Q. **Reference: NP-NLH-001**

Please describe the criteria Hydro employs to determine which power transformers are least critical and can therefore undergo a longer inspection frequency.

A. Newfoundland and Labrador Hydro's ("Hydro") current Power Transformer Preventive Maintenance program is based upon asset class; however, Hydro has developed an asset criticality ranking of its 46 kV and above power transformers considering the following factors:

- Output to System;
- Quality of Desired Output;
- Utilization;
- Alternatives;
- Time to Affect;[1]
- Customer Impacts;
- Loss Type;
- Transformer MVA;
- System Purpose;
- Health and Safety; and
- Environment.

[1] Time of failure to take effect.

Each of these factors are multiplied to provide a numerical value and then grouped into four ranges; A, B, C and D. The A grouping identifies the most critical while the D grouping identifies the least critical. Hydro inspects all 46 kV and above power transformers at the same frequency, regardless of asset criticality. Hydro is currently reviewing the use of asset criticality to consider increasing and/or decreasing frequency of inspections on 46 kV and above power transformers.