

- 1 **Q. Does Newfoundland Power conduct coordination and fault duty studies on its**  
2 **subtransmission and distribution systems? If yes, are these studies periodic or**  
3 **driven by changes in the systems?**  
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- 5 A. Yes, Newfoundland Power does conduct coordination and fault studies on its distribution  
6 and transmission systems.<sup>1</sup> These studies are completed both periodically and when  
7 changes are proposed to the electrical system.  
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- 9 Coordination studies are completed as part of any new protection and control additions or  
10 modifications planned for the transmission or distribution system. These studies are also  
11 completed when required as part of operational support activities for scheduled  
12 maintenance, large distribution line extensions, or temporary system reconfigurations.  
13
- 14 System short circuit fault studies are completed every two to three years or earlier if a  
15 change to the electrical system warrants a full system study. The studies contain a variety  
16 of information relating to the fault current levels that company equipment may be subjected  
17 to. This information is used to determine if existing equipment protection is adequate and to  
18 calculate the interrupting and withstand ratings for new pieces of equipment.<sup>2</sup>

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<sup>1</sup> Newfoundland Power refers to its transmission and sub-transmission lines as *transmission lines*. Newfoundland Power's transmission lines operate at a voltage between 33kV and 138kV and connect between substations.

<sup>2</sup> Interrupting rating refers to the maximum short-circuit current an overcurrent protective device can safely interrupt without being destroyed or causing an arc for an unacceptable duration. Withstand ratings refers to the maximum short-circuit current a device can tolerate when protected by an overcurrent protective device or for a specified time.