

AUG 24 1994

Docket Nos.: 50-269, 50-270, 50-287
License Nos.: DPR-38, DPR-47, DPR-55
EA 94-125

Duke Power Company
ATTN: Mr. J. W. Hampton
Vice President
Oconee Site
P. O. Box 1439
Seneca, SC 29679

Gentlemen:

SUBJECT: ENFORCEMENT CONFERENCE SUMMARY AND NOTICE OF VIOLATION
(NRC INSPECTION REPORT NOS. 50-269/94-21, 50-270/94-21, AND
50-287/94-21)

This letter refers to the enforcement conference held at our request on August 4, 1994, at the Region II office in Atlanta, Georgia. This meeting concerned activities authorized for your Oconee facility. The issues discussed at this conference related to the inspection findings addressed in Inspection Report 50-269,270,287/94-21 concerning the ability of your Keowee Hydro-Electric Power facility to provide reliable emergency power to the Oconee Nuclear Station. A list of attendees and a copy of your presentation materials are enclosed.

Your presentation provided additional information and clarification with respect to the apparent single failure violation and associated issues identified in the subject Inspection Report. Our report indicated that portions of the air system for Keowee Air Circuit Breakers (ACB) 1-4 were not safety-related. This information was based on discussions with Oconee personnel and was consistent with statements in Licensee Event Report 269/94-03 (dated July 25, 1994), which concerned a postulated single failure that would result in the loss of the Oconee emergency power system. However, during the enforcement conference, you stated that all portions of the subject air system were designed, procured, built, and maintained to the same standards; and therefore, your previous identification of certain parts of the system as nonsafety-related was in error. Confirming that the air system in question was not seismically qualified, you expressed your confidence that the system could withstand a seismic event without loss of function. Additionally, you asserted that even though a failure on an underground path ACB could have caused a lockout of the overhead path, independence between the two emergency power paths was maintained since the failure in question would not result in the loss of the underground path. You further stated that credit was taken for all portions of the air system, including those portions previously identified and maintained as nonsafety-related, to replenish air to the ACB reservoirs. Accordingly, you stated that no single-failure, associated with the air system, would result in the loss of both Keowee emergency power paths.

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Based on the information provided in your presentation, and a review of the Oconee licensing basis, the NRC staff concluded that if the air supply system had been maintained at appropriate safety-related standards to assure its operability, one could assume that the air system was available when applying single failure criteria to the emergency power system. However, the NRC does not agree that all portions of the subject air system were maintained as safety-related. Specifically, we attribute the excessive ACB check valve leakage and the failure of the air system pressure regulating valve discussed in Inspection Report 50-269,270,287/94-21, to inadequate preventive maintenance. These deficiencies contributed to the lockout of the emergency overhead path on June 14, 1994. Additionally, a lack of recognition as to the importance of this system was demonstrated in that controlled drawings for the air supply system did not exist, and controls for maintenance and operational activities on this equipment were inadequate. These deficiencies resulted from the failure to include all components of the air supply system for ACBs 1-4 in your Quality Assurance Program. The failure to include these components in the Quality Assurance Program and the failure to maintain and control the air supply system to an extent consistent with its importance to safety is a violation of the requirements of 10 CFR 50, Appendix B, Criterion II, as specified in the enclosed Notice of Violation (Notice).

The NRC continues to be concerned that the staff at Oconee failed to adequately identify and maintain all portions of the Keowee air system as safety-related. The NRC is also concerned that your previous programmatic efforts to identify the equipment that should be maintained as safety-related did not correct this deficiency. You should take expeditious steps to ensure that all the equipment at Keowee has the appropriate Quality Assurance classification. During the enforcement conference, you committed to prepare and have available by the end of September 1994, an aggressive schedule/plan that addresses the open emergency power system issues for Oconee.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Should you have any questions concerning this letter, please contact us.

Sincerely,



Bruce A. Boger, Acting Director
Division of Reactor Projects

Enclosures:

1. List of Attendees
2. Licensee Presentation Materials
3. Notice of Violation

cc w/encls:

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(cc w/encls cont'd - See page 4)

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(cc w/encls cont'd)
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South Carolina Department of Health
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Clearwater, FL 34619-1035

Mr. G. A. Copp
Licensing - EC050
Duke Power Company
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Ms. Karen E. Long
Assistant Attorney General
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Raleigh, NC 27602

bcc w/encls: (See page 5)

Duke Power Company

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bcc w/encls:
L. A. Wiens, NRR
R. Carroll, RII
M. V. Sinkule, RII
Document Control Desk

NRC Resident Inspector
U.S. Nuclear Regulatory Commission
Route 2, Box 610
Seneca, SC 29672

SEND	OFC	RII:DRP	RII:DRP	RII:DRS	RII:EICS	RII:ORA
TO	NAME	RCarroll: <i>[Signature]</i>	PSkinner <i>[Signature]</i>	AGibson <i>[Signature]</i>	BUryc <i>[Signature]</i>	Che
PDR?	DATE	08/17/94	08/19/94	08/17/94	08/22/94	8/19/94
No	COPY?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

OFFICIAL RECORD COPY

DOCUMENT NAME: P:\ONSMTNG2

ENCLOSURE 1

LIST OF ATTENDEES

U. S. Nuclear Regulatory Commission

L. Reyes, Deputy Regional Administrator, Region II (RII)
B. Mallett, Acting Deputy Director, Division of Reactor Safety (DRS), RII
H. Berkow, Director, Project Directorate II-3, Office of Nuclear Reactor Regulation (NRR)
P. Skinner, Acting Chief, Division of Reactor Projects (DRP) Branch 3, RII
T. Peebles, Chief, Operations Branch, DRS, RII
B. Bonser, Acting Chief, Reactor Projects Section 3A, DRP, RII
P. Humphrey, Acting Project Engineer, Section 3A, DRP, RII
L. Wiens, Project Manager, Project Directorate II-3, NRR
P. Harmon, Senior Resident Inspector, Oconee, DRP, RII
L. Keller, Resident Inspector, Oconee, DRP, RII
F. Burrows, Electrical Engineering Branch, NRR
L. Watson, Enforcement Specialist, Enforcement and Investigation Coordination Staff, RII
C. Evans, Regional Counsel, RII
K. Clark, Public Affairs Officer, RII

Duke Power Company

J. Hampton, Vice President, Oconee Nuclear Station (ONS)
J. Davis, Engineering Manager, ONS
B. Dolan, Safety Assurance Manager, ONS
C. Little, Electrical Engineering, ONS
J. Rowell, System Engineer, ONS
G. Savage, Public Affairs, Duke Power Company
M. Bailey, Regulatory Compliance, ONS
H. Grant, Electrical Engineer, ONS
R. Severance, System Engineer, ONS

ENCLOSURE 2

LICENSEE PRESENTATION MATERIALS

AGENDA

BACKGROUND

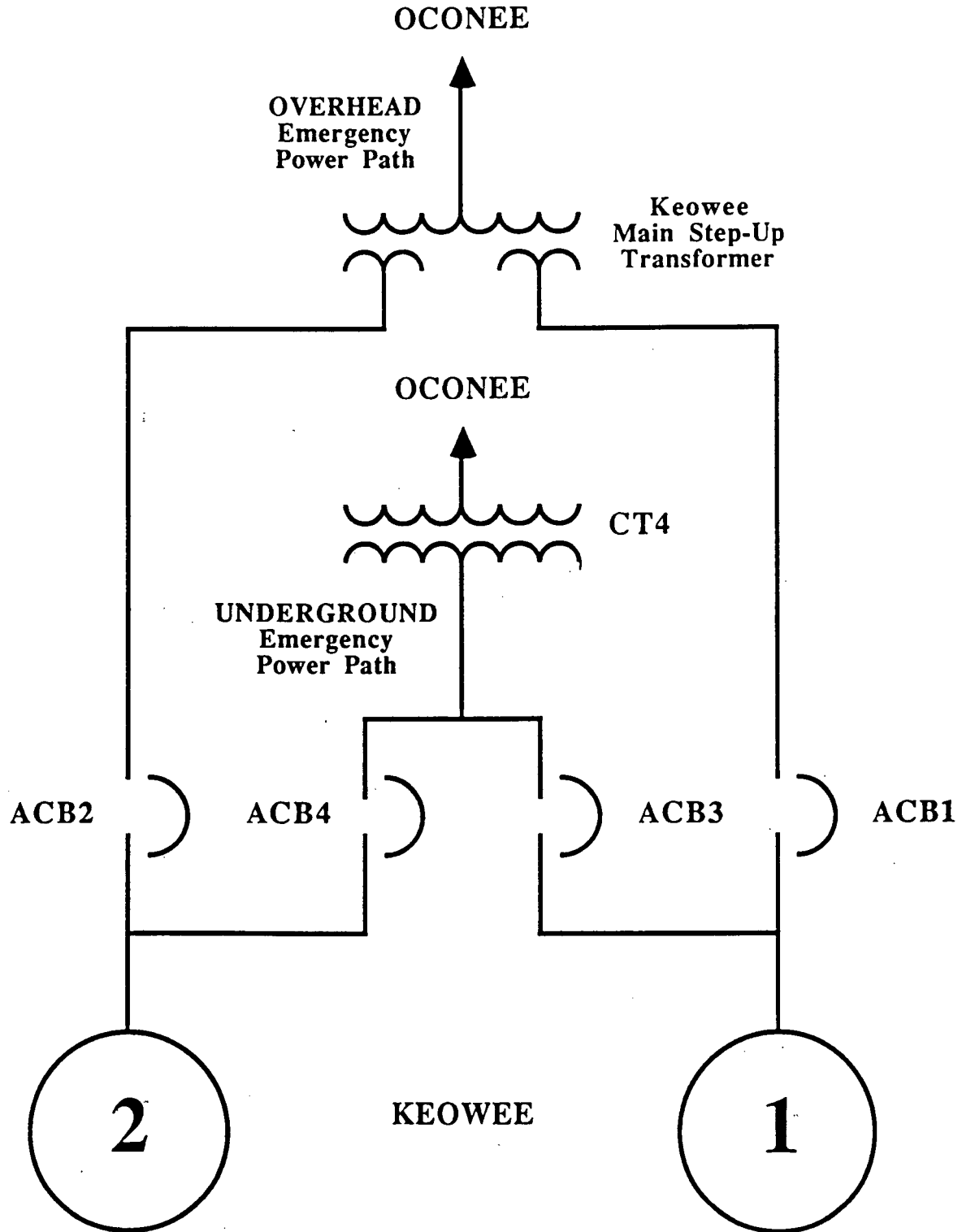
SEQUENCE OF EVENTS

LICENSING BASIS

ACTIONS BEING TAKEN

SAFETY SIGNIFICANCE

Keowee Emergency Power Paths To Oconee



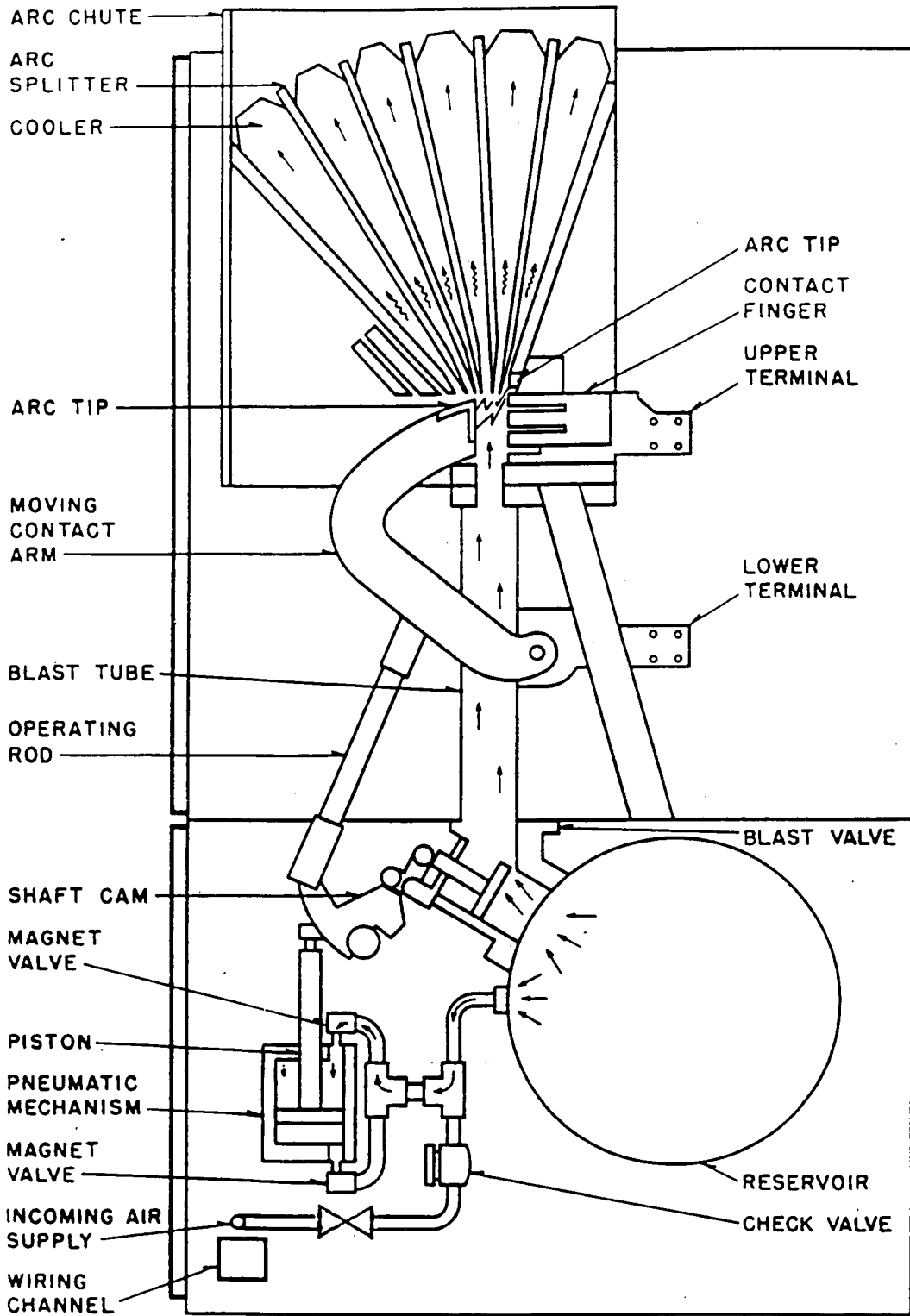
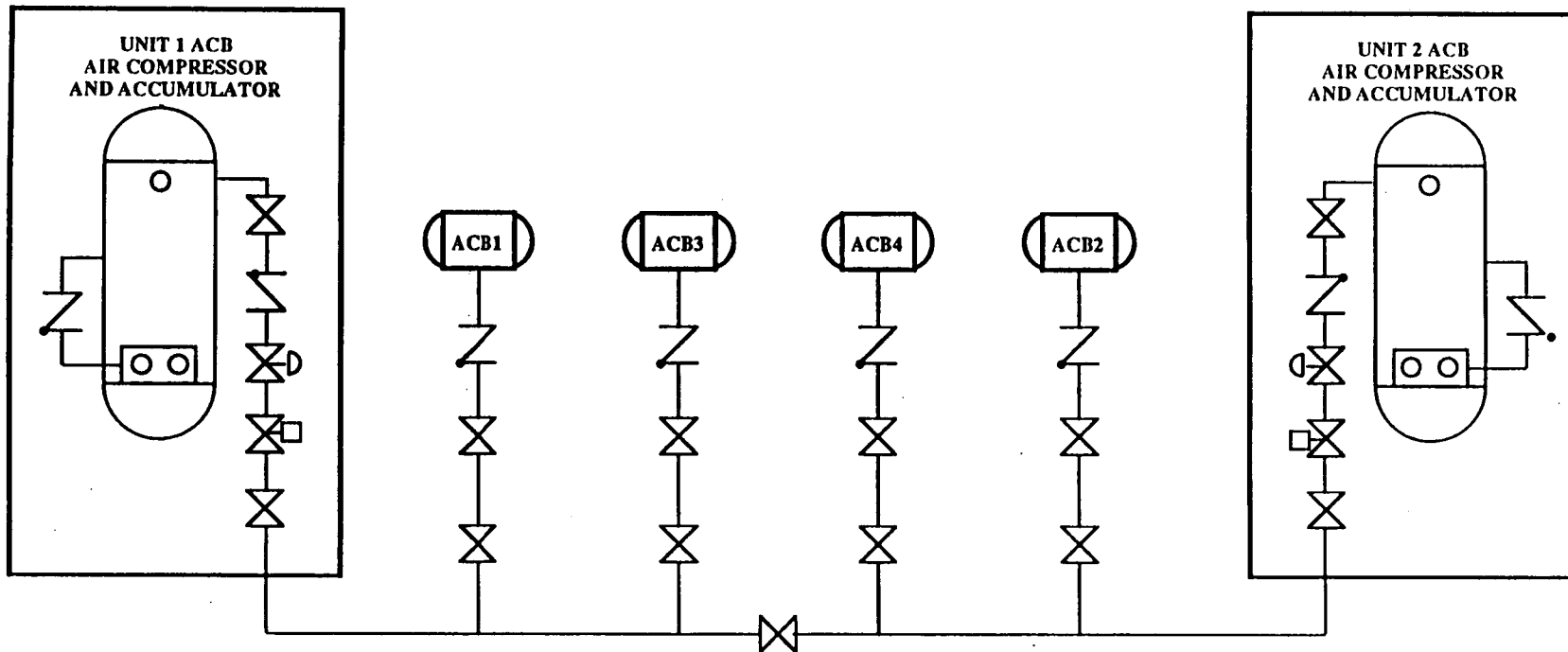


FIG. 2


Breaker Side View Showing Compressed Air Flow
Photo 326022


**DIAGRAMMATIC LAYOUT
OF KEOWEE GENERATOR ACB AIR SYSTEM**



LEGEND:

 = Manual Valve

 = Regulator

 = Check Valve

 = Low Pressure Protection Isolation Valve

SEQUENCE OF EVENTS

JUNE 14, 1994

PERFORMING ANNUAL PREVENTATIVE
MAINTENANCE ON ACB 1

DURING SEQUENCE OF CHARGING ACB 1 RESERVOIR,
COMBINATION OF REGULATOR STICKING AND
LEAKS IN ACB 3 CAUSED ACB 3 RESERVOIR
PRESSURE TO DROP TO 118 PSI

TRANSFORMER LOCKOUT INITIATED

NOTE:

1. Purpose of lock-out is to protect Keowee Generators and is part of original design
2. Engineers and technicians aware of the features
3. PM procedures require calibration of alarms and lock-out pressure switches

JUNE 14 (CONT)

OPENED TIE VALVE TO UNIT 2 AIR HEADER
RESTORING AIR PRESSURE TO UNIT 1

ENTERED LCO FOR OVERHEAD UNAVAILABILITY

OPERABILITY CHECKS MADE OF BOTH UNITS TO
BOTH PATHS

INITIATED PROBLEM IDENTIFICATION PROCESS ON
EVENTS

EXITED LCO

JUNE 15

PERFORMED PM ON ACB 3

JUNE 16

INSPECTED AND REPAIRED UNIT 1 AIR COMPRESSOR
AIR REGULATOR

TESTED ACB 3 AIR SYSTEM USING IMPROVED TEST

KEOWEE CONSIDERED OPERABLE

JUNE 20

PERFORMED PM ON ACB 4

PERFORMED IMPROVED AIR TEST ON ACBs 1 AND 4

JUNE 21

INVESTIGATED BASIS OF AIR LEAKAGE ACCEPTANCE
CRITERIA

PREPARATION MADE FOR REPAIRING ACB 4

JUNE 22

REPAIRED ACB 4 AND TESTED SYSTEM FOR AIR
LEAKAGE

PERFORMED PM ON ACB 2

ENTERED LCO DUE TO UNCERTAINTY IN DESIGN
ASSUMPTIONS

JUNE 23

INSTALLED TEMPORARY MODIFICATION TO REMOVE
LOCKOUT FEATURE ON LOW AIR PRESSURE IN ANY
ACB

LICENSING BASIS

**KEOWEE DESIGNED AND BUILT TO RELIABLE
HYDRO STANDARDS WITH ADDED FEATURES TO
PROVIDE ALTERNATE PATHS OF POWER AND
AUTOMATIC STARTUP FEATURES**

**OCONEE DESIGN BASED ON "THE LARGE NUMBER OF
POWER SOURCES, THE RELATIVELY LARGE
CAPACITY OF THESE SOURCES, AND THE HIGH
RELIABILITY OF THE HYDRO UNITS."**

**AIR SUPPLY SYSTEM WAS CONSIDERED A PART OF
THE ACB'S AND AVAILABLE TO MAINTAIN NORMAL
OPERATING PRESSURE IN THE ACB RESERVOIRS**

ACB AIR SUPPLY SYSTEM SEISMICALLY ADEQUATE

ACTION BEING TAKEN

**ADDITIONAL RESOURCES BEING COMMITTED TO
EXPEDITE COMPLETION OF OUR PLANS ASSOCIATED
WITH EMERGENCY POWER**

**AGGRESSIVE SCHEDULE BEING PREPARED AND
AVAILABLE ON SEPTEMBER 15, 1994**

SAFETY SIGNIFICANCE

KEOWEE EMERGENCY START NOT AFFECTED

UNDERGROUND ALWAYS AVAILABLE

CT 5 FROM LEE/CENTRAL AVAILABLE

SSF AVAILABLE

TWO AIR PRESSURE SYSTEMS AVAILABLE

**PROBABILITY OF AN EVENT RESULTING IN LOSS OF
ALL POWER TO OCONEE IS EXTREMELY LOW**