DUKE POWER COMPANY
OCONEE NUCLEAR STATION - UNIT 1
UNUSUAL EVENT REPORT
UE-269/73-5
FAILURE OF ON-SITE POWER SOURCE TO START ON SIGNAL

Introduction

On June 27, 1973, Keowee Hydro Unit 1 failed to start on a normal startup signal. This incident has been classified as an unusual event as defined by Section 1.9d of the Oconee Unit 1 Technical Specifications.

Description of the Incident

On June 27, 1973, during performance of the periodic test PT/1&2/A/620/09, "Keowee Hydro Operation," Keowee Hydro Unit 1 failed to start on a normal startup signal from the Oconee control room. Keowee Hydro Unit 2 was then tested; it started and operated normally. Oconee Unit 1 was not in operation at the time of the incident.

Upon investigation, it was found that the shutdown solenoid at Keowee Hydro Unit 1 had remained in the shutdown position. This prevented the unit from starting in either the normal or emergency mode.

Corrective Action

Investigation showed that a loose connection at the terminal block prevented the proper operation of the solenoid. After tightening the connection, the unit started and operated properly. Other connections on Keowee Hydro Units 1 and 2 were checked, and no other problems were found.

Safety Analysis

Keowee Hydro Unit 1 is one emergency power source. If it were lost, Keowee Hydro Unit 2 would supply 100 percent of the emergency power load. If the 13.8 kV underground feeder were connected to Keowee Hydro Unit 1, which was lost, it would also be lost; however, the other unit would supply power through the step-up transformer and the 230 kV switching station to the startup transformers and the underground feeder could be transferred by the Oconee operator to the running unit.