- Q. (Reference CA-NP-052 and CA-NP-054) It is stated "In Newfoundland Power's view, better reliability performance does not directly translate to higher costs."
 - a) In NP's view, can a customer's reliability be improved without spending money?
 - b) Please identify all programs that NP currently has underway that result in better reliability without incurring costs.
 - c) Please identify the capital programs and costs that NP could delete from the 2024 CBA without impairing reliability performance.
 - d) Please explain why NP's actual expenditures per customer have increased from \$282/customer in 2003 to \$447/customer in 2023 (CA-NP-004), a 59% increase over a period of 20 years, if NP could have provided better reliability performance without higher cost.
 - e) Could NP have reduced its contribution to customer rates by more than 10% on an inflation-adjusted basis over a 10-year period had it developed programs that resulted in better reliability performance and did not translate to higher costs?
 - f) Please identify all programs/projects included in the 2024 CBA that were not in part justified on the basis of reliability improvements.
 - g) It is stated "In 2022, approximately 226,000 customer accounts were not affected by unplanned distribution-related outages." What percentage of customer accounts did not experience a distribution-related outage in 2022? What percentage of customers did not experience a distribution-related outage in 2022? How do these figures compare to the previous 5 years?
- A. a) The service reliability experienced by customers primarily reflects the condition of the electrical system.¹ Newfoundland Power is focused on maintaining current levels of reliability for its customers in a least cost manner. This requires routine capital expenditures to both maintain the condition of the electrical system and to support the Company's operational response. However, a reliable power system can also be more efficient to operate, with fewer unplanned events that require a costlier response, and can result in lower overall cost to customers compared to an unreliable system. The Company's capital planning process is a deliberate effort to balance the cost and reliability of service provided to customers. There is a balance that must be achieved between cost and reliability.²
 - b) See the response to part a).
 - c) All capital projects proposed in the *2024 Capital Budget Application* are required to maintain the reliable operation of the electrical system at the lowest possible cost.

The reliability experienced by customers is also a function of both planned and unplanned outages. Planned outages are typically related to preventative maintenance, while unplanned outages are related to corrective maintenance. Also, outages related to loss of supply and storms are out of Newfoundland Power's control. From year to year, the number of planned and unplanned outages could decrease, resulting in an improved reliability experience for individual customers.

² For further information see Newfoundland Power's *2024 Capital Budget Application, 2024 Capital Budget Overview,* Section 2.3.

All capital projects in the Renewal investment classification associated with the Distribution, Substations and Transmission asset classes, where deteriorated assets at the end of their useful service lives are being replaced with new assets designed to current standards, provide an indirect benefit to reliability performance. Capital projects in the Information Systems and Telecommunications asset classes support technology used throughout the Company's operations. Similarly, the Transportation capital project provides the vehicles and aerial devices needed by field staff to operate and maintain Company assets and to respond to customer requests. Capital projects related to the life extension of the Company's hydro generating facilities ensure these plants are available to provide emergency generation and system support, which ensures customers are supplied through storms and system peak.

The only capital project in Newfoundland Power's 2024 Capital Budget Application that is justified on the basis of reliability improvements is the Distribution Reliability Initiative.

d) The \$282/customer in 2003 to \$447/customer in 2023F cited in the question are nominal amounts in 2003 and 2023 dollars respectively. Adjusting for inflation, the amounts are \$461/customer in 2003 to \$456/customer in 2023F, representing no appreciable increase over a period of 20 years.³

Over the 2003 to 2022 period, reliability improvements were realized. Table 1 includes the reliability improvement in SAIDI and SAIFI.

Table 1 Reliability Improvement 2003 to 2022				
Year	SAIDI	SAIFI		
2003	4.11	3.00		
2022	3.02	2.06		
Improvement	1.09	0.94		

Table 1 demonstrates that, over the period from 2003 to 2022, there was no increase in capital expenditure per customer while there was an improvement in reliability.

e) Newfoundland Power is unable to comment on the hypothetical scenario outlined in this Request for Information. Newfoundland Power notes that, over the last decade, its contribution to average customer rates decreased by 10% on an inflationadjusted basis. Over the same period, the Company's annual capital investments

³ The analysis presented in the response to Request for Information CA-NP-004 is confined to capital cost only.

have averaged over \$100 million per year.⁴ In Newfoundland Power's view, the Company's approach to capital planning tends to minimize overall costs to customers over the longer term.

- f) See the response to part c).
- g) Newfoundland Power has revised the stated reference noted in the question. See the response to Request for Information CA-NP-054 (1st Revision). For the purposes of calculating reliability metrics, the number of customers and the number of customer accounts are the same.

Based on the foregoing, thirty-three percent (33%) of customers did not experience a service interruption greater than one minute in 2022.⁵

Table 2 provides the customer outages for the previous three years.⁶

Table 2 Customer Outages 2020 to 2022				
	2020	2021	2022	
Customers with Outages	200,000	171,000	175,000	
Customers Without Outages ⁷	64,000	90,000	88,000	
Without Outages	24%	34%	33%	

See Newfoundland Power's 2024 Capital Budget Application, 2024 Capital Budget Overview, page 12.

⁵ 88,000 customers / 263,000 customers = 33%.

The data related to customers is extracted from the Responder Outage Management System database. There are only three complete years of data in that database as Responder came online in the Fall of 2019.

These customers may have experienced outages due to loss of supply or major weather events, or momentary interruptions of duration less than one minute. There may be other customers who did not experience a distribution-related outage. Newfoundland Power is unable to separate service outages by Distribution, Substations or Transmission on an individual customer basis.