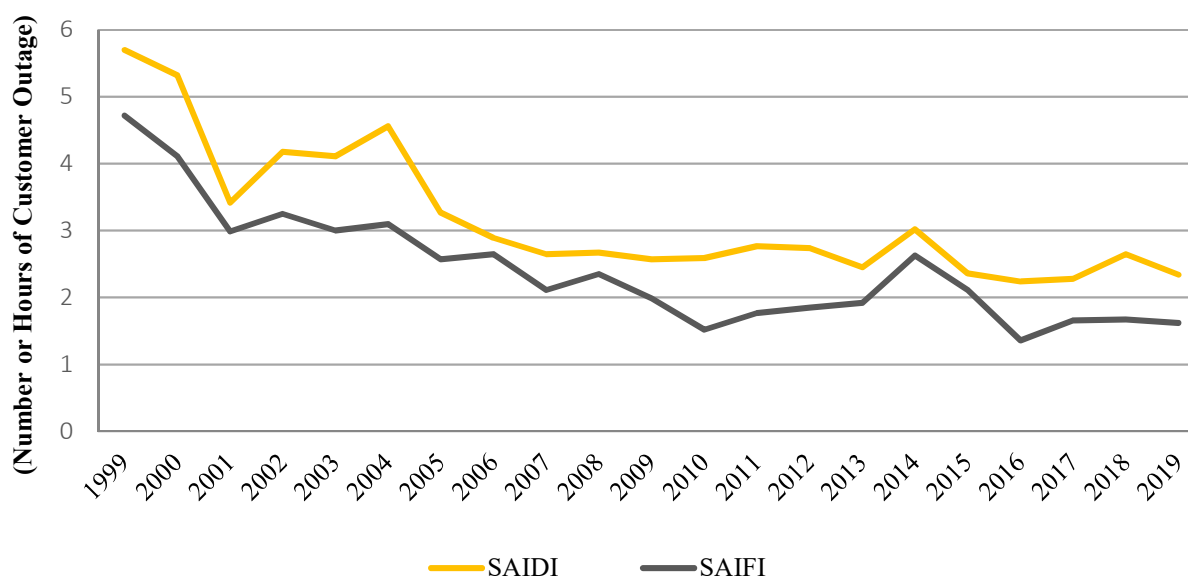


1 **Q. (Reference Application Schedule B, pages 45, 46 and 47 of 98) Please quantify the**  
 2 **cost and reliability benefits customers have received as a result of the Rebuild**  
 3 **Distribution Lines (Pooled) project.**

4  
 5 A. Quantifying the cost and reliability benefits customers have received as a result of the  
 6 *Rebuild Distribution Lines* project since its inception would require identifying outages  
 7 and costs avoided as a result of the work completed. Newfoundland Power is not able to  
 8 complete that analysis. The Company is able to identify both reliability and cost benefits  
 9 that have occurred in the past 20 years, some of which can be attributed to the *Rebuild*  
 10 *Distribution Lines* project.<sup>1</sup>

11  
 12 Figure 1 shows Newfoundland Power's reliability performance for the 20-year period  
 13 from 2000 to 2019.<sup>2</sup>

**Figure 1**  
**Duration and Frequency of Customer Outages**  
**(1999 to 2019)**



14 Marked improvement in reliability performance can be seen since the early 2000s  
 15 following the introduction of structured, inspection-based preventative maintenance  
 16 activities including the *Rebuild Distribution Lines* project.<sup>3</sup>

<sup>1</sup> Newfoundland Power is unable to quantify the reliability benefits to customers resulting from individual capital projects as reliability management practices include a combination of: (i) structured inspection-based preventative maintenance, including the *Rebuild Distribution Lines* project; (ii) ongoing data-based assessment of individual feeder reliability performance; and (iii) effective response to system failure throughout the Company's service territory. This approach to reliability management was described in the *2015 Distribution Reliability Review* filed with Newfoundland Power's *2016 Capital Budget Application*.

<sup>2</sup> See the *2021 Capital Budget Application, Volume 1, 2021 Capital Plan*, page 10, Figure 1.

<sup>3</sup> For a detailed description of the *Rebuild Distribution Lines* project please refer to the response to Request for Information CA-NP-049.

1 Over the 10-year period 1999 to 2009, the reliability experienced by the Company's  
2 customers improved by approximately 55%.<sup>4</sup> Customers' service reliability has remained  
3 reasonably consistent since that time.<sup>5</sup> This improvement in service reliability was  
4 achieved while reducing Newfoundland Power's contribution to customer rates by 20%  
5 on an inflation-adjusted basis.<sup>6</sup>

6  
7 The Company's capital projects, including the *Rebuild Distribution Lines* project, have  
8 contributed to Newfoundland Power's ability to provide reliable service to customers at  
9 least cost.<sup>7</sup>

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<sup>4</sup> See the *2021 Capital Budget Application, Volume 1, 2021 Capital Plan*, page 10.

<sup>5</sup> See the *2021 Capital Budget Application, Volume 1, 2021 Capital Plan*, page 11.

<sup>6</sup> See the *2021 Capital Budget Application, Volume 1, 2021 Capital Plan*, page 15.

<sup>7</sup> Newfoundland Power is a mature electrical utility. Accordingly, the majority of its annual capital expenditures are devoted to the replacement of aged and deteriorated facilities required to provide safe and adequate service to its customers. These expenditures will tend to improve reliability simply because newer plant is inherently more reliable than older plant.