ELECTRICAL TESTING GROUP



MV & HV CABLE TESTING TECHNOLOGY

ON SITE CABLE COMMISSIONING

UNDERGROUND FAULT LOCATION

NEWS LETTER APRIL 2011

INDUCOR INGENIERIA HAS BEEN APPOINTED BY ENDESA CHILE TO CARRY OUT THE FAULT LOCATION TESTING ON THE TURBO GENERATOR OF BOCAMINA I

Concepción - Chile - April 2011:

After the series of 8.8 scale earthquakes occurred on February 2010 in Chile, and being the attractive coastal city of Coronel (Bio-Bio Region), one of the most affected by the tsunami effects, the main turbogenerator of Bocamina 1 Thermoelectric Plant, has presented irregularities during the three last commissioning testing.

With a 147 MVA installed power (13,8 KV) and 43 years (1968), the old but reliable Italian thermal machine, presented perturbances in different progress stages.

The external services division of INDUCOR INGENIERIA S.A., has been appointed by ENDESA Chile to carry out a complete series of Condition Assessment Testing, to determine its current reliability.

After 96 hours of intensive testing, which included Phase Resolved Partial Discharge Analysis, in different states of process, and in OFF-LINE condition, (and in complementary way: Dissipation Factor - Static and Dynamic Impedance - RSO - Surge Tester - among others), the causes of the irregularities have been detected and expressed in the respective reports.

Phase resolved Partial Discharge techniques, which enable to determine through the capture and the state / cause / effect pattern study, have proved once again, to be the main tool for large rotating machines condition assessment testing.

The successful and reliable performance that the Ercole Machine (from Bocamina 1 Thermoelectric Plant) had for several years will have to pass necessarily and in short time, by a stage of internal controls and corrections.





FASE RESUELTA PD PATTERN







