UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76012

November 30, 1979

Docket No. 50-267

Public Service Company of Colorado
ATTN: Mr. C. K. Millen
Senior Vice President
P. O. Box 840
Denver, Colorado 80201

Gentlemen:

The enclosed IE Bulletin No. 79-27, is forwarded for action. A written response is required. If you desire additional information regarding this matter, please contact this office.

Sincerely,

Karl V. Seyfrit
Director

Enclosures:
1. IE Bulletin No. 79-27
2. List of Recently Issued IE Bulletins

cc: D. W. Warembourg, Nuclear Production Manager
Fort St. Vrain Nuclear Station
P. O. Box 368
Platteville, Colorado 80651

L. Brey, Manager, Quality Assurance

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D.C. 20555

SSINS No.: 6820
Accession No.:
7910250499

LOSS OF NON-CLASS 1-E INSTRUMENTATION AND CONTROL POWER SYSTEM BUS DURING OPERATION

Description of Circumstances:

On November 10, 1979, an event occurred at the Oconee Power Station, Unit 3, that resulted in loss of power to a non-class 1-E 120 Vac single phase power panel that supplied power to the Integrated Control System (ICS) and the Non-Nuclear Instrumentation (NNI) System. This loss of power resulted in control system malfunctions and significant loss of information to the control room operator.

Specifically, at 3:16 p.m., with Unit 3 at 100 percent power, the main condensate pumps tripped, apparently as a result of a technician performing maintenance on the hotwell level control system. This led to reduced feedwater flow to the steam generators, which resulted in a reactor trip due to high coolant system pressure and simultaneous turbine trip at 3:16:57 p.m. At 3:17:15 p.m., the non-class 1-E inverter power supply feeding all power to the integrated control system (which provides proper coordination of the reactor, steam generator feedwater control, and turbine) and to one NNI channel tripped and failed to automatically transfer its loads from the DC power source to the regulated AC power source. The inverter tripped due to blown fuses. Loss of power to the NNI rendered control room indicators and recorders for the reactor coolant system (except for one wide-range RCS pressure recorder) and most of the secondary plant systems inoperable, causing loss of indication for systems used for decay heat removal and water addition to the reactor vessel and steam generators. Upon loss of power, all valves controlled by the ICS assumed their respective failure positions. The loss of power existed for approximately three minutes, until an operator could reach the equipment room and manually switch the inverter to the regulated AC source.

The above event was discussed in IE Information Notice No. 79-29, issued November 16, 1979.

NUREG 0600 "Investigation into the March 28, 1979 TMI Accident" also discusses TMI LER 78-021-03L whereby the RCS depressurized and Safety Injection occurred on loss of a vital bus due to inverter failure.

Actions to Be Taken by Licensees

For all power reactor facilities wi
completion of construction (North A
Sequoyah, and Zimmer):

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