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50-400-01

(2)

50-400

RELATED CORRESPONDENCE

A F F I D A V I T

DOCKETED
1/27/84

24 1984
AUG 27 AIO:TB

My name is Chan Van Vo. I am also known as Van Vo Davis. I am giving this statement to Robert Guild, Attorney-at-Law, of Charleston, South Carolina, who has identified himself to me as a representative of the Government Accountability Project. I have been asked to provide further information to the Atomic Safety and Licensing Board of the Nuclear Regulatory Commission about the significance of the improper cold pulling and misalignment of the Steam Generator Feed Water Pump; and CP&L's mishandling of my efforts to identify and properly correct this nonconformance.

2. I repeat my professional opinion expressed in my October 6, 1984, Affidavit that the effective function of these pumps, valves and piping are nuclear safety significant. At the time I attempted to document the deficient fit-up of the Feed Water piping and the resultant stress-induced misalignment of the pump in August 1982 -- and during the entire course of construction of the Harris Plant until then-- the Feed Water system, its piping, pipesupports, valves and pumps, were classified by the Architects/ Engineers, Ebasco Services, Inc., by CP&L, and by their contractors as "Safety Class 4/ Seismic Class I," an acknowledgement of its nuclear safety significance. This classification applied to the Feed Water system in the Harris Turbine Building. Conformance to the Commission's 10 CFR Part 50, Appendix B, Quality Assurance Criteria such as detailed inspection and documentation were required for the Feed Water system.

3. After several years of serious problems in the design, fabrication, installation, and inspection of piping and associated components in the Turbine

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Building at the Harris Plant, CP&L faced the prospect of performing extensive and costly rework including necessary inspections and documentation as required by the NRC's QA regulations. Instead of seeing that the job was done right-- by the same standards that even CP&L had committed to honor-- CP&L sought to circumvent quality standards and thereby "alleviate all concerns related to the additional inspection and documentation requirements for the supports in the Turbine Building," by attempting to "de-classify" the Feed Water and Main Steam systems inside the Turbine Building.

4. In my opinion such attempts by CP&L Engineers Ed Willett and Alex Fuller to "de-classify" these important systems simply represent efforts to cover-up their own shoddy work; as did their responses to my attempt to document and correct the Feed Water Pump misalignment.

5. Even the limited documentation available to me now supports my position. For Example, I attach as Exhibit 1 Work Directive No. 2836, dated 7/13/83, for Turbine Building Feed Water pipe support T-3-261-1-FW-H-11, which reflects this "de-classification" of the Feed Water hangers in the Turbine Building: ". . . this hanger is considered non-seismic and will require no CI or QC involvement or acceptance." This Work Directive cites generic Field Change Request FCR-H-1145, "Reclassification of MS & FW Supports in the Turbine Building." Revisions 0 and 1 reflect site approval by Ed Willett on 1/14/83 and Alex Fuller on 5/13/83, respectively. They are Exhibits 2 and 3, attached.

These generic FCRs rely on a November 12, 1982, Ebasco letter, EB-C-14332,

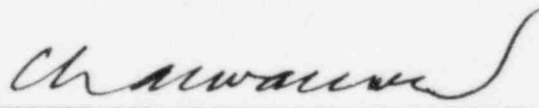
Exhibit 4, for authority to "reclassify the mainsteam and feedwater pipe supports and the main steam piping, in the turbine building. These items are to be non-seismic, in accordance with letter EB-C-14332." No mention is made of the Feed Water piping lines themselves in the FCRs, since the Ebasco letter expressly excepts the Feed Water piping from de-classification: "Please note that the generic FCR should also cover the feedwater supports in the Turbine Building. From the inspection and documentation aspects, these supports can be handled as B31.1, non-seismic, however, the lines will not be declassified to non-seismic." Thus, even long after my observation of the improper fit-up of the Feed Water pipe-to-pump connection, the Feed Water piping line remained Seismic Class I- requiring Quality Assurance program compliance. The Bergen- Patterson drawing for pipe-support FW-H-11, Exhibit 5, dated 5/27/83, continues to reflect "Safety Class 4/ Seismic Class I" for this hanger.

6. I continue to question the validity of CP&L's attempts to solve their problems of shoddy work at the Harris Plant through such "de-classification" of quality requirements. The nonconformance I observed was a violation of such quality requirements applicable at the time they were violated. My concerns should have been investigated and documented properly at the time by my management. They were not. Neither "de-classification" of defective work nor discarding employee complaints will make the Shearon Harris Nuclear Power Plant safe. I only hope that this NRC Licensing Board will.

SWORN to and subscribed before me

this 21 day of November, 1984.

NOTARY PUBLIC


Chan Van Vo

Fja

EXHIBIT 1

FORM NO. 80124
REV. 1
11/82

EXHIBITS
WP-110

WD - 2836

WORK DIRECTIVE

PIPE HANGER No T-3-261-1-FW-H-11

REV. 1/B

PER FCR-H-1145, THIS HANGER IS CONSIDERED
NON-SEISMIC AND WILL REQUIRE NO CI OR QC
INVOLVEMENT OR ACCEPTANCE. <i>Approved 7/13/83</i>

COMPLETED / DATE
(HANGER FOREMAN)

N/A / _____
ACKNOWLEDGED / DATE
(C. I.)

N/A / _____
ACKNOWLEDGED / DATE
(Q. C.)

ACKNOWLEDGED / DATE
(WELDING SUPV. FOR NON-Q)

Type of Request:

- Permanent Waiver to "use-as-is"
- Field Change
- See Recommended Action

ORIGINAL

- Non-ASME
- ASME Section III Division 1
- ASME Section III Division 2
- Q
- Non-Q

Nonconformance No Yes Report No. _____

REF # NA

Identification of Area and Item: MAIN STEAM AND FEEDWATER PIPE SUPPORTS, AND MAIN STEAM PIPING, IN TURBINE BUILDING.

Conflict/Condition

Reference Documents or Attachment

LETTER EB-C-14332 (ATTACHED)

DRAWING 2165 G-107 S01 REV 4 AND S02, REV 4

THE MAIN STEAM AND FEEDWATER PIPE SUPPORTS IN THE TURBINE BUILDING WERE CLASSIFIED AS "SEISMIC I" FOR PURPOSES OF ANALYSIS, NOT IN PLACE OF SAFETY CLASSIFICATION OR REGULATORY COMMITMENT. THIS REQUIRED DOCUMENTATION AND TESTING WHICH ARE NOT NECESSARY FOR CONSTRUCTION OF THE PLANT.

VOID

DATE 6-1-83 BY ECR-H-145 R-1

Uncontrolled Copy FOR INFORMATION ONLY

Recommended Action:

PROJECT ENGINEERING

- Please Investigate and Resolve
- Please Resolve as Follows

ADD A NOTE TO DRAWING 2165 G-107 S01 REV 3 AND S02, REV 4 TO RECLASSIFY THE MAIN STEAM AND FEEDWATER PIPE SUPPORTS, AND THE MAIN STEAM PIPING, IN THE TURBINE BUILDING. THESE ITEMS ARE TO BE NON-SEISMIC, IN ACCORDANCE WITH LETTER EB-C-14332.

RECEIVED DOCUMENT CONTROL
② APR 8 1983

Justification: THERE IS NO CODE OR REGULATORY REQUIREMENT THAT THESE ITEMS BE CLASSIFIED "SEISMIC I", AND THE CURRENT CLASSIFICATION CAUSES UN-NECESSARY INSPECTION AND DOCUMENTATION.

SHEARON HARRIS N.P.P. REGULATORY DEPT

Requested by:

George Q. White
Discipline Engineer

11/14/83
Date

Site Approval:

E. E. McIlwain 1-14-83
Senior Resident Engineer Date

CATEGORY: N

19

FCR/PW H-1145

Design Organization Approval AE NSSS NPED Only Other

Telephone Resolution Yes No

Design Organization Attachments Yes No

Approved as Recommended Rejected Conditional Approval

This change requires the following Document(s) (Specification, Drawing, SAR, etc.) to be changed

DWG 2165 G 107 501 AND 502 R/3

Comments:

DWGS 59-107501 & 502 WILL BE REVISED PER EB-C-14332, AS APPLICABLE

[Signature] Lead Engineer 2-22-83
Signature Title Date

[Signature] [Title] 2/27/83
Signature Title Date

CP&L Harris Plant Engineering Approval

HPES Attachments Yes No

Approved as Recommended Rejected Conditional Approval

[Signature] Discipline Engineer 3/2/83
Discipline Engineer Date

[Signature] MRPE or PPE 3/2/83
MRPE or PPE Date

Site Concurrence: Recommend Implementation Alternate Resolution Rejected

[Signature] 4/7/83
Senior Resident Engineer Date

Distribution:

(Original) Document Control (Copy)
(Copy) (Copy)
(Copy) (Copy)

Implementation Completed as Approved? Yes No
Comments:

Discipline Engineer Date

Final Distribution:

(Original) File in Doc. Control (Copy)
(Copy) (Copy)
(Copy) (Copy)

ORIGINAL

- Permanent Waiver
- Field Change
- Non-ASME
- ASME Sect. III Div. 1
- ASME Sect. II Div. 2

- 0
- Non-0
- Category IIA
- Nonconformance NIA
- Building TURBINE BUILDING
- Elevation ALL

RFTs NIA MS-1-3020.004 FW-1-3050.003

Isometrics NIA

Instruments NIA

Lines NIA Valves NIA

Cables NIA

List All Reference Documents (Drawings, Specs., FCR's, DCN's, Procedures, Etc.)

LETTER EB-C-14332 (ATTACHED)
DRAWING 3165G-107501 REV. 5 AND SG2 REV 4

Description
RECLASSIFICATION OF MS & FW SUPPORTS IN THE TURBINE BUILDING

Conflict / Condition

THE MAINSTREAM AND FEEDWATER PIPE SUPPORTS IN THE TURBINE BUILDING WERE CLASSIFIED AS "SEISMIC" FOR PURPOSES OF ANALYSIS, NOT BECAUSE OF SAFETY CLASSIFICATION OR REGULATORY COMMITMENT. THIS REQUIRES OCCUPATION AND TESTING WHICH IS NOT NECESSARY BUT WOULD BE MAINTAINED FOR THE LIFE OF THE PLANT.

Attachments: No Yes EXHIBIT LETTERS PAGES 3 & 4 OF 4

Recommended Action:

- Please Investigate / Resolve
- Please Resolve As Follows

ADD A NOTE TO DRAWING 3165G-107501 REV. 5 AND SG2 REV. 4 TO RECLASSIFY THE MAINSTREAM AND FEEDWATER PIPE SUPPORTS, AND THE MAINSTREAM PANG IN THE TURBINE BUILDING. THESE ITEMS ARE TO BE NON-SEISMIC IN ACCORDANCE WITH LETTER EB-C-14332 EXCEPT FOR THE FOLLOWING HANGERS: FW-H-144, 145, 200, 201, 203, 204, 205, 206, 207, 172, 86, 487. MS-H-212, 213, 214, 215, 216, 217, 219, 230, 231, 232, 233, 234, 235, 237 & 345. FEEDWATER FRAMES C-1-304 & C-1-310 WILL ALSO REMAIN SEISMIC.

Justification: CONDITION ABOVE SATISFIES CRITERIA OF SEISMIC - NONSEISMIC. NON ISOMETRICS IT-261-FW-5 AND IT-286-MS-1.

Checked By: T. CHRISCOE
Discipline Engineer
Date: 5-13-83

Site Approval: Ch. Fullin for MPT
Senior Resident Engineer
Date: 5-13-83

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FOR INFORMATION ONLY

Approved
01. MC 5/23/83

FCR APW - H - 1145 REV. 1

Organization Approval AE NSSS NPED Only Other

Phone Resolution Yes No Design Organization Attachments Yes No

Approved as Recommended Rejected Conditional Approval

change requires the following Document(s) (Specification, Drawing, SAR, Etc.) to be changed:

2165-G-107501 & 2165-G-107502

Signature	Title	Date	Signature	Title	Date
CP&L Harris Plant Engineering Approval					
HPES Attachments <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Approved as Recommended <input type="checkbox"/> Rejected <input type="checkbox"/> Conditional Approval					
Reference Documents: EBASCO LETTER EBC-14332 STRESS 120' IT-2W-FW-S REV. 5 and IT-206-MS-1 REV 6					

<u>Robert D. Harrington</u>	5-19-83	<u>JOHN J. FINE</u>	5/26/83
Discipline Engineer	Date	MHPE or PPE	Date

Concurrence: Recommend Implementation Rejected

W. J. ... Senior Resident Engineer 5/23/83

Distribution:

(Original) Document Control

(Copy) DAVID TIMBERLAKE - WELDING

(Copy) WARD MEHLER - QC

Implementation Completed As Approved? Yes No

Discipline Engineer _____ Date _____

Distribution:

(Original) File in Doc. Control

(Copy) _____

(Copy) _____

(Copy) _____

EBASCO SERVICES INCORPORATED



Two World Trade Center New York, N.Y. 10048

NOV 12 1982

EB-C- 14332
File: 5Q-H-2
5-S-11

Mr L I Loflin, Manager
Engineering - Harris Plant
Carolina Power and Light Company
P O Box 101
New Hill, North Carolina 27562

Dear Mr Loflin:

SUBJECT: SHEARON HARRIS NUCLEAR POWER PLANT
ANALYSIS OF MAIN STEAM LINES SMS2-144
THROUGH 150

Reference: CE-13476

We have reviewed your request for deletion of snubbers associated with the subject lines and wish to offer the following for your consideration.

The EB-E-241 correspondence provided a criteria for support loads which assure a satisfactory seismic design. The snubbers in question cannot be replaced with rigid restraints without thermally overstressing the pipe during plant normal operation.

It is noted that any snubbers located in the Turbine Building will be reviewed and deleted if the criteria for design of anchors at seismic/non-seismic interfaces are not violated.

Regarding the subject lines, portions of the lines inside the Turbine Building do not have to be seismically designed. As discussed with your Mr G White, the most efficient way to reflect this change is to have CP&L prepare a generic FCR which would request Ebasco to "de-classify" all MS lines/portions of lines inside the Turbine Building to B31.1, non-seismic lines. Due to the large scope of these lines (much broader than SMS2-143 through 150 as indicated in your letter) the disposition of this change through a line and valve list would be too extensive. In our opinion this generic FCR will alleviate all concerns related to the additional inspection and documentation requirements for the supports in the Turbine Building. The only exception to this generic approach are the major Main Steam lines from the interface anchor to the turbine stop valve (44" lines). The declassification of these lines will be handled through a formal revision to the line list and other design documents including the FSAR. This is highlighted in our reply to your CE 13502 letter.

Please note that the generic FCR should also cover the feedwater supports in the Turbine Building. From the inspection and documentation aspects, these supports can be handled as B31.1, non-seismic, however, the lines will not be declassified to non-seismic. This is due to the fact that the interface anchors were not designed for the seismic/non-seismic load criteria.

Please provide us with the aforementioned FCR as soon as possible.

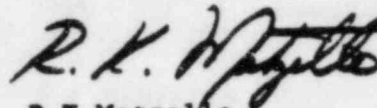
RECEIVED NOV 16 1982

FILED
7/14/74

ANALYSIS OF MAIN STEAM LINES SMS2-144
THROUGH 150.

If you have any questions, please call us.

Very truly yours,



R K Matzelle
Project Manager

PF:amb

- cc: L I Loflin
- J J Sheppard
- L H Martin
- J L Willis
- R M Parsons
- Sheldon D Smith
- G L Forehand
- N J Chiangi

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the matter of CAROLINA POWER & LIGHT CO. Et al.)
Shearon Harris Nuclear Power Plant, Unit 1)

Docket 50-400
O.L.

CERTIFICATE OF SERVICE

I hereby certify that copies of Signed and Notarized Chan Van Vo
affidavit of 11-21-84 re Feedwater Pump problem & efforts to correct it
with five (5) Exhibits attached thereto

HAVE been served this 25 day of November 1984, by deposit in
the US Mail, first-class postage prepaid, upon all parties whose
names are listed below, except those whose names are marked with

an asterisk, for whom service was accomplished by copy of unsigned
affidavit mailed out by John Runkle this date. Any party wishing

a signed copy can obtain one on request from me.

Judges James Kelley,* Glenn Bright and *James Carpenter (1 copy each)
Atomic Safety and Licensing Board
US Nuclear Regulatory Commission
Washington DC 20555

George F. Trowbridge (attorney for Applicants)
Shaw, Pittman, Potts & Trowbridge
1800 M St. NW
Washington, DC 20036

* Ruthanne G. Miller
ASLB Panel
USNRC Washington DC 20555

Office of the Executive Legal Director
Attn Dockets 50-400/401 O.L.
USNRC
Washington DC 20555

E
Plan
Only
* Spence W. Perry
FEMA Room 840
500 C St. SW
Washington DC 20740

Docketing and Service Section (3x)
Attn Dockets 50-400/401 O.L.
Office of the Secretary
USNRC
Washington DC 20555

* Dan Read
CHANGE/FLP
5707 Wavcross
Raleigh, NC 27606

John Runkle
CCNC
307 Granville Rd
Chapel Hill NC 27514

* (E plan only)
Steve Rochlms
FEMA-Suite 700
1371 Peachtree St. NE
Atlanta GA 30309

* Dr. Linda W. Little
Governor's Waste Mgt. Bd.
513 Albemarle Bldg.
325 N. Salisbury St.
Raleigh, NC 27611

* Travis Payne
Edelstein & Payne
Box 12607
Raleigh NC 27605

* Robert Gruber
Exec. Director
Public Staff
Box 991
Raleigh NC 27602

* Bradley W. Jones
USNRC Region II
101 Marietta St.
Atlanta GA 30303

* Richard Wilson, M.D.
729 Hunter St.
Apex NC 27502

Certified by

W. W. Eddleman