

1 **Reference: 1.1 Distribution Reliability Initiative**

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3 **Q. Page 9. It is stated that the inspections have identified 51 deficiencies in the**  
4 **4.8 km section of feeder WAV-01 proposed to be re-built in 2024, including 27**  
5 **deteriorated poles and crossarms.**

6 **a) Provide a table that shows the total number of each of poles and**  
7 **crossarms on the 4.8 km section, the number of deficient or deteriorated**  
8 **poles in this 4.8 km section and the number of deficient or deteriorated**  
9 **crossarms in this 4.8 km section.**

10 **b) What would be the cost to repair the 51 deficiencies without rebuilding**  
11 **the 4.8 km section of feeder WAV-01?**

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13 A. a) Table 1 includes the total number of individual poles and crossarms on the  
14 4.8-kilometre section of distribution feeder WAV-01 and the number identified  
15 through inspection as deteriorated.<sup>1</sup>

Table 1 Deficiencies on Proposed Rebuild Section of WAV-01		
	Total Number	Number Deteriorated
Poles	76	32
Crossarms	78	52

16 b) Newfoundland Power considered repairing each of the 51 individual deficiencies  
17 identified on the 4.8-kilometre section of WAV-01.<sup>2</sup> However, due to the high  
18 number of deteriorated poles and crossarms and the deteriorated condition of the  
19 conductor on this section, it was determined that addressing the deficiencies  
20 individually would effectively be the same as rebuilding the entire section of line.<sup>3</sup> In  
21 addition, this approach would not address danger tree contacts, which have  
22 contributed to the poor reliability performance experienced by customers.

<sup>1</sup> The 51 deficiencies referenced in this request for information represent individual work orders created in the Company's asset management system resulting from inspections of this section of WAV-01 feeder. These individual work orders can include the identification of multiple deteriorated components. As such, the statement referenced in report *1.1 Distribution Reliability Initiative*, page 9 would be more clearly stated as "*Inspections have identified 51 deficiencies on this 4.8-kilometre section of feeder, including 27 deficiencies containing deteriorated poles and crossarms.*", as there are more than 27 poles and 27 crossarms requiring replacement.

<sup>2</sup> This approach would be the typical outcome of a distribution feeder inspection and completed as part of the Company's *Rebuild Distribution Lines* program.

<sup>3</sup> Replacing 32 of 76 poles would require redesigning the entire 4.8-kilometre section of line. As a result, more than 32 of the poles on this section would need to be replaced in order to achieve the appropriate conductor sagging and tension, as well as proper span lengths, to meet current design standards. The conductor on the identified section of distribution feeder is in very poor condition, with deterioration and separation of the conductor strands, and requires replacement.

1           The Company assessed the rebuild of this section of line as Alternative 1 in report  
2           *1.1 Distribution Reliability Initiative*, which included replacing all deteriorated poles  
3           and crossarms in the existing right-of-way, upgrading the deteriorated conductor  
4           and widening the right-of-way. The total capital cost Alternative 1 is \$1,027,000.<sup>4</sup>  
5           This alternative was determined not to be least cost for customers.

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<sup>4</sup> See Newfoundland Power's *2024 Capital Budget Application*, report *1.1 Distribution Reliability Initiative*, section 4.2.