

1 Q. Re: 2013 Capital Projects 500,000 and Over: Explanations, page C-52 Upgrade
2 Power Transformers:
3 What are the condition assessment techniques referred to by Hydro?
4
5

6 A. The condition assessment techniques referred to by Hydro consist of:

- 7 • An Oil Quality Analysis to determine the priority for oil reclamation;
- 8 • A Dissolved Gas Analysis to determine if a transformer has active gassing
9 which is an indicator of an internal fault;
- 10 • Performing Doble testing to determine the condition of the bushings, the
11 transformer insulation and protective devices;
- 12 • Performing visual inspection of the transformer and radiators to assess
13 condition of rust and oil leaks;
- 14 • Performing Furan analysis of the oil to determine a Degree of
15 Polymerization of the paper to help determine how close a unit is to the
16 end of life; and
- 17 • An oil analysis of the Tap Changer compartments using a combination of
18 DGA and particle count to rank the condition of the on line tap changers.