployment of AMR
42		technology, meter reading operating costs were reduced by approximately \$1.8 million,
43		or 65%, between 2012 and 2017. ¹

¹ Automation of the Company's meter reading function is described in *Volume 1, Application, Company Evidence and Exhibits, Section 2.2.2 Balancing Costs and Service,* Page 2-6 to 2-7.

Paperless Billing ("ehills")

1	Paperless Billing ("ebills")
2	Newfoundland Power continued to promote ebills to customers. The number of
3	customers participating in ebills increased by approximately 20% per year from 2013 to
4	2017. The Company has the second highest proportion of electronically billed customers
5	in the Canadian electric utility sector.
6	
7	The annual cost of issuing ebills is approximately \$10.18/customer less than issuing
8	paper bills. This reflects avoided printing, paper, envelope and postage charges. For
9	example, the Company's postage costs are forecast to decrease by approximately 15%, or
10	\$230,000, between 2015 and 2020. This cost reduction is offset to a degree by a 15.5%
11	increase in postal rates over the same period and a forecast increase in the number of
12	customers of 3.6%. ²
13	
14	Customer Communications
15	Customers are increasingly choosing digital channels to communicate with
16	Newfoundland Power. For example, over the period 2013 to 2017, visits to the
17	Company's website more than doubled from approximately 1.0 million to 2.8 million,
18	accounting for approximately 80% of all customer-initiated contacts in 2017.
19	
20	Visits to Newfoundland Power's website include the use of customer self-service options,
21	which allow customers to view their balance, check the status of outages, and obtain
22	other information online without having to call the Company. This achieves cost savings
23	as the cost of a call handled by a Customer Service Representative is over \$8 per call,
24	while the cost of a contact via the website is less than 10¢ per contact. ³
25	
26	The Company relaunched its website in January 2018 to better serve customers. The new
27	website allows customers to more seamlessly use self-service options and other features
28	using mobile devices. This will ensure efficiencies continue to be realized.
29	
30	Electrical System Automation
31	Newfoundland Power has continued to automate its electrical system. From 2015 to
32	2017, the number of automated distribution feeders in the Company's service territory
33	increased from approximately 80% to nearly 90%. ⁴
34	
35	Such automation allows electrical system assets to be controlled remotely through the
36	Company's Supervisory Control and Data Acquisition ("SCADA") system. This
37	mitigates the need to dispatch field crews to energize or de-energize a distribution feeder
38	and allows field crews to focus on restoring service to customers. Such capabilities
39	create efficiencies and enable cost savings, particularly during significant events. For

² Customer participation in ebills and related savings are described in the Company's 2019/2020 General Rate Application, Volume 1, Application, Company Evidence and Exhibits, Section 2.2.2 Balancing Costs and Service, Page 2-7 to 2-8.

³ See Volume 1, Application, Company Evidence and Exhibits, Section 2.2.2 Balancing Costs and Service, pages 2-8 to 2-9.

⁴ The number of automated distribution feeders is provided in response to Request for Information PUB-NP-021.

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example, during the severe wind storm that occurred in March 2017, the operation of 20 downline reclosers avoided over 1 million customer outage minutes without the assistance of field crews.

Outage Management

In 2018, Newfoundland Power commenced the replacement of its Outage Management System ("OMS").⁵ The new OMS will introduce a greater degree of automation within the Company's outage management processes. For example, the system will use information in the SCADA system to automatically assess the likely cause and location of outages throughout the Company's 70,000 km² service territory.

The automatic assessment of outages will provide field staff with better information on the likely cause and location of outages. This will improve the efficiency and cost effectiveness of field assessments. For example, the approximate overtime cost of a 2-person line crew is \$225/hour; the approximate overtime cost of a technologist is \$100/hour. Reducing the time required to locate an outage at night by 2 hours would therefore yield savings of approximately \$650 for a single outage call. Newfoundland Power will assess the level of efficiencies provided by the system once sufficient data becomes available following implementation in 2019.

LED Street Lighting

Newfoundland Power substantially completed its assessment of Light Emitting Diode ("LED") street lighting technology in 2018. LED fixtures are more efficient and reliable than traditional High Pressure Sodium ("HPS") fixtures. LED fixtures also require less maintenance, thereby reducing related operating costs.

In 2018, the Company completed a net present value analysis that showed LED fixtures
are the least-cost option to provide street and area lighting service to customers. A
survey of customers living in close proximity to existing trial installations also showed
LED street lights are the preferred lighting option among customers.⁶

As part of its 2019/2020 General Rate Application, the Company is proposing to introduce a new customer rate for LED fixtures. Customers availing of this rate will experience savings of between 8% and 39% in comparison to existing rates. This reflects the cost savings provided by the more efficient and reliable technology.

⁵ See the Company's 2018 Capital Budget Application, Report 5.5, Outage Management System Replacement and Enhancement.

⁶ See Volume 2, Supporting Materials, Reports, Tab 1, LED Street Lighting.