

P.O. Box 101, New Hill; N. 27562 February 25, 1985

Dr. J. Nelson Grace United States Nuclear Regulatory Commission Region II 101 Marietta Street, Northwest (Suite 2900) Atlanta, Georgia 30323 NRC-327

CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR POWER PLANT
1986 - 900,000 KW - UNIT 1
G. H. BETTIS OPERATORS ON RUSKIN - SUPPLIED
HVAC DAMPERS, ITEM 157

Dear Dr. Grace:

Attached is our third interim report on the subject item which was deemed reportable per the provisions of 10CFR50.55(e) and 10CFR, Part 21, on May 22, 1984. CP&L is pursuing this matter, and it is currently projected that corrective action and submission of the final report will be accomplished by April 10, 1985.

Thank you for your consideration in this matter.

Yours very truly,

R. M. Parsons

Project General Manager Completion Assurance

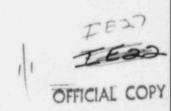
Shearon Harris Nucler Power Plant

RMP/bs

Attachment

cc: Messrs. G. Maxwell/R. Prevatte (NRC-SHNPP)
Mr. R. C. De Young (NRC)

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CAROLINA POWER & LIGHT COMPANY SHEARON HARRIS NUCLEAR POWER PLANT

UNIT 1

THIRD INTERIM REPORT

G. H. BETTIS OPERATORS ON RUSKIN-SUPPLIED HVAC DAMPERS

NCR-83-103 NCR-84-333

ITEM 157

FEBRUARY 25, 1985

REPORTABLE UNDER 10CFR21 & D 10CFR50.55(e)

SUBJECT:

Shearon Harris Nuclear Power Plant Unit 1 G. H. Bettis operators, Purchase Order NY-435205 on Ruskin-supplied HVAC dampers

ITEM:

The following damper tag numbers are affected by this condition. Dampers with an asterisk (*) were added later due to additional research by the vendor.

AR-D3-1 AV-D78SA-1	CV-D5SA-1*
AV-D15SA-1 CV-D7SB-1*	CV-D1SB-1*
FL-D35SA-1-4 AV-D79SB-1	CV-D4SA-1*
FL-D36SB-1-4 FL-D9SB-1-4	CV-D6SA-1*
FL-D37SA-1-4 FL-D11SA-1-4	CV-D8SA-1*
FL-D38SB-1-4 FL-D12SB-1-4	CV-D9-1*
AV-D82SA-1 FL-D21SA-1-4	CV-D10-1*
AV-D83SB-1 FL-D22SB-1-4	CV-D11-1*
AV-D86SA-1 FL-D5SB-1-4	CV-D12-1*
AV-D87SB-1 FL-D8SA-1-4	CV-D13-1*
AP-D4-1 FL-D4SA-1-4	CV-D14-1*
AV-D9SA-1 CV-D3SA-1*	CV-D1SA-1*
CB-D2SB-1 CV-D2SB-1*	

SUPPLIED BY:

Ruskin Manufacturing Company

NATURE OF DEFICIENCY:

The following condition was discovered as a result of some Bettis operators failing a vendor in-house operational test: According to Bettis, some of the internal seals (made of ethylene propylene) in the operators become swollen, apparently due to absorption of the internal lubricant (Mobil Grease 28). This swelling increases friction within the operator. This increased friction may result in increased operator actuation time beyond that required for design conditions.

DATE PROBLEM WAS CONFIRMED TO EXIST:

Based on a copy of a telex from Ruskin to Ebasco dated December 2, 1983 (received approximately December 5, 1983), which indicated a 10CFR21 reportable condition concerning Bettis actuators, the condition was determined to be potentially reportable on December 20, 1983. Also, site-generated NCR-83-103 on December 28, 1983 and NCR-84-333 on February 10, 1984 were issued.

DATE PROBLEM REPORTED:

Mr. K. V. Hate' notified the NRC (Mr. A. Hardin) on December 21, 1983 of a potentially reportable item per 10CFR21 and 10CFR50.55(e). G. H. Bettis reported the problem to the NRC on November 13, 1983.

DATE PROBLEM

REPORTED (CONT'D)

On May 22, 1984, CP&L (Mr. K. V. Hate') notified the NRC (Mr. D. Myers) that the December 21, 1983 potentially reportable item had been evaluated and found to be reportable per 10CFR21 and 10CFR50.55(e).

SCOPE OF PROBLEM:

The following safety-related HVAC systems/areas are affected:

- A. RAB Electrical Penetration Area
- B. RAB RHR Heat Exchanger Area
- C. RAB Mechanical Penetration Area
- RAB H&B Penetration Area D.
- E. RAB Charging Pump Area
- F. RAB Valve Gallery
- RAB Pipe Tunnels and Charging Pump Areas Exh. G. System
- H. FHB Normal Exhaust System
- FHB Normal Supply System I.
- J. FHB Loading Area
- Containment Fan Cooler System K.

SAFETY

IMPLICATION:

Should the dampers fail to operate within the required actuation time, areas may not properly isolate and airborne contaminants may not be controlled as intended.

REASON DEFICIENCY

IS REPORTABLE: Should the dampers fail to operate within the design time limit during anticipated accident conditions, the radiological releases may exceed the 10CFR100 guidelines.

CORRECTIVE

ACTION:

Replace lubricant and seals in affected G. H. Bettis actuators on Ruskin dampers supplied to SHNPP. G. H. Bettis has supplied the repair kits that contain the recommended lubricant, Molykote 44, and replacement seals.

PREVENTIVE

MEASURES:

Future orders for nuclear-qualified actuators should be furnished with Molykote 44 lubricant and EP seals.

FINAL REPORT:

Although the required rework is now complete, the testing and documentation required to close this item is still in process. It is currently projected that the final report will be issued by April 10, 1985.