

1 **Q. (Reference Application) The Application states 28 times in Schedule B “This project is**  
 2 **justified on the obligation to provide reliable service to customers at least cost and cannot**  
 3 **be deferred.” In the 2022 Capital Plan (page 2) it is stated “The Electrical Power**  
 4 **Control Act, 1994 contains the provincial power policy. Among other provisions, the**  
 5 **provincial power policy requires that power be delivered to customers at the lowest**  
 6 **possible cost consistent with reliable service.”**

7  
 8 **a) Specifically, what is Newfoundland Power’s mandate?**

9 **b) Provide Newfoundland Power’s definition of “reliable service” and all reliability**  
 10 **criteria used to define “reliable service”.**

11 **c) Is it a requirement under current legislation that Newfoundland Power provide**  
 12 **service commensurate with the value its customers place on the service?**

13  
 14 **A. a) Newfoundland Power is a public utility within the meaning of the *Public Utilities Act***  
 15 **(the “Act”).<sup>1</sup> The Company is the primary distributor of electricity in the province of**  
 16 **Newfoundland and Labrador, serving 87% of all customers in the province.**

17  
 18 Newfoundland Power’s mandate is to provide service to customers in a manner  
 19 consistent with the provisions of the Act and the *Electrical Power Control Act, 1994*  
 20 (the “EPCA”).

21  
 22 The Act requires a public utility to provide service and facilities that are reasonably  
 23 safe and adequate and just and reasonable.<sup>2</sup>

24  
 25 The EPCA establishes the provincial power policy. The provincial power policy  
 26 requires, among other provisions, that all sources and facilities for the production,  
 27 transmission and distribution of power in the province should be managed and  
 28 operated in a manner that would result in:

- 29  
 30 (i) The most efficient production, transmission and distribution of power;  
 31 (ii) Consumers in the province having equitable access to an adequate supply of  
 32 power;  
 33 (iii) Power being delivered to consumers in the province at the lowest possible cost  
 34 consistent with reliable service.<sup>3</sup>

35  
 36 **b) Newfoundland Power defines its current service delivery as reliable.**

37  
 38 In 1998, the Board retained a consultant to review and report on the quality of service  
 39 provided by Newfoundland Power to its customers. The Board’s consultant  
 40 recommended that the Company seek to improve the service reliability experienced  
 41 by its customers.<sup>4</sup> At that time, Newfoundland Power’s customers were experiencing

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<sup>1</sup> See Section 2(1)(h)(i) of the Act.

<sup>2</sup> See Section 37(1) of the Act.

<sup>3</sup> See section 3(b) of the EPCA.

<sup>4</sup> See D.G. Brown, P. Eng., *Report on Newfoundland Light and Power Co., Limited Re Quality of Service and Reliability of Supply*, page v.

1 an average of 4.5 hours of outage annually.<sup>5</sup> This compared to a Canadian average of  
2 3.1 hours.<sup>6</sup>

3  
4 Newfoundland Power subsequently worked to improve the service reliability  
5 experienced by its customers. Over the last decade, the Company's customers  
6 experienced an average of 2.5 hours of outage annually. This represents a 44%  
7 improvement over 1990s levels<sup>7</sup> and is better than the current Canadian average of  
8 5.2 hours.<sup>8</sup>

9  
10 Newfoundland Power has viewed current levels of service reliability as acceptable for  
11 about a decade.<sup>9</sup> The Company's customers have indicated a reasonable level of  
12 satisfaction with its service delivery over this period.<sup>10</sup>

13  
14 Newfoundland Power is now focused on maintaining current levels of service  
15 reliability for its customers at the lowest possible cost. The service reliability  
16 experienced by customers primarily reflects the general condition of the electrical  
17 system and the Company's response when customer outages occur. Annual capital  
18 expenditures are essential to maintaining the condition of the electrical system and  
19 Newfoundland Power's responsiveness when outages occur.

20  
21 The Company applies condition-based, cost-based and risk-based criteria when  
22 undertaking capital projects to maintain its electrical system. The specific criteria  
23 applied for capital projects varies depending upon the asset that requires investment  
24 and the nature or justification of a particular project.

25  
26 Condition-based criteria are applied during inspections,<sup>11</sup> condition assessments,<sup>12</sup>  
27 and engineering reviews.<sup>13</sup> Cost-based criteria are applied in evaluating viable

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<sup>5</sup> Over the period 1993 to 1997, Newfoundland Power's System Average Interruption Duration Index ("SAIDI") was 4.5 hours under normal operating conditions. Normal operating conditions do not include outages related to significant events or loss of supply.

<sup>6</sup> Over the period 1993 to 1997, the SAIDI for Canadian Electricity Association ("CEA") Region 2 utilities was 3.1 hours. CEA Region 2 utilities are those that serve a mix of urban and rural customers and include Newfoundland Power.

<sup>7</sup> Over the period 2010 to 2019, Newfoundland Power's SAIDI was 2.5 hours  $((4.5 - 2.5) / 4.5 = 44\%)$ .

<sup>8</sup> Over the period 2010 to 2019, the Canadian average SAIDI was 5.2 hours.

<sup>9</sup> In Newfoundland Power's 2010 *General Rate Application*, the Company stated it considered then current levels of service reliability to be satisfactory (see Volume 1 (1st Revision), Section 2: Customer Operations, page 2-8, line 6). Similarly, the Company has characterized its electrical system performance as reliable in its 2013/2014 *General Rate Application* (see Volume 1, Section 1: Introduction, page 1-3, line 10), its 2016/2017 *General Rate Application* (see Volume 1 (1st Revision), Section 1: Introduction, page 1-3, line 11), its 2019/2020 *General Rate Application* (see Volume 1, Section 1: Introduction, page 1-3, line 21), and in its 2022/2023 *General Rate Application* (see Volume 2, Section 1: Introduction, page 1-3, line 21).

<sup>10</sup> Since 2010, customers' satisfaction with Newfoundland Power's service delivery has averaged approximately 87%.

<sup>11</sup> See, for example, response to Request for Information CA-NP-033 on the *Rebuild Distribution Lines* project.

<sup>12</sup> See, for example, response to Request for Information CA-NP-022 on the *Hydro Facilities Rehabilitation* project.

<sup>13</sup> See, for example, response to Request for Information CA-NP-035 on the *Distribution Reliability Initiative*.

1 alternatives<sup>14</sup> and to confirm whether a project, such as extending the service life of a  
 2 hydro plant, will provide an economic benefit for customers.<sup>15</sup> Risk-based criteria are  
 3 applied when assessing the probability that an asset will fail and the potential  
 4 consequences on the service provided to customers.<sup>16</sup>  
 5

6 The application of this criteria regularly involves the quantification of costs and  
 7 customer benefits. Projects aimed at reducing costs to customers are accompanied by  
 8 well established economic analyses.<sup>17</sup> The quantification of customer benefits  
 9 includes, as examples, the customer minutes of outage avoided through the  
 10 deployment of emergency thermal generation,<sup>18</sup> hotline work methods,<sup>19</sup> or  
 11 distribution feeder automation.<sup>20</sup>  
 12

13 Together, these criteria allow Newfoundland Power to meet its objective of  
 14 maintaining reliable service for its customers at the lowest possible cost.  
 15

16 For additional information on how the Company balances the cost and reliability of  
 17 the service provided to its customers, see response to Request for Information  
 18 NLH-NP-042.  
 19

- 20 c) It is a requirement under current legislation that Newfoundland Power provide  
 21 reliable service to customers at the lowest possible cost. See part a).

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<sup>14</sup> See, for example, response to Request for Information CA-NP-054 on the *Workforce Management System Replacement* project.

<sup>15</sup> See, for example, response to Request for Information CA-NP-024 on the *Sandy Brook Plant Penstock Replacement* project.

<sup>16</sup> See, as examples, responses to Requests for Information CA-NP-024 and CA-NP-029 on the *Sandy Brook Plant Penstock Replacement* and *Transmission Line Rebuild* projects, respectively. See response to Request for Information CA-NP-008 on how Newfoundland Power prioritizes its capital projects, including major refurbishment projects.

<sup>17</sup> See, for example, response to Request for Information CA-NP-031.

<sup>18</sup> See, for example, response to Request for Information CA-NP-025 on the *Thermal Plant Facility Rehabilitation* project.

<sup>19</sup> See, for example, response to Request for Information CA-NP-041 on the *Tools and Equipment* project.

<sup>20</sup> See, for example, response to Request for Information CA-NP-038 on the *Distribution Feeder Automation* project.