

FOIA JULY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8707230678 DOC. DATE: 87/07/20 NOTARIZED: NO DOCKET #
 FACIL: 50-400 Shearon Harris Nuclear Power Plant, Unit 1, Carolina 05000400
 AUTH. NAME AUTHOR AFFILIATION
 HOWE, A. Carolina Power & Light Co.
 WATSON, R. A. Carolina Power & Light Co.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 87-036-00: on 870621, air roll of 1A-SA diesel engine not performed within 4 to 8h after engine shutdown. Caused by marking in test procedure step as not applicable. Engine air rolled. No accumulation of water detected. W/870720 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4
 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

NOTES: Application for permit renewal filed. 05000400

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| | ID CODE/NAME | | LTTR | ENCL | | ID CODE/NAME | | LTTR | ENCL |
| | PD2-1 LA | | 1 | 1 | | PD2-1 PD | | 1 | 1 |
| | BUCKLEY, B | | 1 | 1 | | | | | |
| INTERNAL: | ACRS MICHELSON | | 1 | 1 | | ACRS MOELLER | | 2 | 2 |
| | AEOD/DOA | | 1 | 1 | | AEOD/DSP/NAS | | 1 | 1 |
| | AEOD/DSP/ROAB | | 2 | 2 | | AEOD/DSP/TPAB | | 1 | 1 |
| | DEDRO | | 1 | 1 | | NRR/DEST/ADE | | 1 | 0 |
| | NRR/DEST/ADS | | 1 | 0 | | NRR/DEST/CEB | | 1 | 1 |
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| | NRR/DEST/MEB | | 1 | 1 | | NRR/DEST/MTB | | 1 | 1 |
| | NRR/DEST/PSB | | 1 | 1 | | NRR/DEST/RSB | | 1 | 1 |
| | NRR/DEST/SGB | | 1 | 1 | | NRR/DLPQ/HFB | | 1 | 1 |
| | NRR/DLPQ/GAB | | 1 | 1 | | NRR/DOEA/EAB | | 1 | 1 |
| | NRR/DREP/RAB | | 1 | 1 | | NRR/DREP/RPB | | 2 | 2 |
| | NRR/PMAS/ILRB | | 1 | 1 | | NRR/PMAS/PTSB | | 1 | 1 |
| | <u>REG FILE</u> 02 | | 1 | 1 | | RES DEPY GI | | 1 | 1 |
| | RES TELFORD, J | | 1 | 1 | | RES/DE/EIB | | 1 | 1 |
| | RGN2 FILE 01 | | 1 | 1 | | | | | |
| EXTERNAL: | EG&G GROH, M | | 5 | 5 | | H ST LOBBY WARD | | 1 | 1 |
| | LPDR | | 1 | 1 | | NRC PDR | | 1 | 1 |
| | NSIC HARRIS, J | | 1 | 1 | | NSIC MAYS, G | | 1 | 1 |

TOTAL NUMBER OF COPIES REQUIRED: LTTR 45 ENCL 43



LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
SHEARON HARRIS - UNIT ONEDOCKET NUMBER (2)
0 5 0 0 0 4 0 0 1 OF 0 3

PAGE (3)

TITLE (4)

MISSED DIESEL GENERATOR AIR ROLL FOLLOWING ENGINE OPERATION

| EVENT DATE (5) | | | LER NUMBER (6) | | | REPORT DATE (7) | | | OTHER FACILITIES INVOLVED (8) | | | | | | | |
|--------------------|-----|------|--|-------------------|-----------------|------------------|-----|------|-------------------------------|---|------------------|--|---|---|---|---|
| MONTH | DAY | YEAR | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | MONTH | DAY | YEAR | FACILITY NAMES | | DOCKET NUMBER(S) | | | | | |
| 0 | 6 | 2 | 1 | 8 | 7 | 8 | 7 | 0 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| OPERATING MODE (9) | | | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11) | | | | | | | | | | | | | |
| 3 | | | 20.402(b) | | | 20.405(c) | | | 50.73(a)(2)(iv) | | | 73.71(b) | | | | |
| POWER LEVEL (10) | | | 20.405(a)(1)(i) | | | 50.36(c)(1) | | | 50.73(a)(2)(v) | | | 73.71(c) | | | | |
| 0 | | | 20.405(a)(1)(ii) | | | 50.36(c)(2) | | | 50.73(a)(2)(vii) | | | <input checked="" type="checkbox"/> OTHER (Specify in Abstract below and in Text, NRC Form 366A) | | | | |
| | | | 20.405(a)(1)(iii) | | | 50.73(a)(2)(i) | | | 50.73(a)(2)(viii)(A) | | | | | | | |
| | | | 20.405(a)(1)(iv) | | | 50.73(a)(2)(ii) | | | 50.73(a)(2)(viii)(B) | | | | | | | |
| | | | 20.405(a)(1)(v) | | | 50.73(a)(2)(iii) | | | 50.73(a)(2)(x) | | | | | | | |

LICENSEE CONTACT FOR THIS LER (12)

NAME
ANDREW HOWE - ENGINEER

TELEPHONE NUMBER

AREA CODE
9 1 9 3 6 2 - 2 7 1 9

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPDs | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPDs |
|-------|--------|-----------|--------------|--------------------|-------|--------|-----------|--------------|--------------------|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) ☐ NO ☒

EXPECTED SUBMISSION DATE (15)

MONTH DAY YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

ABSTRACT:

On June 21, 1987, with the plant in Mode 3, it was discovered that an air roll of the 1A-SA diesel engine had not been performed within four to eight hours after engine shutdown, as required by the Shearon Harris Operating License (NPF-63). This air roll is performed to detect any water ingress into the engine's cylinders, and may only be omitted when the plant is already in an Action Statement of Technical Specification 3/4.8.1.1, "Electrical Power Systems, AC Sources."

When the four hour interval began, this action statement was in effect, and the procedure step for the air roll was marked as "not applicable". However, this action statement was exited prior to expiration of the four hour interval, and so the air roll was required to be performed.

This situation was not discovered until after the four hour interval had elapsed. Upon discovery, the engine was air rolled and no accumulation of water was detected.

This event is reported under condition 2.G of the Shearon Harris Operating License.

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PDR ADDOCK 05000400
S PDR

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

| | | | | | | | |
|--|--|----------------|-------------------|-----------------|----------|----|-----|
| FACILITY NAME (1) SHEARON HARRIS - UNIT ONE | DOCKET NUMBER (2) 0 5 0 0 0 4 0 0 8 7 - 0 3 6 - 0 0 | LER NUMBER (6) | | | PAGE (3) | | |
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | | |
| | | | | | 0 2 | OF | 0 3 |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

DESCRIPTION:

On June 19, 1987, Emergency Service Water header "B" was taken out of service for repairs, and the 1B-SB diesel generator was declared inoperable, since service water is a support system for engine cooling. Technical Specification 3.8.1.1, Action Statement B was activated, requiring that the redundant 1A-SA diesel generator be tested within 24 hours. Such testing of a diesel generator is required when the redundant diesel generator becomes inoperable, except as a result of pre-planned maintenance or testing activities. This testing was satisfactorily completed on June 20, 1987, and the 1A-SA engine was shut down at 1727 on June 20, 1987.

The Shearon Harris Operating License (NPF-63) requires each diesel generator be operated and maintained in accordance with Transamerica Delaval, Inc. requirements, which are delineated in Attachment 1 to the license. These requirements include an air roll of a diesel engine within four to eight hours subsequent to engine shutdown to detect any ingress of water into the engine cylinders. The presence of water in the engine cylinders would indicate possible cracking of the cylinders, which could lead to subsequent failure of the diesel generator. This requirement may be omitted only when the plant is already in Technical Specification Action Statement 3.8.1.1, "Electric Power Systems, AC Sources." This omission is permitted since the diesel generator is not capable of operation during the performance of an air roll, and it is not desirable to deliberately take the engine out of service when the electric power system is not fully operable.

The action statement was in effect when the test procedure for the 1A-SA diesel generator called for the air roll to be performed. Upon verification of this, the appropriate step in the test procedure was marked as "not applicable." Subsequent to that action but before the four hour interval had elapsed, the "B" service water header was returned to service at 2110 on June 20, 1987, and Action Statement 3.8.1.1 was exited. The diesel engine air roll then was required to be performed, since the interval did not elapse until 2127. Thus a 17 minute period occurred during which the engine was required to be air rolled and the condition which allows the air roll to be omitted did not exist.

CAUSE:

The situation was discovered during administrative review of the test procedure results by shift personnel. The test procedure step for the air roll should not have been marked as "not applicable" until the four hour interval was expired to ensure that subsequent changes in plant status would not require the air roll to be performed.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

| FACILITY NAME (1) | DOCKET NUMBER (2) | LER NUMBER (6) | | | PAGE (3) | |
|---------------------------|-------------------|----------------|-------------------|-----------------|----------|--------|
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | |
| SHEARON HARRIS - UNIT ONE | 0 5 0 0 0 4 0 0 | 8 7 | - 0 3 6 | - 0 0 | 0 3 | OF 0 3 |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

CAUSE (continued)

A similar event had previously occurred on June 7, 1987 (refer to Licensee Event Report 87-033-00). In this event, the air supply to the barring device, used immediately prior to the air roll, was not sufficient to operate the equipment, and the four hour interval elapsed prior to completion of the air roll.

SAFETY CONSEQUENCES:

The purpose of an air roll is to detect water ingress into the diesel engine cylinders. Such accumulations of water are only expected if the cylinders have been damaged by cracking, and Shearon Harris Plant has not experienced such problems with its diesel engines. An air roll is not required for engine operability as demonstrated by the exception written into the operating license which permits omission of the air roll under specific circumstances.

When an air roll of the 1A-SA diesel engine was performed, no water was detected in the cylinders. The diesel generator was operable throughout the period despite omission of the air roll.

This event is reportable as a Licensee Event Report under the conditions of the Shearon Harris Operating License, Section 2.G.

CORRECTIVE ACTIONS:

1. Upon discovery of the omission of the air roll, the 1A-SA diesel engine was air rolled at 1411 on June 21, 1987. No water was detected in the engine cylinders.
2. The diesel generator test procedures will be reviewed for possible changes to prevent recurrence of this event.





Carolina Power & Light Company

HARRIS NUCLEAR PROJECT
P.O. Box 165
New Hill, NC 27562

JUL 20 1987

File Number: SHF/10-13510C
Letter Number: HO-870465 (O)

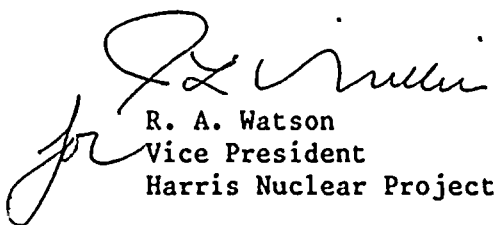
U.S. Nuclear Regulatory Commission
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Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT UNIT 1
DOCKET NO. 50-400
LICENSE NO. NPF-63
LICENSEE EVENT REPORT 87-036-00

Gentlemen:

In accordance with Title 10 to the Code of Federal Regulations, the enclosed Licensee Event Report is submitted. This report fulfills the requirement for a written report within thirty (30) days of a reportable occurrence and is in accordance with the format set forth in NUREG-1022, September, 1983.

Very truly yours,



R. A. Watson
Vice President
Harris Nuclear Project

RAW:skm

Enclosure

cc: Dr. J. Nelson Grace (NRC - RII)
Mr. B. Buckley (NRR)
Mr. G. Maxwell (NRC - SHNPP)

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