

DUKE POWER COMPANY
OCONEE UNIT 1

Report No.: RO-269/76-15

Report Date: October 25, 1976

Occurrence Date: September 30, 1976

Facility: Oconee Unit 1, Seneca, South Carolina

Identification of Occurrence: Isolation of 230 kV Yellow Bus during
electrical breaker testing

Conditions Prior to Occurrence: Units 1 & 2 at 100% FP
Unit 3 in refueling shutdown

Description of Occurrence:

On September 30, 1976, during the testing of electrical breaker PCB-30 circuits following the implementation of a station modification, the breaker failure relay associated with PCB-30 malfunctioned and resulted in electrical isolation of the 230 kV yellow bus. Corrective maintenance actions were initiated immediately and normal conditions were restored within 32 minutes.

Apparent Cause of Occurrence:

This incident was caused by the failure of the logic module of a solid state breaker failure relay associated with electrical breaker PCB-30. When, during testing, an electrical signal was transmitted to this relay, it malfunctioned and resulted in isolation of the 230 kV yellow bus.

Analysis of Occurrence:

This incident did not result in the loss of any emergency power sources to the Oconee units. Also, during the 32 minutes that normal power was not available via the 230 kV yellow bus was isolated, the 230 kV red bus was available to supply power from all transmission lines to the startup transformers of the Oconee units. It is therefore concluded that this incident did not adversely affect the health and safety of the public.

Corrective Action:

The defective logic module in the breaker failure relay was replaced and the relay was successfully tested. There have been no previous component failures of this type and therefore, no generic deficiencies associated with breaker failure relays are suspected. The particular component that failed will be further examined for the exact cause of failure, but otherwise, no additional corrective action is considered necessary.

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