

**50-269**

**NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL**

FILE NUMBER

**INCIDENT REPORT**

TO:  
  
Mr. Norman C. Moseley

FROM:  
Duke Power Company  
Charlotte, NC  
William O. Parker, Jr.

DATE OF DOCUMENT

7/13/77

DATE RECEIVED

8/1/77

LETTER  
 ORIGINAL  
 COPY

NOTORIZED  
 UNCLASSIFIED

PROP

INPUT FORM

NUMBER OF COPIES RECEIVED

**1 Signed**

DESCRIPTION

ENCLOSURE

**DO NOT REMOVE  
ACKNOWLEDGED**

Licensee Event Report #R0 50-269/77-20 on 6/28/77 concerning 125 VDC switching station battery charger failure; associated battery subsequently determined inoperable.

PLANT NAME:

Oconee Nuclear Station  
VT 8/2/77

(1-P)(2-P)

NOTE: IF PERSONNEL EXPOSURE IS INVOLVED  
SEND DIRECTLY TO KREGGER/J. COLLINS

**1 CY ENCL Rec'd**

FOR ACTION/INFORMATION

BRANCH CHIEF:  
W/ 3 CYS FOR ACTION  
LIC ASST.:

**SCHWENKER**

**Sheppard**

INTERNAL DISTRIBUTION

REG FILE  
NRC PDR  
I & E (2)  
MIPC  
SCHROEDER/IPPOLITO  
HOUSTON  
NOVAK/CHECK  
GRIMES  
KNIGHT  
BUTLER  
HANAUER  
TEDESCO  
EISENHUT  
BAER  
SHAO  
VOLLMER/BUNCH  
KREGGER/ J. COLLINS  
ROSA

EXTERNAL DISTRIBUTION

LPDR: **WALHALLA, S.C.**  
TIC:  
NSIC:  
ACRS (16) SENT AS CAT. B

CONTROL NUMBER

**90  
4**

772140276

*[Signature]*

DUKE POWER COMPANY

POWER BUILDING

422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.  
VICE PRESIDENT  
STEAM PRODUCTION

July 13, 1977

TELEPHONE: AREA 704  
373-4083

Mr. Norman C. Moseley, Director  
U. S. Nuclear Regulatory Commission  
Suite 818  
230 Peachtree Street, Northwest  
Atlanta, Georgia 30303

Re: Oconee Unit 1  
Docket No. 50-269

Regulatory

File Cy



Dear Mr. Moseley:

Pursuant to Sections 6.2 and 6.6.2 of the Oconee Nuclear Station Technical Specifications, please find attached Reportable Occurrence Report RO-269/77-20. This report is submitted one day late as discussed in conversations with your staff.

Very truly yours,

*William O. Parker, Jr.*  
William O. Parker, Jr. *By MSB*

MST/rr

Attachment

cc: Director, Office of Management Information  
and Program Control

772140276

DUKE POWER COMPANY  
OCONEE UNIT 1, 2 AND 3

Report No.: RO-269/77-20

Report Date: July 13, 1977

Occurrence Date: June 28, 1977

Facility: Oconee Units 1, 2 and 3, Seneca, South Carolina

Identification of Occurrence: 125 VDC switching station battery charger failure; associated battery subsequently determined inoperable

Conditions Prior to Occurrence: Unit 1 at 100 percent full power; Unit 2 in refueling shutdown; Unit 3 at 80 percent full power

Description of Occurrence:

On June 28, 1977, it was determined that one of the two 125 VDC switching station batteries had been effectively out of service for approximately eleven days. The battery cells were replaced and the battery returned to service within the 24 hour time period specified by Oconee Technical Specification 3.7.2(e). The events associated with the incident are as follows.

Beginning June 17, 1977 and continuing through June 20, 1977, several events recorder alarms were received indicating low voltage on the SY-1 battery bus. Appropriate corrective action was not taken in response to the alarms.

On June 20, 1977, during routine examination of the switchyard batteries a low voltage condition was noted. The SY-1 battery and charger were promptly removed from service and the SY-1 battery was connected to the standby battery charger for recharging. The SY-1 battery charger was repaired and then reconnected to the SY-1 battery to complete the charge. The SY-1 battery was returned to service when the terminal voltage across the battery was acceptable. Recharging of SY-1 was accomplished without the use of the appropriate procedures and specific gravity readings to assure the full charge of the battery were not taken.

During a review conducted on June 28, 1977, of the initial battery charger failure, it was determined that the event was reportable and that the battery charging procedure had not been followed. Due to the low voltage after the battery charger failure, the battery was determined to be potentially inoperable. Specific gravity and voltage readings were taken, and it was determined that the battery was inoperable. The decision was made on June 28, 1977, to replace the battery cells with identical cells from battery SY-4, a non-safety related switching station battery. The battery was then tested to assure load carrying capability and returned to service. This was accomplished within the time period specified in Technical Specification 3.7.2(e).

Apparent Cause of Incident:

The battery charger failed due to dirty contacts on control circuitry cards. The contacts were cleaned and the charger functioned properly. When the battery charger was not operating, the battery cells were discharged to a low voltage. Recharge of these cells would have required approximately two weeks. Therefore the battery cells were replaced.

This occurrence is also attributable to personnel errors in failing to initiate prompt corrective action in response to the battery low voltage alarm. Additionally, failure to follow proper procedures resulted in the return to service of an inoperable battery.

Analysis of Occurrence:

This occurrence resulted in the loss of one of the 125 VDC switching station batteries for approximately twelve days. The redundant battery was operable during this period and was capable of performing all required safety functions. Therefore the health and safety of the public were not adversely affected by this incident.

Corrective Action:

The control circuitry cards on the SY-1 battery charger were cleaned and the charger was returned to service. The battery cells in battery SY-1 were replaced and the battery was properly tested and returned to service.

At the beginning of each shift, all computer point alarms, the backup alarm lockout matrix, all illuminated statalarms and all events recorder summaries will be reviewed. Responsibility for review of these alarms will be defined.

All procedures related to the operation and maintenance of batteries will be reviewed and rewritten as necessary to incorporate adequate limits for voltage and specific gravity readings and adequate instructions for resolving deficiencies. Appropriate personnel will attend training sessions which will define the function and importance of all safety related batteries. Procedure policies will also be reviewed with personnel to assure that procedures are used and are followed. Also, the preventive maintenance schedule for the switchyard battery chargers will be reviewed for adequacy.

It is felt that this corrective action will assure that this incident will not reoccur.

USNRC REGION II  
ATLANTA, GEORGIA

77 JUL 14 AIO: 28

NO 10 NO 16 1971 1 3 3 9