

Primary Interest Groups

Generator Owners (GO), Generator Operators (GOP), Transmission Owners (TO), Transmission Operators (TOP)

Overview

The failure of a generator step-up transformer high-side disconnect phase connection caused the generator to be taken off line.

Details

An Entity reported the high-side disconnect switch failed on a generator step-up transformer. The switch was a vertical-break single-ended gang switch installed in 1992. The Entity reported that the switch operated successfully a few days prior to the event. It appears that the connection point broke off the switch just before the jaw. The top portion of the standoff post insulator disintegrated due to the fault. The fault destroyed the switch and with it any evidence of metal fatigue, although that appears to be a likely cause of failure. Contamination was also a possible source given the plant's location in an industrial environment near saltwater.



Corrective Actions

The Entity's procedures required the company to inspect the switches every 18 months. After the event, the Entity stated it would now conduct switch inspections, testing, and cleaning on an annual basis during unit maintenance outages, including monthly infrared inspections of these switches.

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