





Polaris Diagnostics & Engineering Ltd has been commissioned by Scottish Hydro Electric Transmission (SHE Transmission), to carry out a Level 1 condition assessment of Tummel Bridge GT1 132/11kV Transformer.

The level 1 condition assessment has been carried out, based on a review and independent assessment of the historic oil data and SSER Report T2BP-ACR-0016 Revision 1.0 dated November 2019, both supplied by SHE Transmission.

Based on the assessment of the historical & current asset condition data, GT1 is in reasonably good condition and there is a low likelihood that the transformer condition will deteriorate by ageing during the RII T2 period.

In order to further assess and manage the condition of this transformer, the following recommendations are made:

- Continue with routine oil sampling and analysis of the main tank and tap changer.
- Continue with routine maintenance.
- Continue with routine inspection.
- Detailed load flow monitoring.
- 132kV bushings should be oil sampled for DGA and moisture analysis and assessed by the criteria set out in National Grid TGN 82. In addition the bushing power factor and capacitance should be measured. This would require an outage and the removal of the 132kV and 11kV bushings to facilitate the testing.

Author	Issue Authority
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