

SOUTH AMERICA

HONDURAS

On February 11, 1999, the 300 MW Francisco Morazan Power Station located in the highlands of Honduras suffered a major fire in the transformer gallery. The fire shut down the hydroelectric station causing a national emergency as half of the national power demand derived from the Power Station. The fire damaged the 230kV low pressure oil filled power cables in the vertical shaft responsible for transmitting the power from the station to the electrical grid.

The decision was made to repair the oil filled cables as placing the power back in service was a top priority. This was a short-term solution; however, the oil filled cables were eventually replaced to the modern XLPE cable insulation type a few years later. EHV Power was engaged to complete the repairs and CIDA, the Canadian International Development Agency, provided funding for the cable repair project.

One of the oil filled cable circuits would have to be sacrificed for the repair; thus, reducing the station capacity from 300 to 225 MW. The following test were performed by EHV to ensure the cables were suitable for repairs:

- Residual Gas Pressure (RGP)
- Oil Power Factor Tests
- Impregnation Coefficient Tests
- Dissolved Gas Analysis

The repairs were completed in less than 2 months. A successful HiPot test was achieved, and the circuits were placed back into service. The re-operation of the Power station avoided power purchases and the people of Honduras benefited from an early reduction in power rationing.

