

DUKE POWER COMPANY  
OCONEE UNIT 2

Report Number: RO-269/78-3

Report Date: March 23, 1978

Occurrence Date: February 22, 1978

Facility: Oconee Nuclear Station, Seneca, South Carolina

Identification of Occurrence: Keowee Hydro Unit 2, Field Flashing Breaker  
Inoperable

Conditions Prior to Occurrence: Unit 1 100% FP  
Unit 2 100% FP  
Unit 3 100% FP

Description of Occurrence:

At 1750, on February 22, 1978, when an attempt was made to start Keowee Hydro Unit 2, the unit's field flashing breaker failed to close. The unit was therefore inoperable, contrary to the requirements of Oconee Nuclear Station Technical Specification 3.7.1. The unit was started and successfully operated at 1752. The breaker and controls, wires and contacts within the breaker were inspected with no abnormalities discovered. The unit has successfully started on several subsequent occasions.

This type of incident has occurred on two previous occasions, which were reported in Reportable Occurrence Reports RO-269/77-29, and RO 269/78-1, transmitted by my letters of January 18, and February 3, 1978 respectively.

Apparent Cause of Occurrence:

The apparent cause of the incident was initially identified as a faulty relay within the field flashing breaker control system. The apparently faulty relay was replaced, along with another relay that had been arcing. After relay replacement, and during the investigation of this report, the breaker failed to operate again. Therefore, the exact cause of the breaker malfunction has not yet been determined. The breaker system is continuing to be observed to determine the cause of the incident.

Analysis of Occurrence:

The failure of the breaker to close caused Keowee Unit 2 to become temporarily inoperable. Two minutes after the initial unsuccessful attempt, the field flashing breaker successfully operated making Keowee Unit 2 fully operable. Throughout this period, the second Keowee Hydro unit was fully operable and available to supply emergency power to the station if required. The health and safety of the public were not endangered.

7912110

734

Corrective Action

Initially an inspection of the breaker and its controls was made with no defective components discovered.

During the investigation of this report two relays in the field flashing breaker control circuit were replaced. An extensive investigation is continuing in this area of concern to correct the breaker control system faults.