

DUKE POWER COMPANY
OCONEE UNIT 3

Report No.: UE-287/74-5

Report Date: January 31, 1975

1-31-75

Event Date: December 18, 1974

Facility: Oconee Unit 3, Seneca, South Carolina

Identification of Event: Inadvertent isolation of Keowee overhead feeder

Conditions Prior to Event: Unit 1 - refueling shutdown
Unit 2 - heatup in progress
Unit 3 - 99 percent full power

Description of Event:

On December 18, 1974, Oconee Nuclear Station power circuit breakers PCB8 and 9 tripped and isolated the overhead transmission line from Keowee to the 230 kV switchyard. The other Keowee unit, connected to the underground feeder, was not affected by this incident. Investigation revealed that the air supply line to air circuit breaker ACB-4 had come loose, reducing the air pressure in the accumulator for that breaker and resulting in the operation of the pilot wire monitoring relay which tripped PCB8 and PCB9.

Designation of Apparent Cause of Event:

The main air supply line to ACB4 was not adequately supported at the coupling and vibratory motion caused the line to work loose from the coupling.

Analysis of Event:

The overhead transmission line from Keowee Hydro Station to the 230 kV switchyard is one of several redundant sources of backup power which can supply the Oconee Nuclear Station. The primary source of emergency power, the Keowee Hydro Station through the underground feeder cable, was not affected by the isolation of the overhead transmission line. Provision is made in Technical Specification 3.7.2 for one Keowee unit to be inoperable for test or maintenance for periods not to exceed 24 hours. Since one Keowee unit was connected to the underground feeder during this instance and the overhead transmission line was returned to service within three hours, it can be concluded that emergency power supplies to Oconee were not significantly degraded. The health and safety of the public were not affected.

Corrective Action:

The air line was reconnected to ACB4 and PCB8 and PCB9 were closed to restore the Keowee overhead transmission line to service. The air line mounting

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