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11/27/84

November 24, 1984

Mr. Larry L. Robinson
Office of Investigation
U.S. Nuclear Regulatory Commission
Suite 2900
101 Marietta Street, N.W.
Atlanta, GA 30323

Dear Mr. Robinson:

Thank you for your letter on November 14, 1984 with the attached of a copy of the Transcript of the meeting with you in Raleigh, North Carolina on November 1, 1984.

After review the facts in the Transcript, in that I found large misunderstanding causes my English pronunciation. Therefore, please find the attached are 19 page of corrections for the subject meeting prepared by me.

I am also enclosing the copies of 36 pages of DDR No. 1875 for the weld deficiencies, and DR No. M-403 with the PO-h-40924 for your information.

If you need for any further information, please write to me, I will be happy to provide it.

Sincerely,

Chan Van Vo

Chan Van Vo

8508230007 850814
PDR FOIA
GUILD85-173 PDR

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CORRECTION ON PAGE 6

From line 15 to line 19.

MR. VO: Objection, I have one objection, that is NRC's Attorney Mr. Charles Barth said -- due to telephone interview with the Raleigh News and Observer "WE ARE PRESENTLY CHECKING OUT VAN VO VERY VERRYPULLY" In my opinion he would do well to check out CP&L and Daniel Construction Contractor. I don't know what kind of relation between CP&L and him made he said that.

CORRECTION ON PAGE 7

From line No 3 through line No. 5

MR. VO: No, I would like to feed back in here by giving to you my recommendations and promotions as a part of evidences.

From line No. 12 to line No 13

MR. VO: Yeah, because these recommendations and promotions will prove my performance in the past to the present in comparison with CP&L's probationary status, and the termination my job due to poor performance.

CORRECTION ON PAGE 8

From line 15 to line 17

MR. VO: Yeah, recommendations and promotions are as a part of evidences, in which I think will show that CP&L's really contradicted themselves of what they are mentioned on my probationary status.

CORRECTION ON PAGE 12

From line 16 through line 21

MR. VO: I would like to point out is that in June, 1983, refer to NRC Meeting No. 400-41-83-20 was issued on June 10, 1983, in which includes hand notes of Mr. John York, NRC's Commissioner at Harris Site. Refer to that Alex Fuller, my direct supervisor assigned me to work with the CP&L's QA Surveillance Group to perform the investigation on the seismic hangers are built at Harris site. Alex Fuller gave to me his hand note that I have concentrated on random selecting 50 hanger packages phase I and phase II completions.

CORRECTION ON PAGE 13

From line No 10 to line No 11

MR. VO: I really don't know how they can issued to the field materials reflected to the P.O. No. 21022 before and after voided. I only found these problems until july, 1983 due to perform the investigation on the seismic asbuilt hangers with the QA Surveillance Group.

CORRECTION ON PAGE 13 AND PAGE 14

From line 15 through line 22 of page 13, and
From line No. 1 to line No. 2 of page 14.

MR. VO: Mr. Alex Fuller introduced me to Mr. Buck Williams CP&L's QA engineer was Supervisor QA Surveillance Group that I have to work with them.
Refer to Mr Alex Fuller hand noted that I have to pull out from the files 50 hanger packages phase I and II to investigate. But Mr. Buck Williams didn't agreed with Alex Fuller, he asked me to pull out 50 packages are completed phase II inspection, then his people will select from there.

CORRECTION ON PAGE 14

From line No. 6 to line No. 7

MR. VO: Mr. Buck Williams and his people selected them.

From line No. 10 to line No. 11

MR. VO: By random selection they picked out 12 packages from 50.

CORRECTION ON PAGE 14 AND PAGE 15

From line No. 16 through line No 22 of page 14, and
line No. 1 of page 15.

MR. VO And then we started to investigate 12 seismic hanger packages just selected by Mr. Williams's Group. At that time my duty is responsible to help Mr. Williams's Group to identify location of each hanger, also if possible I will prevail case by case basis with QA 's inspector if the deficiencies raised up by them are not fairly.

CORRECTION ON PAGE 15

From line No 3 through line No. 10.

MR. VO: Due to the investigation, I have nothing to prevail, because any deficiencies raised up by them are properly. Finally, with the QA's deficiencies noted giving to me by Mr. Williams Group. I prepared the Office report to my management (Mr. Willett and Fuller) that contains all deficiencies I found and QA's deficiencies noted.

CORRECTION ON PAGE 15

From line No. 13 to line No 14

MR. VO: Yes, we performed investigation together. If I am not agreed with the deficiencies found by them. I will prevail with them in case by case basis.

CORRECTION ON PAGE 18

From line No. 3 through line No. 18.

MR. VO: I really don't know, sir.
Like I said before, the time they issued materials reflected on PO 21022, I wasn't in their group. At that time I was piping Associate Engineer, my duty is deal with pipe and valves installation, until April 1984 I was transferred to work with Fuller. And due to reinvestigation of the asbuilt hangers, I just found these problems in July, 1983.

CORRECTION ON PAGE 20

From line 11 to line 13

MR. VO: No, they just said void, that means they never have order materials reflect to the PO number 21022, and refer to purchasing department log book VOID meaning they don't have any record at all.

CORRECTION ON PAGE 21

From line 10 to line 18

MR. VO: When I start to work with CP&L from April 1979 to April 1982, I was piping engineer, my performance was just dealing with pipe, and valves installation, until April 1982 Mr. E.E. Willett transferred me to hanger Department to work under Mr. Alex Puller supervisory. Therefore, I don't know why, when, and who issued to the field the materials refer to the PO 21022 for the installation of permanent hangers. Because these materials have been issued back in 1980, EVENT THE P.O been voided.

CORRECTION ON PAGE 21 AND 22

MR. VO: In my opinion is that CP&L management lack of coordination and communication, therefore, who was issued the materials refer to PO 21022 to the field never check back to make sure it was existing PO or VOID P.O.

The correction above applied for line 22 of page 21, and line No. 1 through line 10 of page 22.

CORRECTION ON PAGE 23

From line No. 5 through line No. 12

MR. VO: No Sir! After finished the assignment to investigate 12 hanger packages with QA Surveillance Group, I transferred my Office report to Mr. Alex Puller and Mr. E.E. Willett, in which I pointed out the materials been issued to the field on non-existing PO. That is in the morning, Mr. Alex Puller been messed on me about my report. Then same day about 3 P.M. Mr. Alex Puller called me back in his office, he said, "You are a liar, you don't know how to do the job. He also said that he was assigned another employee down to the warehouse, and this employee found that all documentation refer to PO 21022 was existing in the warehouse.

CORRECTION ON PAGE 23

From line No. 18 through line No. 22

MR. VO: No, Sir. At that time I don't know how to answer to Mr. Alex Fuller when he called me a liar and don't know how to do the job. I only answer to Mr. Alex Fuller that is in my opinion very soon he will receive the official nonconformance report from the QA Surveillance Group supported my findings.

CORRECTION ON PAGE 29 and PAGE 30

From line No. 21 to line No. 22 of page 29, and
From line No. 1 through line No. 8 of page 30

MR. VO: To answer you, I have no confidence at all, Sir. The reason that been five years to work at Shearon Harris Nuclear Power Plant I found so many deficiencies but I never seen NRC tolerate on this subject. In comparison with NRC Region III back in 1982 when they suspended Zimmer's license due to they found that were approximately 4,200 deficiencies, in which the utility deal back and forth. Then go back to Harris site if you try to look on their non conformance log book (E.g. DDR's log book, NCR's log book, DR's log book etc..) and added them up together you will see the number should be raised up over 4,000, and beside that so many non conformances just report by issuing interoffice memorandum, its means no documentation. The question in my mind is that NRC Region II know about that subject, or they know but they ignored that. That reasons I do not trust NRC Region II performance.

CORRECTION ON PAGE 30, 31, AND 32

Page 30 from line 19 to 22, whole page 31, and line 1 ^{through line 13} ~~12~~ ^{cl} of page 32

MR. VO: I remember that I have had read the article issued by NRC back in 1981 "SPECIAL REPORT URANIUM, 1981" in which Mr. James O' Reilly said: "I am gravely concerned about shoddy construction because of its potential impact on public health and safety." That made me feel at least some NRC Officer still care about SAFETY. But reality was completely different. When CP&L started to built Shearon Harris Plant until June 1983 the QA DDR's log book has approximately 1,400 or 1,500 DDR are opened, then from June 1983 to early December 1983 the DDR number increased up to approximately 2,400 just only 6 months, beside that I don't know how many NCR, and DR been opened, also how many nonconformances just reported by issuing INTEROFFICE MEMORANDUM, its means no documentations. Also look at non existing Work Procedure WP-110 Rev. 7 and 8 with, in which over hundred Generic PCR and RCI. There are more and more generic problems with design

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control and construction appeared from the day they started to build the plant until the end of 1983. For example, in lieu of analyzing the actual as-built hangers structure of the plant for performance capability and an ability to withstand, most of pipe hangers were modified in the field with hastily drawn, and over hundreds of Generic PCR and RCI been issued to cover the as-built conditions. (Look on CP&L WP-110 rev. 7 and 8 for the installation of seismic pipe hangers).

In that case does NRC Region II conduct an honest investigation of the safety issues?

Also, after performed investigation 12 hanger packages in July, 1983, I don't know what kind of pressure CP&L put on him, and in August 1983, Mr. Vincent no more CP&L employee. Also, in early January, 1984 CP&L QC inspector, nickname is TINK, and his last name is WARD, only one month he found almost 1,000 deficiencies then CP&L removed him out of inspection job. For these reasons, how should I trust NRC Region II.

CORRECTION ON PAGE 32 AND 33

Page 32 from line No. 17 through line No. 22, and
Page 33 from line No. 01 through line No. 04.

Mr. VO: For so many reasons I have been explained to yours, I never seen any actions on NRC Region II to make an honest investigation, there was I have no confidence at all.

Also confidence on CP&L, it is no way.

I also would like to have a question is that: 50% components, and equipments been transferred from NPCD to NOD without QA documentations. Does NRC know about that? And 400 seismic instrumentation packages been hold. I don't know why they are on HOLD. Does NRC know about that? These informations are furnished to me by some freinds of my they are still on site.

CORRECTION ON PAGE 34,35,AND 36

Page 34 from line No. 13 through line No. 22,
Whole page 35, and
Page 36 from line No. 01 through line No. 13.

MR. VO: Sir! I like to point out about my personal's history is that due to VietNam war ending in April 30, 1975, for my freedom I left my country and come to United States, during that time I left behind two children, because I could not get them go with me. At that time event I do not know how to speak English, but for surviving I have to do different type of jobs, and go back to school to learn, and hope some day will get better. Then the end of 1978 I am graduated Associate Degree in Civil Engineering Technology from Fayetteville Technical Institute, then I get job offer from CP&L in March, 1984, finally I started to work with CP&L in April 10, 1979. I try very hard to be a good employee (refer to the copies of my recommendations and promotions I just gave to yours can be proved my performance.). In June, 1981 after over five years living in United States, I became American Citizenship by naturalization. I still have two children back in Viet Nam, therefore, I changed my name and hope some day I will go back to Viet Nam to rescue my kids. After April 1982 Mr. E.E. Willett and Alex Fuller started push pressure on me, therefore, I went to see Mr. McDuffy, senior construction vice president, I explained to him all about the pressure that both of Willett and Fuller pushed on me, and I cry in front of him is that I have so much misery in the past due to Viet Nam war, beside I still have two children back home, and I talk to him "If the Company don't need me no more, please lay me off. I explained to him that I still support two kids at Viet Nam, therefore, with lay off I can joint unemployment to have little money for seeking another employer. But finally no one help, all of them just try to hurt me.

CORRECTION ON PAGE 36 AND page 37

From line 16 through line 22 of page 36, and
From line 01 through line 14 of page 37

MR. VO: After five years applied with the U.S Immigrant and Naturalization for the reunion of my two children, in August, 1984 The U.S Embassy in Thai Lan return the document of my children with the request to renew the affidavit to support my children, and they said if they did not received new affidavit they will drop the case and not processed it. I did show to Mr. Robert Guild these documents. I am now unemployment, therefore, I could not completed my affidavit, and how you think about the hope of me and my two kids at home? The reason I explained to both of you my personal case, because in the PROBATION CP&L mention my family problem.

I know CP&L very powerful company in the North Carolina, but they just used they powerful to hurt people, they never know what is human and humane. I have had employeeed with them almost five years, I found that CP&L just used they powerful, and the gap of regulation to support their business by CUT-THROAT their consumers.

CORRECTION ON PAGE 40 and PAGE 41

From line 16 through line 22 of page 40, and
From line 01 through line 11 of page 41.

MR. VO: Yes Sir. Large wrong materials been used to the field. From the begining when they started to built Harris plant CP&L QA/QC's and Construction's organization lack of inspect and control the materials. At that time any materials received from different Vendors, no matter SEISMIC or NON SEISMIC they ship to the field to store together where ever they belong (e.g. like they store both SEISMIC and NON SEISMIC together in Turbine bldg, Reactor bldg., Fuel handling bldg. etc...). Also particularly Daniel's craft employees, if they made mistake due to fitting the pipe or hangers, they foreman will ask them to get their lunch box and go with him out to the gate, it means they will terminate the job.

CORRECTION ON PAGE 41 AND PAGE 42

From line No. 14 through line No. 20 of page 41, and
From line 01 through line 09 of page 42.

MR. VO: Before became Engineer with CP&L, I was pipefitter, and Plumber, with the experience of pipefitter and plumber help me to observe Daniel's craft employeeed very closely. Example: When the Daniel's hanger fitter start to fit the seismic hanger refer to Bergen Patterson design drawing, assume in the design drawing show one member is Tube steel 4"x4"x0.250 and 2'6" long to be attached into the embed, but the existing embed was recessed, therefore, the fitter need to trim off tube steel to fit, but after trim off the steel come out too short, himself he don't notify to his foreman that mistake, because with the intidation by Daniel he might lost his job. Then he try pick-up another stell same dimension lay down all around in the field no matter seismic or nonseismic, also the thickness of the material substitution by his mistake could not be identified. Therefore the traceability of material cannot identified the original sources. That case happen anywhere at Harris Site from 1979 to July 1983, due to NRC findings some non conformance on the material substitutions, then Alex Puller giving order to Daniel's craft go out to the to collect all the rest of materials back to warehouse to re-certified or up grade by stamping or marking A-36 on material, because refer to new work procedure 110 rev.9 if any steels in which they have marked A-36 are SEISMIC materials.

CORRECTION ON PAGE 42

From line 20 to line 21

MR. VO: I agreed with you that A-36 is the lower grade of steel plates, but in my understanding is that refer to 10CFR Part 50 App.B Section VII required documentary all the evidence of sources of materials, beside, I am not talking just steel base plates, how about another sources of materials like angle, tube steel or I beam. Do they are same grade?

CORRECTION ON PAGE 43

From line No. 3 through line No. 6

MR. VO: I don't know about that. I would like to say that beside steel base plate, they have up grade different materials like angle line, tube steel etc. without certification test or heat number. (that means no record of C.M.T.R) Example CP&L's DR No. M.403 issued on 8-26-83., NCR No. 84-0063, also look on the hanger RH-M-165 been finding use wrong material by NRC Commissioner Mr York back in June 1983 for your information.

CORRECTION ON PAGE 46 AND PAGE 47

From line 16 through line 22 of page 46, and line 1 of page 47.

MR. VO: After QA Surveillance Group Completed their investigation on 12 hanger packages, and issued non conformance then CP&L high level management on site issued stop work order on the seismic pipe hangers. Then they start prepared new work procedure (WP-110 rev.9) to cover their mistakes. Then under Alex Fuller supervision with T.B (Consultant Engineering) just hired on site, together they started prepare new seismic hanger packages by destroying all the inadequate CMR or inadequate inspection documentations.

CORRECTION ON PAGE 47

From line No. 4 through line No. 20

MR. VO: In November 1983 Mr. Alex Fuller give to me new assignment is that from now on I am field engineer, I have to be permanent in the field with the craft people to support them for non seismic hangers installation. That means I don't right to be in office except lunch time. Due to perform my job, my crew need some surplus material to fit-up the nonseismic hanger, therefore, I went to ware house 6 at surplus area to find the material. At that time I saw three people very closed to Alex Fuller in ware house 6. When I passed through a trash can near by surplus area I see so many paper in that can, by curiosity I picked-up few of them, finally, I found that are old CMR and hanger's sketches, then I decided to keep its.

CORRECTION ON Page 51

From line No. 1 through line line No. 5

MR. VO: All the seismic hanger packages are built from started at Harris Site refer to WP-110 Rev.0 to Rev.8 are supersided, both TB's personnel and Alex Fuller's people started change completely new package to reflect to new procedure WP-110 Rev.9. The cover of new package was hard board, it was completely different with the old is soft.

CORRECTION ON PAGE 51

From line No. 7 through line No. 10

MR. VO: Thicker Sir. Then with the new package they are discarding some inadequate documents, and some are transferred from the old package to the new one.

CORRECTION ON PAGE 51

Line 13

MR. VO: Not all Sir. They voided some of them.

CORRECTION ON PAGE 51 AND PAGE 52

From line No. 21 through line No. 22 of page 51, and
From line No. 01 through line No. 06 of page 52

MR. VO: To me they should be kept all documents due to transfer to new package event inadequate documents, because to the existing inadequate documents will help them to correct the problems. Because up to November 1983, the Harris Plant was 84% completed, which reflected to WP-110 rev. 0 through rev.8. At that time I personally found so many deficiencies containment spray hangers inside containment building near the top of the dome.

CORRECTION ON PAGE 52

From line NO. 9 to line No. 10

MR. VO: I don't know, Sir. At that time I did not see reformed inspections.

CORRECTION ON PAGE 52 AND 53

From line No. 21 to line No. 22 of page 52, and
From line No. 01 through line No. 07 of page 53

MR. VO: At that time I was Field Engineer, I never see they performed reinspections, may be they inspected different shift with me.

CONTINUED CORRECTION ON PAGE 52 AND 53

My concern was that all materials collected back from the field to the warehouse ,in which they are mixed seismic and non seismic (it includes I beam, tube steel angle line,base plate etc..).Only I hear all Alex Puller trust's employees were back and forth to marke delta 36 or A-36 on materials,because refer to new WP-110 rev.9 any materials,in which they have marked A-36 are SEISMIC materials.If you look on NCR. No. 84-0063,I thinkk you will find out why I was concerned about.

CORRECTION ON PAGE 53

From line No. 10 through line No. 15

MR. VO: I don't know.To me when they destroy some existing documents,it was violated to 10CFR part 50 App.B.The existing documents should be stay event new procedure has completely different process.May be CP&L has another procedure allow them to do that.I don't know.

CORRECTION ON PAGE 53

From line No. 18 to line No. 19

MR. VO: That's original they destroyed.I don't think they kept copy.

CORRECTION ON PAGE 56

From line No. 2 to line No 3

MR. VO: I was CP&L employee,I don't want to get trouble,at that time by curiosity I did picked-up some paper on the top of trash can.

CORRECTION ON PAGE 56

Line No. 5

MR. VO: No Sir,I didn't stay there very long.

CORRECTION ON PAGE 56 AND 57

From line No, 20 through line No. 22 of page 56,and
From line No. 01 through line No. 04 of page 57

MR. VO: Excuse me a second. Assume CP&L has proper procedure to allow them destroyed CMR.Why they didn't destroyed all of them.The reason I see they just destroyed a part and keep a part.These performance includes TB consultant on site.

CORRECTION ON PAGE 57

From line No. 6 through line No. 9

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MR. VO: They have contract with CP&L,to work with pipe hanger construction department .As far I know they job is developed and implemented how to control hanger program.

CORRECTION ON PAGE 58 AND 59

From line No. 20 through line No. 22 of page 59, and
From line No. 01 through line No. 04 of page 60.

MR. VO: I know very clear about 10 CPR part 50 App. B.
The reason I am here today to show to both of your
these evidence, and hope with your expertise in the
Nuclear Power industry, particularly NRC Investigator
you might tell me that CP&L is not violated NRC
regulation due to construct at Harris plant.

CORRECTION ON PAGE 59

From line No. 7 through line No. 9.

MR. VO: You are NRC Investigator. I think you know exactly
NRC regulation required Utilities to built a nuclear
power plant.

CORRECTION ON PAGE 59

From line No. 19 through line No. 21.

MR. VO: Here are two DDR's No 2317 and 2327 the highest No
that CP&L's QA were issued in early december 1983, then
they supersede the DDR procedure. The reason I like
to pointed out in here is that NRC Region II know until
the end of 1983 how many nonconformances were issued
at Harris Site (this includes NCR, and DR) and how
many of them are dispositioned ?

CORRECTION ON PAGE 61

From line No. 7 to line No. 13

MR. VO: The reason I am giving to your about the copies of
DDR, in which I would like to show only 6 months from
june 1983 to early December 1983 the number of DDR
increased from approx. 1,500 to approx. 2,400. Also I
like to repeated the question are that NRC know how
many non conformances have been written up, and how many
of them are dispositioned.

CORRECTION ON PAGE 62

From line No 1 to line No. 10.

MR. VO: I agreed with you the number was very significant, Sir.
But the point why CP&L been built Harris Site so many
years ago, then now they supercede DDR procedure and
changed to use different procedure by go back to lowest
number. In my opinion is that CP&L afraid to be suspen-
ded like Zimmer plant.

CORRECTION ON PAGE 62 AND PAGE 63

From line No. 20 through line No. 22 of page 62, and
From line No. 01 through line No. 04 of page 63.

MR. VO: Both me and Mr. Buck Williams (Former Mechanical QA Engineer with TVA) have read the NRC Docket No. 50-358 Construction permit No. CPPR-88 EA 82-129. ORDER IMMEDIATELY SUSPENDING CONSTRUCTION, Therefore, we know very good why NRC suspended Zimmer. Beside, Mr. Williams has strong experience and expertise about QA/QC program, and he might be proposed to his supervisor how to get away from that problem.

CORRECTION ON PAGE 63

From line No 11 to line No 12

MR. VO: That's what I think. I really don't know NRC Region II focuses on this aspect.

From line No. 15 to line No 16

MR. VO: NO, I don't think Mr. Buck Williams idea. The CP&L high level management downtown made that decision.

CORRECTION ON PAGE 63 AND 64

From line No 20 through line No. 22 of page 63, and
From line No. 1 of page 64.

MR. VO: They still writing non conformance refer to new NCR procedure, but with the new procedure the number was go back to be like 84-0001.

CORRECTION ON PAGE 64

From line No 7 through line No 13

MR. VO: Yes they are still writing nonconformance refer to new procedure. But beside that how many memorandum report the deficiencies like the one I am giving to you. Also I have one DDR # 1875 was writing on 8/17/83 with 36 pages cover about hundreds of weld deficiencies. My concern is that NRC know about that.

CORRECTION ON PAGE 74 AND page 75

From line No. 22 of page 74, and
From line No 1 through line No. 4 of page 75.

MR. VO: I really don't know how to explain to you that they are really discriminated me but no evidences nor statement. Finally in mid 1983 Mr. Ed Mc. Lean come to ask Mr. Willett is that he need me, and he would like Mr. Willett transfer me to his department. But the answer is NO.

CORRECTION ON PAGE 75 AND PAGE 76

From line No. 12 through line No. 22 of page 75, and line No. 1 of page 76.

MR. VO: Yes, Sir. That's I feel. Because I remember back in 1980, when Mr. E.E. Willett take over the Mechanical Construction Department at Harris Site. He called me into his office. He said, Chan in this Department only you and me are older. And he told me that he was a U.S. Navy CAPTAIN retired. When he told me that really make me so proud, because it is very hard to have a boss is CAPTAIN in U.S. NAVY. Because in my opinion with U.S. NAVY's traditional if someone moved up to CAPTAIN, they will have very strong experience of LEADERSHIP and well managed. For these reasons made me believe that I am lucky to be employeeed with Mr. Willett. Because I personally been trained to be respected and disciplined.

CORRECTION ON PAGE 76

From line No. 3 to line No. 5

MR. VO: After few month Mr. Willett created very good atmosphere in his department by opening a beer bash, in which will help employees under his supervision closed together. That's I think at that time.

CORRECTION ON PAGE 76 AND page 77

From line No 7 through line No 22 of page 76, and From line No 1 through line No 08 of page 77.

MR. VO: Then in early 1983 we have party at Mr. Larry Coble house about 70 miles South of Raleigh. After the party Mr. Willett ask me, Mr. Taggart, and Mr. Ed Mc Lean to play card with him. I say I don't know how to play American's card, therefore I asked Mr. Mc Lean if I win he got to let me know, and if I lose just take my money. During we play card, I don't what happen Mr. Taggart lost all his money, and Mr. Willett decided the game is over. Taggart and his wife so mad, they talk something so badly to Willett. Finally 3 A.M. the party is over, the distance from the party to Taggart's house about 70 miles, and his car was run out of gas. He asked me to borrow some money. I said I got 10 dollars left you take. Two weeks after the party Mr. Taggart and his wife be laid off, on the same day Alex Puller let Taggart know is that he will be out off his job, Puller interview another graduate student to replace Taggart.

CORRECTION ON PAGE 77 AND PAGE 78

From line No, 11 through line No 22 of page 77, and
From line No 1 to line No 2 of page 78.

MR. VO: Yes, Sir. Then two weeks later their notice, Daniel lay off Mr. Taggart and his wife. I am so impressed about this case. And I think some days they will do that on me. Therefore, I decided to see Mr. Puller and asked him: Just because personal conflict between Willett and Taggart you lay both of them off, and could you tell me when Mr. Willett and you will lay me off or terminate my job? Mr. Puller said: They are Daniel's employees, and you are CP&L's employee don't worry about that.

CORRECTION ON PAGE 78 AND PAGE 79

From line No 19 through line No 22 of page 78, and
From line No, 1 through line No 5 of page 79.

MR. VO: No, Sir. I remember back in the end of 1979, two black graduate Engineer come to interview, but they never get the job.

CORRECTION ON PAGE 79 AND PAGE 80

Line 22 of page 79 and line 1 of page 80.

MR. VO: I told Mr. Puller is that I am now looking for another job, when I found one I will let him know right away.

CORRECTION ON PAGE 83

line No 5

MR. VO: There are so many reasons, Sir.

CORRECTION ON PAGE 83 AND 84

From line No. 9 through line No. 22 of page 83, and
From line No 1 through line No. 17 of page 84.

MR. VO: No, Sir. Not for my suggestion.
I think is harrassing me for the following reasons:

- 1/ I raised up the deficiency of feedwater pump,
- 2/ May be Mr. Willett knows is that he told me before he was CAPTAIN in U.S. NAVY, but some U.S NAVY's Officer, like Mr. Ed. Mc. Lean told me he wasn't. Therefore, I think he is the shame of his story.
- 3/ I also raised up the question about personal conflict between him and Mr. Taggart.
- 4/ Before finishing my asbuilt walkdown verification program, Mr. Willett walkout from Mr. Puller office

continued next page

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he stop and say hello to me, then he found on my desk "Guidelines for system asbuilt walkdown verification inspection" he said it is very good and he asked me let him has a copy. Then I hear due to the meeting of Construction management at Harris Site, Mr. Willett was in the meeting and he suggested to use his program. Finally two months later my program is finished and I send to him a copy, same time I mailed one copy to Mr. Mc. Duffy. I think that the reason make him mad at me, and try to harass me. Also on October 30, 1984 due to seeking employer in Charlotte, I visited my former Supervisor Mr. Thomas French, Technical Manager of J.A JONES, Inc. (he was former CP&L's employee). At that time, by curiosity I am asking him: Mr. French. You are employee with CP&L about 7 years, may be you know them better than I am. Why back in 1979-80 to me that we do very good job, then CP&L started have more consultant engineering came on site to help CP&L to resolve the construction problem (like Duke Power's employees, TB, Bergen Patterson, Ebasco and etc...). Mr. French answer to me that CP&L afraid because they lack of expertise and experience in the Nuclear power construction, also poor management.

CORRECTION ON PAGE 84

Line No 22

MR. VO: They come in a resident engineering outfit as field engineers, Sir.

CORRECTION ON PAGE 85

From line No 6 through line No 15.

MR. VO: In early October 1984, due to visit two friends of my, they are presently still employees at Harris plant, they told me story about 50 % equipments and components transferred from NPCD to NOD are without QA documentations, also about 400 seismic instrumentation packages are on HOLD. Its were very strange to me, and in my mind I don't know NRC Region II know or tolerate these problems or not? Due to five years employee with CP&L I try to suggest with my supervisor different program, and hope to bring up on time the system refer to RFT should transfer to NOD on schedule.

CORRECTION ON ON PAGE 85 AND PAGE 86

From line No. 20 through line No. 22, and line 1 of page 86

MR. VO: No one listens to me, Sir. Event my suggestion is good program.

CORRECTION ON PAGE 86

From line No. 8 through line No. 12

MR. VO: After I explained with Mr Mc Duffy the condition that Mr. Willett and Fuller are harrassing me,I cry with him and I also asked to lay me off.Mr. Mc Duffy said: Chan you are a good man,go back to work and fill out the request transfer form,then I will help you.I listen to him ,go back to work and filled the form out.

CORRECTION ON PAGE 87

From line No. 5 through line No. 9

MR. VO: I don't think so.The request transfer form is just the formality.Because if different organization accept my transfer,I think they will call Willett or Fuller to have reference on me.

CORRECTION ON PAGE 89

From line No. 10 through line No 18

MR. VO: Few months later,I asked Mr. Jim Bell,he's an Electrical Project Engineer,is that he know someone at BRUNSWICK in Southport N.C,please introduce to me,I would like Transfer overthere.The reason he knew what the plan is that both Willett and Fuller intended to hurt me.By helping me ,he gave to me the memorandum from him to Mr. George Cameron to introduce me is that I am seeking to transfer to Southport.
I went down to Brunswick plant for seeking transfer, after talking with different supervisors,they said will check and call me back.Few days later I call back to check about my case,they say they don't have job opening for me.

CORRECTION ON PAGE 90

From line No. 2 to line line No.3

MR. VO: I guest so.

From line No 8 through line No 11

MR. VO: First I though was Puller,but some freinds of my they asked me.Chan do you know who turn you down.I said I don't know.They said it's Mr. Mc Duffy.

From line No,14 through line No. 19

MR. VO: Yes, they told me that,and I asked them Why? They said Mc. Duffy is construction Senior Vice President ,if he is willing to help you,you will be transferred right away.This is rational expnation to me.

CORRECTION ON PAGE 91

From line No. 6 through line No. 10.

MR. VO: I just try to show to two NRC's Investigators about the temporary Seismic-hanger procedure prepared by Jim Johnson and approved by Alex Puller to use cable to support safety piping due to RPT (that means Nuclear Power plant construction department will transfer the safety piping system in which they support by temporary cable to Nuclear Operation department Start-Up) When they call temporary support that means no QA/QC inspection nor documentation. Is that proper procedure? or non existing procedure/ Is that NRC Region II, or NRC's Commissioners at Harris Site know about that aspect?

From line No 13 to line No 17

MR. VO: It is very important subject in that I like to scan in here. Because due to lack of construction controlling and material traceability and inspection documenting, therefore, JIM Johnson created that procedure and Alex Puller approved. Who is Jim Johnson? As the information from the Daniel's Craft moved from Wolf Creek to Harris site that Jim Johnson was Daniel Engineer Supervisor in construction Mechanical Department at Wolf Creek, due to Daniel Screw that plant by same performance, therefore, The Kansas Power and Light terminated all of them. Then this Daniel organization moved to Harris Site. At that time I explained to Mr. Puller if you used this procedure is very dangerous, because if NRC find out we might be get trouble. I also let him know that Jim Johnson and Daniel performed and terminated by Kansas Power, I said If you don't believe me you can come to ask my foreman Mr. Jack Edmonds about Jim Johnson and Daniel organization at Wolf Creek.

CORRECTION ON PAGE 92

page 13

MR. VO: With the whole evidences I just show to both of you, that are not enough to help you to know who they are?

From page 14 through page 17

MR. VO: Large CP&L's employees on site know about that. He is just a braggadocio.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

CORRECTION ON PAGE 92 AND PAGE 93

From line No. 20 through line No 22 of page 92, and
From line No. 1 through line No. 7 of page 93.

MR. VO: I am not an investigator, with all evidences I am giving here aren't enough evidences to determine their competence. May be my observation is wrong. May be with the strong experience of NRC's Investigator you might be determined they are very good. In my opinion, Shearon Harris plant almost $\frac{1}{2}$ decade schedule delay, costs exorbitant and so on, is that they are enough competence? or they are competent but they plan to be that way?

CORRECTION ON PAGE 94

From line No. 6 through line No 17 of page 94.

MR. VO: If you think they are still competent people, please go back to review on the CP&L's organization chart at Harris Site from September 1981 until the present. I think you will find out who they are? what their responsibility? and where they be for comparison with the present. I think that is enough evidences to help you to know they are still competent or not.

CORRECTION ON PAGE 105

From line No. 12 through line No. 13

MR. VO: I could by using speed letter to report the deficiencies to my management. (it was Mr. Puller).

CORRECTION ON PAGE 106

From line No. 3 through line No 8

MR. VO: I was field Engineer, and the CP&L's didn't mentioned field Engineer to write up DDR or NCR.

CORRECTION ON PAGE 110

From line No 12 to line No 13

MR. VO: They signed off completion weld inspection, event there are improperly welds



2A

THE CONSERVATION COUNCIL OF NORTH CAROLINA

307 Granville Road, Chapel Hill, N.C. 27514

(919) 942-7935 or 942-1080 (24 hours)

November 25, 1984

James L. Kelley
Glenn O. Bright
Dr. James H. Carpenter
Atomic Safety and Licensing Board
Nuclear Regulatory Commission
Washington, D.C. 20555

01 NOV 28 A 8:11

RECEIVED
ATLANTA, GEORGIA

Re: Shearon Harris Nuclear Power Plant (Docket 50-400 OL)

Dear Sirs:

As requested at the hearing in Raleigh on November 15, I am supplying an affidavit in support of the Conservation Council's Contention WB-2 which addressed the "safety significance" of the feedwater pump and system.

As you will notice, the affidavit has not been signed by Mr. Van Vo. This is a draft affidavit although it is my understanding from Mr. Van Vo's attorney, Mr. Guild, that Mr. Van Vo has read and approved it. He is sending me a signed and verified original. I unfortunately will not be available next week as I have a hearing down in Jacksonville, NC. I have asked Mr. Eddleman to send copies of the signed affidavit if it is sent to my office before I return.

Attached to the draft affidavit are five exhibits which show that the feedwater system in the turbine building was classed as "Safety Class 4/Seismic Class 1" at the time of the problem in August of 1982. Part of the system was latter "de-classified," although the feedwater piping itself has apparently not been. The affidavit and exhibits supply adequate basis for the contention.

Thank you for allowing us the opportunity to submit this affidavit in support of our contention.

Sincerely,

John Runkle

John Runkle
General Counsel

Enc.

cc. Service List

Robert Guild, Attorney for Chan Van Vo

~~8411280200~~

13 pp.

A21

A21

CERTIFICATE OF SERVICE

I hereby certify that copies of the Conservation Council's Affidavit of Chan Van Vo and Exhibits were served upon the following by deposit in the U. S. Mail, postage prepaid, or by hand delivery.

James L. Kelley
Atomic Safety and Licensing Board
US Nuclear Regulatory Commission
Washington, D.C. 20555

Glenn O. Bright
same address

Dr. James H. Carpenter
same address

Docketing and Service (3 cc.)
Office of the Secretary
US Nuclear Regulatory Commission
Washington, D.C. 20555

Charles A. Barth
Office of the Executive Legal Director
US Nuclear Regulatory Commission
Washington, D.C. 20555

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Dr. Richard D. Wilson
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Apex, NC 27502

Wells Eddleman
718-A Iredell Street
Durham, NC 27705

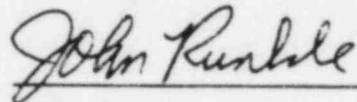
Bradley W. Jones
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PO Box 1551
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Robert Gruber
Public Staff, Utilities Commission
PO Box 991
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Dr. Linda Little
Governor's Waste Management Board
325 N. Salisbury St., Room 513
Raleigh, NC 27611

Thomas Baxter
Shaw, Pittman, Potts & Trowbridge
1800 M Street, N.W.
Washington, D.C. 20036



John Runkle
Conservation Council of NC
307 Granville Road
Chapel Hill, NC 27514

This is the 25th day of November,
1984.

A F F I D A V I T

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

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

Chan Van Vo

this ____ day of November, 1984.

NOTARY PUBLIC

WD- 2836

WORK DIRECTIVE

PIPE HANGER No. F-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. *Reviewed 7/13/87*

COMPLETED
(HANGER FOREMAN)

DATE

N/A
ACKNOWLEDGED
(C.I.)

DATE

N/A
ACKNOWLEDGED
(C.I.)

DATE

ACKNOWLEDGED
(WELDING SUPV FOR NON-Q)

DATE

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. RET-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)

DRAWINGS 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 TAKE OF SAFETY INSPECTION OR REGULATORY COMMITMENT. THIS REQUIRES DOCUMENTATION AND TESTING WHICH ARE NOT NECESSARY FOR NON-SEISMIC CONSTRUCTION OF THE PLANT.

VOID
RECEIVED
DATE 1-23-83 BY ECR-H-145 R-V

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 3 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.

Requested by:

Site Approval:

George C. White
Discipline Engineer

11/4/83
Date

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

CATEGORY 3 ✓

1 174 H-1145

Page 2 of 4

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 SOL AND SOE R/3

Comments:

DOGS 5G-107SD1 & SD2 WILL BE REVISED PER GB-C-14332
AS APPLICABLE

John L. Pigg 2-22-83
Signature Title Date

W. L. G. 2/27/83
Signature Title Date

CP&L Harris Plant Engineering Approval

HPES Attachments ☐ Yes ☒ No

☒ Approved as Recommended

☐ Rejected

☐ Conditional Approval

George Q. White 3/2/83
Discipline Engineer Date

J. L. G. 3/2/83
MHPE or PPE Date

Site Concurrence: Recommend

☒ Implementation

☐ Alternate Resolution

☐ Rejected

Mark Day 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. III Div. 2

☒ 0
Category TEA
Nonconformance N/A
Building TURBINE BUILDING
Elevation ALL

RFTs N/A MS-1-3020.004 FW-1-3050.003Isometrics N/AInstruments N/ALines N/AValves N/ACables N/A

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

LETTER EB-C-14332 (ATTACHED)

DRAWING 2165G-127501 REV. 5 AND SO2 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

EBC LETTERS PAGES 3 & 4 OF 4

Recommended Action:

- ☐ Please Investigate / Resolve
☒ Please Resolve As Follows

ADD A NOTE TO DRAWING 2165G-127501 REV. 5 AND SO2 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-1-301 & C-1-310 WILL ALSO REMAIN SEISMIC.

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

JUN 1 1983

Requested By:

J. CHISCOE
Discipline Engineer5-13-83
Date

Site Approval:

[Signature] MPT
Senior Resident Engineer5-13-83
Date

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

ments:

Signature	Title	Date	Signature	Title	Date
CPBL Harris Plant Engineering Approval					
NPES Attachments <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Approved as Recommended <input type="checkbox"/> Rejected <input type="checkbox"/> Conditional Approval					
Reference Documents: <u>EBASCO LETTER EDC-10332 STRESS 150' IT-24-FW-S REV. 5 and</u> <u>IT-286-MS-1 REV 6</u>					

Robert D. Harrington 5-11-83 5-11-83 90-11161A FME JF NERUL 5/26/83

Discipline Engineer Date MHPE or PPE Date

Concurrence: Recommend ☒ Implementation ☐ Rejected

Distribution:

Original) Document Control

Copy) DAVID TIMBERLAKE - WELDING

Copy) WARD MERLER - QC

(Copy) _____

(Copy) _____

(Copy) _____

Implementation Completed As Approved? ☐ Yes ☐ No

ments:

Discipline Engineer	Date
Distribution:	
Original) File in Doc. Control	
Copy)	(Copy)
Copy)	(Copy)
Copy)	(Copy)

EBASCO SERVICES INCORPORATED

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

NOV 12 1982

EB-C- 14332
File: 3Q-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-B-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.

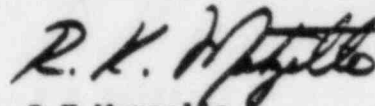
Please provide us with the aforementioned FCR as soon as possible.

NOV 15 1982

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

1	2	CTP	T.S. 8x8 x 1/4 x 2-9 1/2 L4 (ASTM A500 GR. B)	142
2	2	CTP	T.S. 6x6 x 1/4 - 8 L4 (ASTM A500 GR. B)	63
3	2	CTP	T.S. 4x4 x 1/4 x 1-10 3/4 L4 (ASTM A500 GR. B)	63
4	1	CTP	T.S. 4x4 x 1/4 x 3-2 1/2 L4 (ASTM A500 GR. B)	93
5	2	CTP	T.S. 4x4 x 1/4 x 6-9 3/4 L4 (ASTM A500 GR. B)	166
6	2	CS	R 1/4 x 7 1/2 x 0-7 3/4 L4 (SA-36)	9
7	2	CS	R 1/4 x 8 1/2 x 0-5 1/4 L4 (SA-36)	5
8	2	2010	10" RIGID ROD STRUT P-P 1-5 1/4"	51
9	2	2600	10" G 9 PIPE CLAMP	56
10	1	CTP	ES 4x4 x 1/4 x 0-8 L4 (ASTM A500 GR. B)	8
11	2	CS	SEE SNT 6	
12	2	CS	SEE SNT 5	
TOTAL WT				616

7-18-83
 1-27
 TPL 10416

INTERFERENCE CHECK

DESIGN BASE
 ON COMPUTER
 ANALYSIS

(PA/PIPE) PAINT
 BUNDLE & TAG
 TOTAL

REF. E.P. COMPOSITE DWG. C-1-315

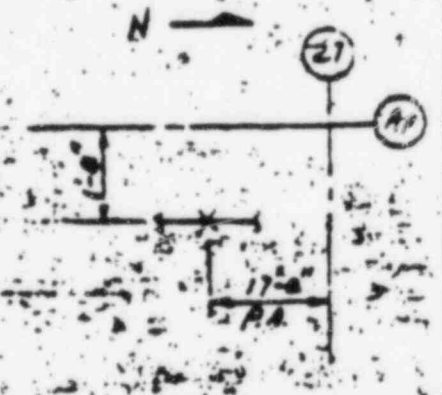
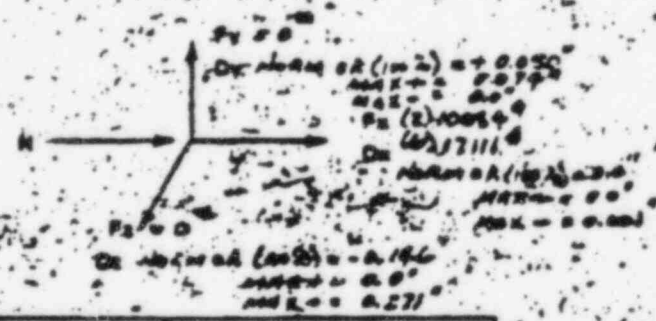
BY: RP DATE: 11-2-82

SAFETY CLASS 4
 SEISMIC CLASS I

- NOTES
- (PA) DIMENSION LOCATES PIPE ATTACH. IN DESIGN POSITION
 - (STL) DIMENSION LOCATES CENTER LINE OF STEEL ATTACHMENT

			RR-FR					
			BOF	BOF	BOF	BOF	BOF	BOF
OPERATING	WT.	LD	-101	-101				
THERMAL	T	LD	-807	-807				
VIBRATION		LD						
LOCA		LD						
8 (CORE RESPONSE)		LD	5429					
2 (SHELL RESPONSE)	WMC	LD	333	333				
2 (SHELL RESPONSE)	SSD	LD	394	628				
2 (SHELL RESPONSE)	DPO	LD	0					
2 (SHELL RESPONSE)	DSE	LD		9042				
2 (SHELL RESPONSE)	DPO	LD						
HYDRO		LD						
HANGER WGT.								
FRICTION FORCE								

*DENOTES LOADS INDICATED ARE ONE HALF OF LISTED CONDITION.



STRESS NO. 1	IX-261-FW-3	REV. 5
STRESS CALC. 1	72	REV. 10-18-82
STRESS PT. 1	1842	

LOCATION PLAN

P.O. NO. MT 436253 UNIT NO. 1
 ERASCO SERVICES INC. (CAR-EM-301)
 CAROLINA PWR. & LT. CO. - SHEARON HARRIS
 SS SS LY AL DATE 2-8-83

BERGEN-PATERSON PIPESUPPORT CORP.
 FEEDWATER
 PIPING 64-072 7/8
 STRUCTURAL 64-258 7/10
 JOB NO. 2291 HAS REL. 1273
 MAKE & DATE T-3-261-1-FW-H-11
 SHEET 1 of 6

60' 100' FOOT (BENT) L.P. OUT. 3' 9" C
 AL FOR FUEL-REVIEW BEFORE PLACING TO SHOP
 5-27-83
 2-8-83
 1-27-83