

1 Q. **Reference: Application, Capital Programs and Projects, Upgrade Worst-Performing**  
2 **Distribution Feeders (2026–2027), Appendix A, Table A-3**

3 Does Hydro deem acceptable the SAIFI performance of all distribution feeders on its system?  
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6 A. Newfoundland and Labrador Hydro's ("Hydro") main reliability key performance indicator for  
7 distribution is service continuity, in which SAIFI<sup>1</sup> is a contributor, measuring the overall reliability  
8 of service to consumers supplied directly by Hydro-owned distribution systems. Hydro  
9 establishes service continuity SAIDI<sup>2</sup> and SAIFI targets each year through the development of a  
10 five-year average.

11 Hydro's overall reliability metrics for service continuity are comparatively higher than the  
12 Electricity Canada ("EC") Region 2 benchmark averages, as EC Region 2 consists of utilities with a  
13 mix of rural and urban customers, and Hydro's distribution customers are widely dispersed  
14 geographically, being primarily located in rural and/or remote areas.

15 The large geographic areas served by Hydro distribution systems, typically constructed with long  
16 radial feeders, can present significant reliability challenges. Outage risk on individual feeders is  
17 not consistent across all lines as the diversity of factors which may affect reliability such as  
18 vegetation cover, geographic elevation, and wind exposure may vary significantly based on  
19 location.

20 Feeders that are performance outliers are currently being addressed by Hydro's Upgrade Worst-  
21 Performing Distribution Feeders project, which prioritizes work based on five-year average

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<sup>1</sup> System Average Interruption Frequency Index ("SAIFI"). SAIFI is the System Average Interruption Frequency Index per year, which indicates the average of sustained interruptions per customer served per year, or the average number of power outages a customer has experienced in the respective distribution system per year. This index is calculated excluding loss of supply outages, planned outages, and customer requests.

<sup>2</sup> System Average Interruption Duration Index ("SAIDI"). SAIDI indicates the System Average Interruption Duration Index for customers served per year, or the average length of time a customer is without power in the respective distribution system per year. This index is calculated excluding loss of supply outages, planned outages, customer requests, and major events.

1 reliability indices: SAIDI, SAIFI, CHI,<sup>3</sup> CHIKM,<sup>4</sup> and CIKM.<sup>5</sup> This project has occurred annually since  
2 2019, and will take time to address all feeders with trending reliability issues. Additionally,  
3 Hydro has proposed its condition-based asset renewal project to Renew Distribution Feeders  
4 again in 2026, with the aim of preventing equipment deterioration to the point of failure,  
5 resulting in unscheduled power outages and impacting reliability. For further discussion on  
6 feedback from customers on system reliability please refer to response CA-NLH-049, part e), of  
7 this proceeding.

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<sup>3</sup> Customer-Hours of Interruption (“CHI”) is the sum of the products of the outage duration multiplied by the number of customers affected during the outage for each event within a one-year period. This index is calculated excluding loss of supply outages, planned outages, customer requests, and major events.

<sup>4</sup> Customer Hours of Interruption per Kilometre (“CHIKM”) is calculated by dividing the number of customer outage hours by the kilometres of feeder. This index is calculated excluding loss of supply outages, planned outages, customer requests, and major events.

<sup>5</sup> Customers Interrupted per Kilometre (“CIKM”) is calculated by dividing the number of customers that have experienced an outage by the kilometres of feeder. This index is calculated excluding loss of supply outages, planned outages, and customer requests.