22kV cable termination, outer cone type





Visible discharge at Cable lug

Asset: Cable lug of 22kV cable termination, outer cone type

PD sensor: Infra-Red thermal scan, ultrasound, TEV & HFCT

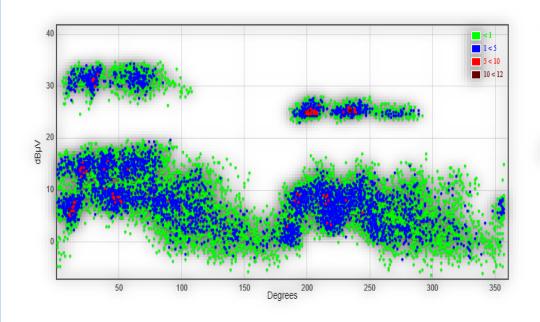
29 November 2022 PD activity was detected at 22kV cable termination of GIS using (0900 Hrs) multiple PD sensor and Infra-Red thermal scanning.

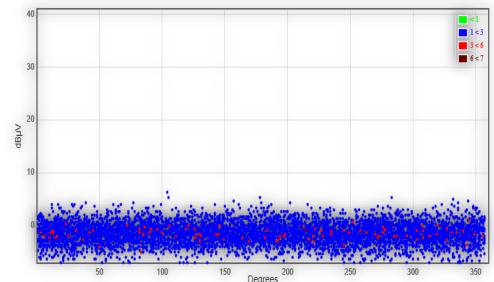
29 November 2022 The circuit was de-energized on the same day. PD was found at (2000 Hrs) 22kV cable termination.

30 November 2022 Online PD re-measurement was done after replacement of cable terminations. No PD activity found.



Comparison of ultrasound



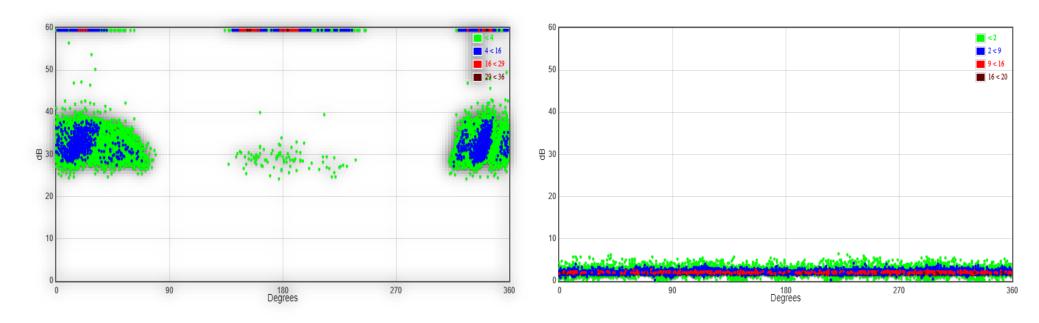


Abnormal ultrasound

No abnormal ultrasound after replacing of cable termination



Comparison of TEV measurement

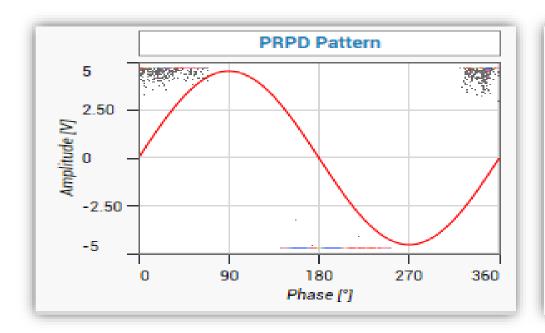


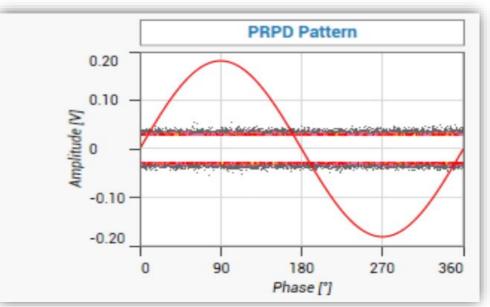
PD detected

No PD detected after replacement of cable termination



Comparison of HFCT measurement



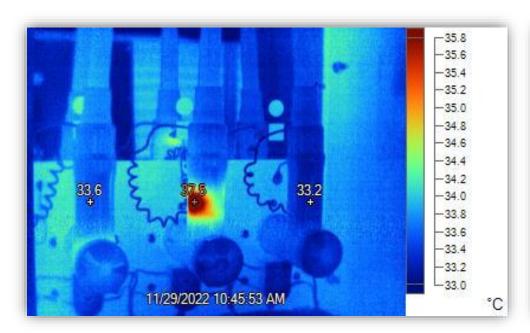


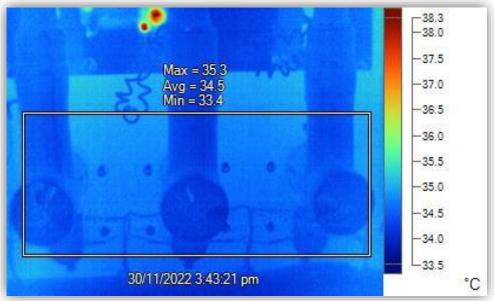
High PD detected at 5 volts magnitude

No PD detected after replacement of cable termination



Comparison of Infra-Red Thermal Scan





Thermal Abnormality detected

No Thermal Abnormality detected after replacement of cable termination

