

1 **Q. How are relay and coordination possible misoperations investigated by**
2 **Newfoundland Power and by whom? Are all misoperations investigated?**
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4 **A.** All possible misoperation of relays and coordination are investigated.
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6 The system events on Newfoundland Power's SCADA system are millisecond time
7 tagged for sequence of events analysis. The Operations Support Team comprised of
8 Engineering Technologists and Electrical Engineers, who specialize in protection and
9 control systems, review the system events log to determine if the sequence of events is
10 appropriate for the circumstances. Equipment which does not appear to have operated
11 appropriately is investigated in greater detail to determine the cause. This detailed
12 investigation includes reviewing the SCADA sequence of events log, relay event and
13 disturbance records, and relay settings. Any confirmed misoperations are subsequently
14 reviewed to identify necessary changes in the protection and control scheme, relay
15 settings, equipment maintenance and/or replacements, to correct the misoperation.