TRANSPOWER

QUALITY ALERT!

11 June 2021
Maximo REF No. 130769

Oil Temperature Gauge Set Points

ISSUE IDENTIFIED:

During a recent interconnector outage, the remaining in-service interconnector transformer analogue oil gauge initiated a high temperature alarm at approximately 65°C. This prompted an immediate on-site investigation that determined the temperature alarm set point was incorrectly set.

Due to high loadings in the region combined with high ambient temperatures, the Grid Operator took prompt action and advised the security desk of the situation who then intervened and constrained generation in the region to move load away from the remaining in-service interconnector transformer, due to uncertainty raised by the initiation of the high oil temperature alarm from the oil temperature gauge.

SMP 02.30.001 states that calibration and setting of **oil thermometers** and bi-metal switches be set at 85C (pre 1970) and 90C (post 1970).

CONTRIBUTING FACTORS:

- The SMP checks were not thoroughly completed on two separate occasions. Resulting in the temperature set point of the oil temperature gauge remaining at 65C.
- High loadings, high ambient temperatures and the cooling characteristics of the units prompted early intervention to prevent a potential temperature trip and a loss of supply to the region.

ACTIONS TAKEN TO PREVENT REOCCURENCE:

- Toolbox held with the team regarding the Standard Maintenance Procedure (SMP) content and the implications associated with required checks.
- A wider review of the sites to be completed at the next station inspection to ensure the requirements of the SMP are met across all our assets.

LEARNINGS FROM THIS

- **Ensure SMP outcome and requirements are clearly understood and carried out in the field**
- **Report exceptions to the Service Delivery Manager and Operational Engineering for further review**
- **Learnings only apply to oil temperature gauges with analogue oil temperature alarm wired to SCADA**

Note – For new transformer monitoring schemes the oil temperature alarm comes from the digital winding temperature monitor.

Quality Assurance

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