

**Substations**

1  
2  
3 **Q. Reference: "2024 Capital Budget Application," Newfoundland Power Inc.,**  
4 **June 22, 2023, Supporting Materials, Substations: 2.1, app. B, Table B-1, p. 9.**

5  
6 **a) Newfoundland Power states that the expected useful life for high-voltage**  
7 **switches is 30 years. Why does Newfoundland Power intend to replace**  
8 **two 12.5 kV switches at 24 years of age?**

9  
10 **b) Has Newfoundland Power completed maintenance on the two switches**  
11 **planned for replacement at 24 years of age? If so, please provide a**  
12 **summary of maintenance activities completed over the last 5 years. If not,**  
13 **why not?**

14  
15 A. a) The substation switches at Old Perlican Substation installed on the 12.5 kV wood  
16 pole structure are deteriorated and approaching end of life. The air break switches  
17 at the substation have deteriorated to the point that they are now inoperable and  
18 must be replaced. The hook stick operated switches are showing signs of  
19 deterioration.

20  
21 The 12.5 kV wood pole structure is also deteriorated and requires replacement. The  
22 wooden structure will be removed and replaced with a new galvanized steel  
23 structure. The existing 12.5 kV hook stick switches will not mount on the new steel  
24 structure so new switches will be installed to align with the new steel structure.

25  
26 b) Newfoundland Power attempted to complete maintenance on the two switches  
27 planned for replacement in May 2020. At the time, the switches were inoperable  
28 and maintenance was unsuccessful.