

1 **Q.** (Reference Application, 2022 Capital Plan, PDF page 151 of 523, including footnote  
 2 **19)** It is stated “*Figure 2 shows the duration (“SAIDI”) and frequency (“SAIFI”) of*  
 3 *outages to Newfoundland Power’s customers over the period 2001 to 2020 under*  
 4 *normal operating conditions. (FN 19 Newfoundland Power calculates its SAIDI*  
 5 *(“System Average Interruption Duration Index”) and SAIFI (“System Average*  
 6 *Interruption Frequency Index”) in accordance with Canadian Electricity Association*  
 7 *(“CEA”) Guidelines. SAIDI is calculated by dividing the total number of customer*  
 8 *outage minutes by the total number of customers served. SAIFI is calculated by*  
 9 *dividing the total number of customer interruptions by the total number of customers*  
 10 *served. The data shown in Figure 2 does not include customer outages due to*  
 11 *significant events or loss of supply from Newfoundland and Labrador Hydro.)”*

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 13 a) What is the definition of “normal operating conditions”?  
 14 b) What term does Newfoundland Power use to describe a period that is not one of  
 15 normal operating conditions?  
 16 c) What is the definition of “significant events”?  
 17 d) In 2020, how many significant events did Newfoundland Power record? For  
 18 2020, on a map of Newfoundland please indicate the number and duration of  
 19 customer outages attributable to significant events.  
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21 A. a) Newfoundland Power calculates its reliability data according to Canadian Electricity  
 22 Association (“CEA”) guidelines. The CEA’s recommended reporting standard is  
 23 IEEE Std 1366 – 2012, contained within the *IEEE Guide for Electric Power*  
 24 *Distribution Reliability Indices*.  
 25

26 Utility reporting standards measure system reliability separately for: (i) normal  
 27 operating conditions; and (ii) significant events. “Normal operating conditions” refer  
 28 to the external conditions that are reasonably expected to occur throughout a utility’s  
 29 service territory. “Significant events” refer to events that exceed the design and/or  
 30 operational limits of the electrical system.  
 31

32 b) See part a).  
 33

34 c) See part a).  
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36 d) Newfoundland Power recorded 2 significant events in 2020. The first significant event  
 37 occurred on January 6<sup>th</sup> and lasted for 1 day. The second significant event occurred on  
 38 January 17<sup>th</sup> and persisted for a total of 4 days.  
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40 For a map of Newfoundland showing the number and duration of customer outages  
 41 attributable to significant events in 2020, see response to Request for Information  
 42 CA-NP-107.