



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

FEB 06 1985

MEMORANDUM FOR: J. Vorse, Director, Office of Investigations
Region II Field Office

FROM: B. Uryc, Investigation/Allegation Coordinator

SUBJECT: HARRIS - ALLEGED CONSTRUCTION DEFICIENCIES

CASE NO: RII-84-A-0143

I have enclosed a copy of a memorandum from A. Herdt to J. Lankford, dated December 12, 1984, for your review and appropriate action. Please note that there are several issues in this document which indicate that an OI investigation is warranted regarding those issues.

I would appreciate a meeting to discuss these matters at your convenience. It would appear that these issues require some coordination relative to what your office is doing from an investigative standpoint.

The enclosure was prepared by members of the D/S staff who reviewed several documents associated with this case.

As always, your assistance and cooperation are greatly appreciated.

Bruno

Bruno Uryc

8508230039 850814
PDR FOIA
GUILD85-173 PDR

A13

A13

Shred

No. PC402-BA-ID-EE

MARTINOS, MI
LOS ANGELES, CALIFORNIA 90006, USA
Produced by: J. J. BERRY GROUP, INC.
U.S.A.

* HANGER SURPLUS MATERIAL REQUISITION FORM DTD 1-8-81
ITEM #2 TS 4"x4"x1/4" x2'-6" LG FROM 1-SW-H-200, NO TS
4"x4"x1/4" ON 1-SW-H-200
R 5"x5"x3/8" ITEM #4 FROM 1-SW-H-170, ONLY 3/8" R SUPPLIED BY SOUTH
WEST FAB ON PIPE EAR.
ITEM #5 TS 3"x3"x1/4" x2'-0" LG, FROM 1-CC-H-536, NO TS 3"x3"x1/4" ON
1-CC-H-536

SPEED LETTER FROM WAYNE HARRIS DTD 4-25-80
ITEM #6 1"x7"x9 1/2" R FROM PO #21022, PO #21022 COULD NOT
BE FOUND

** WORK DIRECTIVE #EYS WAS SIGNED AS COMPLETED, HOWEVER
DISCREP. WAS NOT CORRECTED

A110

A110

CAROLINA POWER & LIGHT COMPANY SHEARON HARRIS NUCLEAR POWER PLANT

SEISMIC HANGER INSTALLATION & INSPECTION TRAVELER

NUMBER CC-H-105 REV. NO. 3/D
 NO. 3-CC-12-10 SA 7
 LOCATION OR SPECIAL REQUIREMENTS: A 2-236-1

ACTIVITY	RESPONSIBILITY	SIGN-OFF					
		PHASE I		PHASE II		PHASE III	
		INITIAL	DATE	INITIAL	DATE	INITIAL	DATE
1 HANGER WORK PACKAGE	MECH ENGR						
2 HANGER MEMBERS	PIPING SUPT	J.R.	1-23/81	B. H. 3/10	1-23/81		
3 HANGER:							
A IDENTIFICATION PER PACKAGE	CI		1/29/81				
B ORIENTATION	CI		1/29/81				
C FIT UP (FULL PEN. WELD)	QA						
D PER STRESS ISO.	CI						
E PER SKETCH	CI						
4 HANGER MEMBERS.	PIPING SUPT	DCS, 3/10	4-13-81				
5 HANGER	PIPING SUPT						
6 COMPLETED WELDS	QA	PT, 3/10	5/13/81				
7 COPY OF TRAVELER	QA						
8 PACKAGE TO MECH ENGR.	PIPING SUPT	DCS, 3/10	4-13-81				
9 PACKAGE TO CI	MECH ENGR						
10 PACKAGE TO QA	CI						

WELD THICKNESS $\leq 1\frac{1}{2}"$ KR. 12/9/80

WELD THICKNESS = 1 1

PREHEAT VERIFIED BY Q.A. 1 1

COMMENTS

Accept window size only. George L. Barlow 3/D 12-9-81
Inspected with Prior to Inspection accepted 27 June 82
3/D George W. White

OK 3/D 12/12/81 accept

A112

A112 WHITE (WORK PACKAGE)

YELLOW (C.I.)

PINK (Q.A.)

WD- 645WORK DIRECTIVEPIPE HANGER No A-2-236-1-CC-H-105REV. 3/0

- CUT WELDS FOR TOP ① TO ② TO
OBTAIN $\frac{1}{16}$ " CLEARANCE BETWEEN THE
HANGER AND THE PIPE. THE GAP AT THE
BOTTOM OF THE PIPE AND BOTTOM ① WILL
BE CORRECTED BY SHIMMING

PAT CHRISCOE

12-20-82

A. Smith / 12-28-82
COMPLETED DATE
(HANGER FOREMAN)

P. Hanson / 12-28-82
ACKNOWLEDGED DATE
(C I.)

C. Weigh / 1-6-83
ACKNOWLEDGED DATE
(C)

N/A
ACKNOWLEDGED DATE
(WELDING SUPV FOR NON-Q)

CAROLINA POWER & LIGHT COMPANY SHEARON HARRIS NUCLEAR POWER PLANT

SEISMIC HANGER INSTALLATION & INSPECTION TRAVELER

 HANGER NUMBER CC-H-105 REV NO N/A

 LINE NO 30012-125A-1

 LOCATION OR SPECIAL REQUIREMENTS: A-2-236-1
WD-645 WPL 12-21-82
12-28-82 Met Reg # 66145-DA

ACTIVITY	RESPONSIBILITY	SIGN OFF					
		PHASE I		PHASE II		PHASE III	
		INITIAL	DATE	INITIAL	DATE	INITIAL	DATE
1 PROVIDE HANGER WORK PACKAGE	MECH ENGR						
2 FIT UP HANGER MEMBERS	HANGER SUPT	JST	3/0 12/4/82	AK	3/0 12/29/82		
3 INSPECT HANGER							
A IDENTIFICATION PER PACKAGE	CI	* JST	3/0 12-3-82	R. H. H.	3/0 12-29-82		
B LOCATION & ORIENTATION PER PACKAGE & PROCEDURE	CI	* JST	3/0 12-3-82	R. H. H.	3/0 12-29-82		
C WELDMENT FIT UP (FULL PEN WELD)	QA			N/A			
D LOCATION PER STRESS ISO	CI						
E GEOMETRY PER SKETCH	CI			R. H. H.	3/0 12-22-82		
4 WELD OUT MEMBERS A PRIMARY	HANGER SUPT	JST	3/0 12/4/82				
B SECONDARY	HANGER SUPT			QAB	3/0 3-23-83		
5 INSPECT COMPLETED WELDS	QA	ALT	3/0 12/8/82		3/0 5/6/83		
6 PULL COPY OF TRAVELER	QA			N/A			
7 RETURN PACKAGE TO MECH ENGR	HANGER SUPT	JST	3/0 12/3/82	CHB	3/0 5/9/83		
8 SUBMIT PACKAGE TO CI	MECH ENGR						
9 SUBMIT PACKAGE TO QA	CI						

 EMBED THICKNESS $\leq 1\frac{1}{2}$ " AK 12/21/82

 EMBED THICKNESS = 1 1

 PREHEAT VERIFIED BY QA 1 1

COMMENTS

C.I.1 (* Number of signature for previous traveler)

Q.A.1 Noted ALT 12-2-82

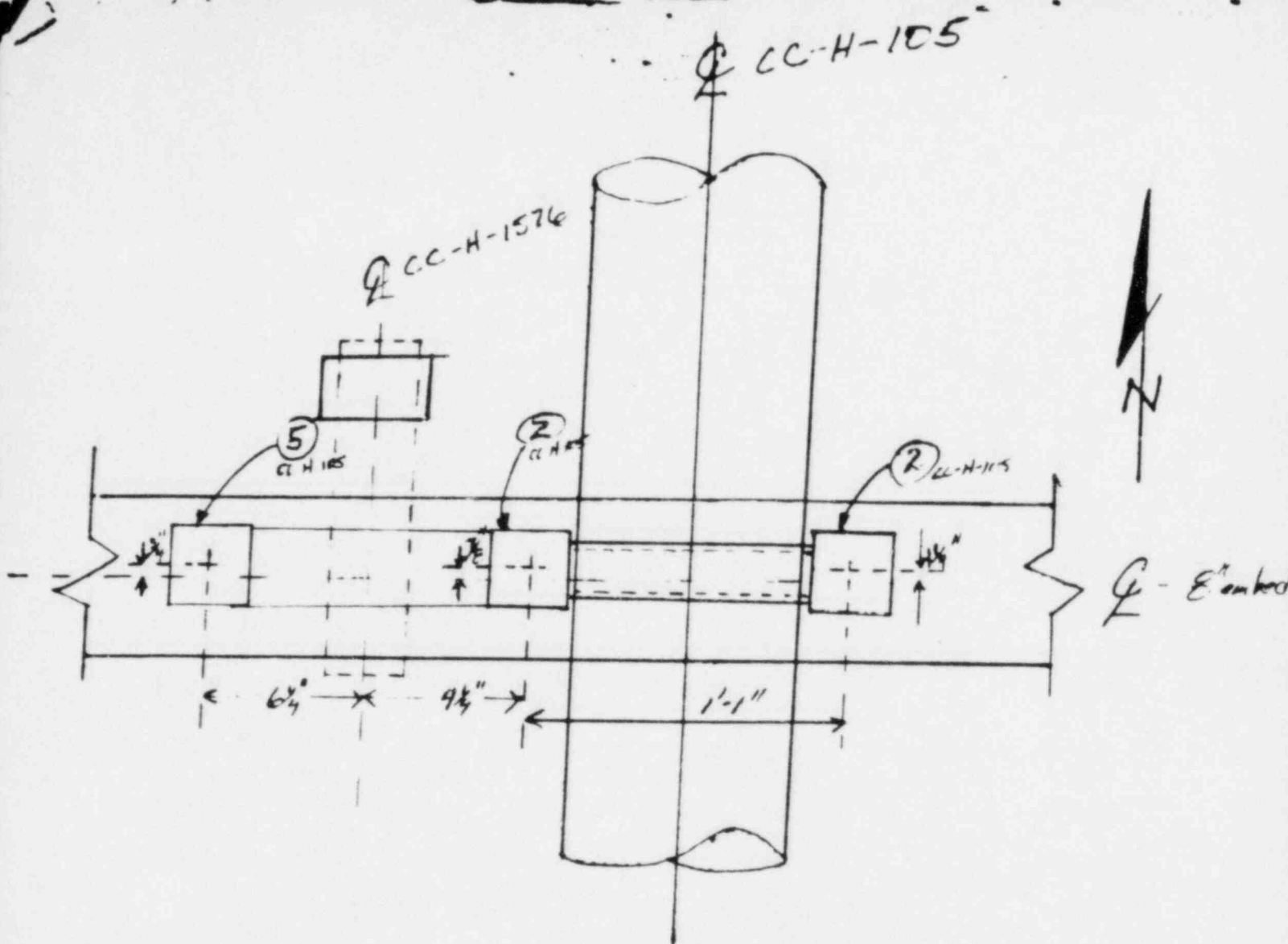
Reinspection Completed 12-21-82

Top #1 to East #2 - no gap, Top #1 to West #2 - $\frac{1}{16}$ " on South & Bottom sides. R. H. H. 12-28-82

Noted to 3/0 DNB 12/83

A114

A114



Plan @ E/u. 236'

Attachment to Exhibit 7 *[Signature]* 12-77-82

SEISMIC WELD DATA REPORT (PROCEDURE CQC-19)

PAGE 1 OF 1

I LINE NEER R MAN	1. UNIT 1	2. BUILDING RAB	3. ELEV 236	4. LOCATION ZONE 2	5. COMPONENT / HANGER ID CC-H-105						
	6. DRAWING(S), REV & SHEET NOS 3/1 A.W.I.			7. WELD PROCEDURE(S) & REV NO'S 7018	8. WELD METAL TYPE S 26	9. WELDER SYMBOLS S 26					
	DISCIPLINE ENGINEER DATE 5/18/81			WELDING ENGR / FOREMAN DATE 3-24-81							
II LOADING QA	ALL ITEMS	1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION WELDS. 2. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES. 3. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS. 4. INFORM QA FOR HOLD POINTS (H) & FINAL WELD INSPECTION.									
		FOREMAN ACCEPT <input checked="" type="checkbox"/> REJECT <input type="checkbox"/> DATE 2/13/81 NCR NO									
II LOADING QA	ALL ITEMS	1. WELD TYPES & CONFIGURATION CHECKED WITH DRAWINGS & COMPONENT/HANGER. 2. WELDER QUALIFICATION									
		ACCEPT <input checked="" type="checkbox"/> REJECT <input type="checkbox"/> 3. MATERIAL STATUS ACCEPT <input checked="" type="checkbox"/> HOLD <input type="checkbox"/> NCR NO INSP INT'L DATE 12/12/81									
II LOADING QA	ALL WELD JOINT	* JOINT IDENTIFICATION OR DESCRIPTION & QTY OF WELDS PREHEAT FINAL LAYER VT MT/PT RT UT PWHT VAC BOX H A R H A R H A R H A R H A R H A R 3/1 3/1 NEW RECORDS FOR 4E									
		INSPECTOR'S INITIALS DATE 12/12/81 WELDED INSP									
II LOADING QA	FIT-UP INSPECTION FP WELDS MANDATORY FILLET'S OPTIONAL	* JOINT IDENTIFICATION FIT-UP H A R DESCRIPTION OF DEFICIENCIES & REPAIR OR REWORK									
		INSPECTOR'S INITIALS RELEASED FOR ROOT/WELDOUT (DATE)									
II LOADING QA	FIT-UP INSPECTION FP WELDS MANDATORY FILLET'S OPTIONAL	* JOINT IDENTIFICATION FIT-UP H A R DESCRIPTION OF DEFICIENCIES & REPAIR OR REWORK									
		INSPECTOR'S INITIALS RELEASED FOR WELDOUT (DATE)									

WE USE QA-34A FORM TO TEST ADDITIONAL WELDS.
QA INSPECTION & HOLD POINTS VERIFIED BY:

LEGEND:

- A = ACCEPT
- H = HOLDPOINT
- R = REJECT
- FP = FULL PENETRATION
- NA = NOT APPLICABLE
- T = TEMPERATURE
- D = °F

QA SPECIALIST

COPY 2

DATE

A116

(SEE REVERSE SIDE FOR INSTRUCTIONS)

SEISMIC I WELD DATA REPORT
CONTINUATION SHEET

com [unclear] 11/08/01

copy of white SDR
5 COMPONENT/HANGER ID

T	2 BUILDING	3. ELEV.	4. LOCATION	5 COMPONENT/HANGER ID										DESCRIPTION OF DEFICIENCY REPAIR OR REWORK NCR/DDR, ETC.							
				WELDER SYMBOL(S)		PRE-HEAT/FIT-UP		ROOT NDE		VT		MT/PT			RT		UT		VAC BOX		PWHT INITIALS
WELD ID OR DESCRIPTION TY OF WELDS		H		TEMP		H		A		R		H		A		R		H		A	
	RAB	236	ZONE 2																		
him plate to bottom				E-53																	
UL REPAIR of FIELD				E-53																	
TOP P.C. 1 To P.C. 2				E-58																	
SMH To Bot. P.C. 1				E-58																	
PHASE 2 COMPLETE																					
A116																					

A116

A116

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(PROCEDURE CQC-19)

1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION	9/16/82	QC N-105	WELDED BY: <u>ETD/B</u>
2. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES			
3. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS			
4. INFORM QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION			

JOINT I.D. OR DESCRIP. QTY. OF WELDS		WELDER SYMBOL(S)	PREHEAT	FITUP	ROOT NDE		FINAL NDE										PWHT	WSP INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC							
			H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	VAC BOX				
All Field W. 125		ST-16																									
All Shop W. 125		Shop																									
Top Pl. 1 to East Pl. 2		ST-16																									
Side, E. Weld		ST-16																									
Shim Plate to Bot. Pl. 1		ST-16																									
E. Side E. Weld		ST-16																									
Shim Plate to Bot. Pl. 1		ST-16																									
E. Side W. Weld		ST-16																									
Shim Plate to Bot. Pl. 1		ST-16																									
All other Field welds		ST-16																									
Shim plate to bottom Pl.		ST-16																									
Top Pl. 1 to West Pl. 2		ST-16																									
Top Pl. 1 to East Pl. 2		ST-16																									

LEGEND H = HOLDPOINT

417

REMARKS: #1 Per WDR on 12-2-83
Ta 4 R 5 + ST-16 is verified
Done 1-21-83

ONLY

MISSING LINES
VS FILE COPY W-PA-11-28-81

* USE QA-34A TO LIST ADDITIONAL WELDS

AS CONSTRUCTED DOCUMENTATIONS CC-H 105

NOTE INSPECTOR SHALL INITIAL, DATE & ENTER REVISION WHEN VERIFYING OR ENTERING INFORMATION ON THIS SHEET

GENERIC FCR's

GEOMETRY

All geometry measurements over $\frac{1}{8}$ " from design are shown on hanger sketch CC-4-105 E. *R. Henson* 12-29-82
NO RECORD OF DISCREPANCIES / AS-BUILT

EMBEDS

See Sect BB sheet 2 of 2 of hanger sketch CC-H-105 ^{Rev 10}
See attached sheet. *R. Henson* 12-29-82
NO RECORD OF DISCREPANCIES / AS-BUILT

PIN TO PIN DIMENSIONS

MATERIAL SUBSTITUTION

A118

A118

CONSTRUCTION MATERIAL REQUISITION

SHNPP

EXHIBIT
AP XIII-02

Material Requisition No 090662

Requisitioner

Craft/Crew No CARR

Need Date

Area Supt

P.O. #

Drop Zone

Intended Use

A-1-216-1-SW-H-2796 Rev 2/c Seismic

Date Req Rec at Warehouse

Time

Rec'd By

Material Located and Tagged By

Date Req Rec at Staging

Time

Rec'd By

Date Matl. Dropped

Time

Rec'd By

QUANTITY	DESCRIPTION OF MATERIAL & TAG NUMBER	P.O. #	Q/C
1 (*)	T.S. 3" x 3" x 1/4" x 1'-8" Lg.	44094	
1 (*)	T.S. 3" x 3" x 1/4" x 9" Lg.	44094	
2 (*)	R 2 3/4" x 2 3/4" x 1/4"	44094	
2 (*)	R 3 3/4" x 3 3/4" x 1/4"	44094	
1 (*)	T.S. 4" x 4" x 1/4" x 3'-7" Lg.	44094	
(*) Bergen - Paterson Rev. 2/c			

AUTHORITY

ISSUED

NAME AND BADGE NO

FOREMAN OR SUPT.

WAREHOUSEMAN

ORIGINAL WAREHOUSE

SHNPP

Material Requisition No 77012

Area Supt _____

Requisitioner: _____

P.O. # _____

Craft/Crew No M. Graw

Drop Zone _____

Need Date.

Intended Use C-1-256-1-CS-A-425-NO. 251 Aluminum

Date Req. Rec. at Warehouse _____ Time _____ Rec'd By _____

Material Located and Tagged By: _____

Date Req. Rec. at Staging _____ Time _____ Rec'd By _____

Date Matl. Dropped _____ Time _____ Rec'd By _____

[illegible]RECEIVED *M. S. 6684* AUTHORITY

ISSUED

NAME AND BADGE NO.

FOREMAN OR SUPT

WAREHOUSEMAN

A120

A120

ORIGINAL WAREHOUSE

APF C13

Rev 1

3-23-82

CAROLINA POWER & LIGHT CO.

CONSTRUCTION MATERIAL REQUISITION

3-31-83

E. Hubert
AF XIII

SHNPP

Area Supt

Material Requisition No

087229

P.O. #

Requisitioner

Craft/Crew No

Edwards

Drop Zone

Need Date:

Intended Use

T-1-261-1-FW-H-136 Rev-553 Seismic

Date Req. Rec. at Warehouse

Time

Rec'd By

Material Located and Tagged By:

Date Req. Rec. at Staging

Time

Rec'd By

Date Matl. Dropped

Time

Rec'd By

QUANTITY

DESCRIPTION OF MATERIAL & TAG NUMBER

P.O. #

Q/C

1(E) PL 5/8" X 14" X 1 1/2" I Item # 435076

RECEIVED

AUTHORITY

ISSUED

NAME AND BADGE NO

FOREMAN OR SUPT

WAREHOUSE MAN

A121

A121

ORIGINAL WAREHOUSE

1111-08

124681

Requisitioner:

Craft/Crew No.

Need Date

Zone

ided Use

Req Rec. at Warehouse

Time

Rec'd By

erial Located and Tagged By:

Time

Rec'd By

e Req Rec. at Staging

Time

Rec'd By

e Matl. Dropped

Time

Rec'd By

LIVED

AUTHORITY


See 44-803

A122

ORIGINAL WAREHOUSE

Good 66-235
WAREHOUSEMAN

A122

2021		NONCONFORMANCE REPORT (NCR)		CCAD	
PART 1				CORP. Q.A. DEPT	
① NCR NO.: 84-0063	② PLANT-UNIT: SMPP-1	③ CLASS: <input checked="" type="checkbox"/> 26 <input type="checkbox"/> FPC <input type="checkbox"/> RWG <input type="checkbox"/> FSC <input type="checkbox"/> RSQ <input type="checkbox"/> SDQ <input type="checkbox"/> ASME CLASS <input type="checkbox"/> NON-CLASS <input type="checkbox"/>			
④ DESCRIPTION OF ITEM/ACTIVITY AND LOCATION IN PLANT: Material Traceability Pipe Fab Shop			⑤ QUANTITY: 20'		
⑥ SERIAL/HEAT/OTHER/ID NO.: Mt-434330			⑦ SYSTEM AFFECTED: N/A		
⑧ P.Q. NO.: 464141		⑨ SUPPLIER/MFR: N/A			
⑩ DOCUMENT(S) VIOLATED (SPEC/DWG/PROCT/OTHER): CCL-6 App 2 Sect 9.1.2 + CCI-6.3 App 3 Sect 5.1					
⑪ NONCONFORMING CONDITION DETAILS: NO. HOLD TAGS APPLIED: 1					
Documentation for PO-464141 Mt-434330 cannot be confirmed by QA Records. Item has been stamped with A36.					
					
INITIATING GROUP: <input type="checkbox"/> QA <input checked="" type="checkbox"/> QC <input type="checkbox"/> CI <input type="checkbox"/> OTHER					
NCR INITIATED BY: <u>[Signature]</u>				DATE: <u>1/11/84</u>	
⑫ REVIEW COMMENTS: ITEM QUALITY: <input type="checkbox"/> UNACCEPTABLE <input checked="" type="checkbox"/> INDETERMINATE <input type="checkbox"/> UNAFFECTED		NONCONFORMANCE CONFIRMED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
NCR REVIEWED BY: <u>[Signature]</u>				DATE: <u>1-17-84</u>	
⑬ CRITERION: 3d 7F		⑭ EVAL PHASE: <input type="checkbox"/> ENG <input checked="" type="checkbox"/> CONST. <input type="checkbox"/> START-UP <input type="checkbox"/> OPER. <input type="checkbox"/> OTHER			
⑮ REPORTABILITY: <input type="checkbox"/> FURTHER EVALUATION REQUIRED <input checked="" type="checkbox"/> NOT REPORTABLE PER PARAGRAPH 3.3.12					
⑯ MCR EVALUATED BY: <u>[Signature]</u>		DATE: <u>1-17-84</u>		⑰ PRT/MOD/FILE NO.: <u>N/A</u> A123	

3-21**NONCONFORMANCE REPORT (NCR)****COAD**
CORP. QA. DEPT

PART 2

(18) NCR NO. 84-0063	(19) RESPONSIBLE ORGANIZATION QA/QC	(20) ISSUED TO: M. UERDON	(21) PART 3 REQ'D <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
(22) TITLE: MATERIAL TRACEABILITY FIVE STAR SHOP		(23) DUE DATE: N/A	(24) EXTENSION(S): N/A

(25) DISPOSITION: _____ REPORTED CONDITION WAS GENERIC: ☐ YES ☐ NO

☐ REPAIR ☐ REWORK ☐ REJECT (RETURN TO VENDOR) ☐ REJECT (SCRAP) ☐ ACCEPT AS IS ☐ OTHER

(DESCRIBE BELOW)

(26) LIST APPLICABLE CODE CASE _____

DISPOSITION: ☐ FULL ☐ PARTIAL

SUBMITTED BY _____

DATE _____

(27) DISPOSITION EVALUATION COMMENTS:

ACCEPTED BY _____

DATE _____

(28) DISPOSITION VERIFICATION, REVIEW & CONCURRENCE COMMENTS:

HOLD TAGS REMOVED: ☐

(29) VERIFIED BY: _____ DATE: _____

(30) REVIEWED BY: _____ DATE: **A123**

(31) ANI CONCURRENCE BY: _____ DATE: _____

(32) FINAL REVIEW BY: _____ DATE: _____

A123

SP-31

NONCONFORMANCE REPORT (NCR)

CQAD

PART 3

CORP. Q.A. DEPT

(32) NCR NO.:
54063(34) RESPONSIBLE ORGANIZATION:
GA/OC(35) ISSUED TO:
M. Davis(36) TITLE:
material availability - Pipe sub 3A

(37) SYNOPSIS OF NONCONFORMANCE (CHECK ONE OR MORE BLOCKS):

- ☐ A DEFICIENCY EXISTS IN A REQUIRED QUALITY CHARACTERISTIC
☐ A DEFICIENCY EXISTS IN THE REQUIRED DOCUMENTATION
☐ A DEFICIENCY EXISTS IN PROCEDURE:
 ☐ CONTENT
 ☐ IMPLEMENTATION
☐ OTHER

(38) CAUSE OF NONCONFORMANCE (ITEMIZE FROM SYNOPSIS):

(39) PREVENTIVE MEASURES (ITEMIZE FROM CAUSE, LIST COMPLETION DATES, ATTACH SUPPORTING DOCUMENTATION):

RECOMMENDED BY

DATE

APPROVED BY

DATE

(40) CAUSE AND PREVENTIVE MEASURES EVALUATION COMMENTS:

ACCEPTED BY

DATE

(41) CAUSE AND PREVENTIVE MEASURES VERIFICATION, REVIEW & CONCURRENCE COMMENTS:

(42) VERIFIED BY:

DATE:

(43) REVIEWED BY:

DATE:

A123

(44) ANI CONCURRENCE BY:

DATE:

(45) FINAL REVIEW BY:

DATE:

A123

QA-1
9/23/83
Rev. 12

CAROLINA POWER & LIGHT COMPANY
CORPORATE QUALITY ASSURANCE DEPARTMENT
DEFICIENCY AND DISPOSITION REPORT
(Procedure CQC-2)

DCU 38
DDR No. 231
Page 1 of 1
RFT No. 1.2.170.0
2.1.3453.

Item/Activity Name or Description	Shop Order	Code Class	Quantity	Unit	Quality Assurance (PO & Item No.)
HVAC Flexible Connectors	Na	Seismic I	2	1	QA-NPCD-82-
Serial, Heat or Other Identification No.	Supplier or Manufacturer		Type of Procurement		
See Details Below	Pulman Construction Ind. Chicago, Ill.		<input checked="" type="checkbox"/> CP&L <input type="checkbox"/> Transfer <input type="checkbox"/> A-E PO <input type="checkbox"/> NSSS PO		
Violation (Specification, Drawing, Procedure or Other)	NCR No.	Reporting Inspector/Sign.			
CAR-SH-BED-4A Rev-3	Na	Tom Palladini 11-2			
Efficiency Details:					

- 1) PCI 504 501 pc # 2909 - One of the bolts which attaches the rubber material to the flange has a washer and nut missing from it.
- 2) PCI 501 sheet pc # 4738 - There is a hole worn through the inside layer of rubber in the corner of the connector. The hole is one inch long and varies 1/8" to 1/4" in width.

DDR Evaluation			
<input checked="" type="checkbox"/>	Construction Phase		
<input checked="" type="checkbox"/>	Engineering Phase		
<input checked="" type="checkbox"/>	QA Program Violation		
<input checked="" type="checkbox"/>	Specification Deviation		
<input checked="" type="checkbox"/>	Procedural Deviation		
<input checked="" type="checkbox"/>	Unacceptable Workmanship		
<input checked="" type="checkbox"/>	Damage/Defect		
<input type="checkbox"/>	Other		
<input type="checkbox"/>	Not Reportable		
	Site	QA	HPES
	QA/QC	Engr.	
Eval. By -			
Date			

*Under Evaluation by HPES

CW Chavis Jr.
QA/QC Specialist/Engineer

11-2
Date

2 Hold tags applied

Final Disposition: Hold Tags Removed ☐

Remarks:

Accepted By: _____
QA/QC Specialist/Engineer

Verified By: _____
QA/QC Inspector

Reviewed By: _____
QA/QC Specialist/Engineer

Distribution:

- Orig: Director - QA/QC SHNPP
cc Proj. Gen. Mgr./Sr. Res. Engr.
Gen. Mgr. (SU/Operations)
Initiating QA/QC Specialist
Accounting
Mgr. - QA/QC - Harris Plant
☐ Mgr. HPES
☐ Start-Up
☐ NSSS Site Rep
☐ ANI

ANI Concurrence (ASME Code Section III Items Only)

Authorized Nuclear Inspector

Report Closed:

Director - QA/QC - Harris Plant

A124

CP&L <small>Construction Products & Labor</small>		NONCONFORMANCE REPORT (NCR) PART 1		CQAD CORP. Q.A. DEPT	
① NCR NO.: ② PLANT-UNIT: ③		④		⑤	
④ DESCRIPTION OF ITEM/ACTIVITY AND LOCATION IN PLANT: HVAC DUCT FABRICATION/INSPECTION				⑥ QUANTITY: N/A	
⑧ SERIAL/HEAT/OTHER/ID NO.: SEE DETAILS				⑦ SYSTEM AFFECTED: N/A	
⑧ P.O. NO./CONTRACT #: NPCD-82-021		⑨ SUPPLIER/MFR.: PULLMAN CONSTRUCTION COMPANY			
⑩ DOCUMENT(S) VIOLATED (SPEC, DWG, PROC, TS, OTHER): CAR-SH-BE04A, R3; CONTRACT # NPCD-82-021					
⑪ NONCONFORMING CONDITION DETAILS: NO. HOLD TAGS APPLIED: <u>1</u> 1) CHANGES TO THE CONTRACTUALLY IMPOSED EPASCO DESIGN ARE BEING INCORPORATED THROUGH THE USE OF THE PULLMAN DUCT CONSTRUCTION MANUAL WITHOUT FIRST FOLLOWING PRESCRIBED DESIGN CHANGE PROCESSES (FCR/PW/DCN). EXAMPLES ARE AS FOLLOWS FOR PEEK MARK 6501502, 4005 (SHT 2046): A) A TIE ROD WAS PROVIDED AT ONE END (9" x 2") IN USE OF BOTH ENDS AS REQUIRED BY FCR-HVAC-304. B) TRANSVERSE REINFORCING WAS NOT PROVIDED AS ALLOWED WITH FCR-HVAC-304 (SEE ATTACHMENT 5). C) NOT ALL TUBULAR STAINLESS STEEL WERE PROVIDED AS REQUIRED BY FCR-HVAC-264 TABLE 5, BE04A. 2) THE DUCT REFERRED IN ITEM 1) ACCEPTED BY CPEL VQA ON RELEASE DATED 8/11/83 DID NOT MEET EPASCO DESIGN IN EFFECT AT THE TIME OF ACCEPTANCE. 3) PULLMAN FABRICATION PER THE DUCT CONST. MANUAL AND VQA ACCEPTANCE OF THE DUCT (REFERRED IN ITEM 1)) OCCURRED PRIOR TO CP&L APPROVAL OF THE APPLICABLE SHEET AS-18, REV C, OF THE DUCT CONSTRUCTIONS MANUAL SPECIFYING THE ALTERNATE METHOD. VQA IS TO RESPOND TO 2&3; HPES IS TO RESPOND TO 1&3					
INITIATING GROUP: <input checked="" type="checkbox"/> QA <input type="checkbox"/> QC <input type="checkbox"/> CI <i>BAH</i>		NCR INITIATED BY: <u><i>D. A. Hitchcock</i></u> 12/20/83 DATE			
⑫ REVIEW COMMENTS: ITEM QUALITY: <input checked="" type="checkbox"/> UNACCEPTABLE <input type="checkbox"/> INDETERMINATE <input type="checkbox"/> UNAFFECTED		NONCONFORMANCE CONFIRMED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NGR REVIEWED BY: <u><i>A. J. [Signature]</i></u> 1-6-84 DATE			
⑬ CRITERION: 6a3L		⑭ EVAL PHASE: <input checked="" type="checkbox"/> ENG <input type="checkbox"/> CONST. <input type="checkbox"/> START-UP <input type="checkbox"/> OPER. <input type="checkbox"/> OTHER			
⑮ REPORTABILITY: <input checked="" type="checkbox"/> FURTHER EVALUATION REQUIRED <input type="checkbox"/> NOT REPORTABLE PER PARAGRAPH					
⑯ NCR EVALUATED BY: <u><i>[Signature]</i></u>		DATE: 1-6-84		⑰ RFT/MOD/FILE NO.: A125	

A125

SP31

NONCONFORMANCE REPORT (NCR)

PART 2

CQAD
CORP. Q.A. DEPT

(18) NCR NO.: 85 132 (19) RESPONSIBLE ORGANIZATION: HIES (20) ISSUED TO: LILCFUN (21) PART 3 REC'D ☒ YES ☐ NO

(22) TITLE: HVAC DUCT FABRICATION/INSPECTION (23) DUE DATE: (24) EXTENSION(S):

(25) DISPOSITION: REPORTED CONDITION WAS GENERIC: ☐ YES ☐ NO
☐ REPAIR ☐ REWORK ☐ REJECT (RETURN TO VENDOR) ☐ REJECT (SCRAP) ☐ ACCEPT AS IS ☐ OTHER
 (DESCRIBE BELOW)

(26) LIST APPLICABLE CODE CASE _____
 DISPOSITION: ☐ FULL ☐ PARTIAL

SUBMITTED BY

DATE

(27) DISPOSITION EVALUATION COMMENTS:

ACCEPTED BY

DATE

(28) DISPOSITION VERIFICATION, REVIEW & CONCURRENCE COMMENTS:

A125

HOLD TAGS REMOVED: ☐

A125

(29) VERIFIED BY:

DATE:

(30) REVIEWED BY:

DATE:

(31) ANI CONCURRENCE BY:

DATE:

(32) FINAL REVIEW BY:

DATE:

SP-21

NONCONFORMANCE REPORT (NCR)
PART 3CQAD
CORP. Q.A. DEPT

33 NCR NO.: 83-152 34 RESPONSIBLE ORGANIZATION: HPES 35 ISSUED TO: LI UFLIN

36 TITLE: HVAC DUCT FABRICATION/INSPECTION

37 SYNOPSIS OF NONCONFORMANCE (CHECK ONE OR MORE BLOCKS):

☐ A DEFICIENCY EXISTS IN A REQUIRED QUALITY CHARACTERISTIC

☐ A DEFICIENCY EXISTS IN THE REQUIRED DOCUMENTATION

☐ A DEFICIENCY EXISTS IN PROCEDURE:

☐ 1 CONTENT

☐ 2 IMPLEMENTATION

☐ OTHER:

38 CAUSE OF NONCONFORMANCE (ITEMIZE FROM SYNOPSIS):

39 PREVENTIVE MEASURES (ITEMIZE FROM CAUSE, LIST COMPLETION DATES, ATTACH SUPPORTING DOCUMENTATION):

RECOMMENDED BY _____ DATE _____ APPROVED BY _____ DATE _____

40 CAUSE AND PREVENTIVE MEASURES EVALUATION COMMENTS:

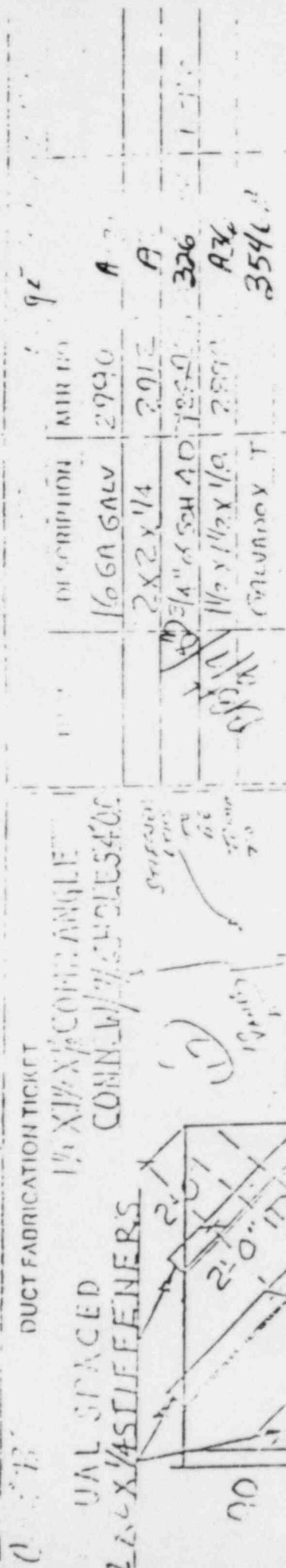
ACCEPTED BY _____ DATE _____

41 CAUSE AND PREVENTIVE MEASURES VERIFICATION, REVIEW & CONCURRENCE COMMENTS:

A125

42 VERIFIED BY: _____ DATE: _____ 43 REVIEWED BY: _____ DATE: _____

44 AND CONCURRENCE BY: _____ DATE: _____ 45 FINAL REVIEW BY: _____ DATE: _____



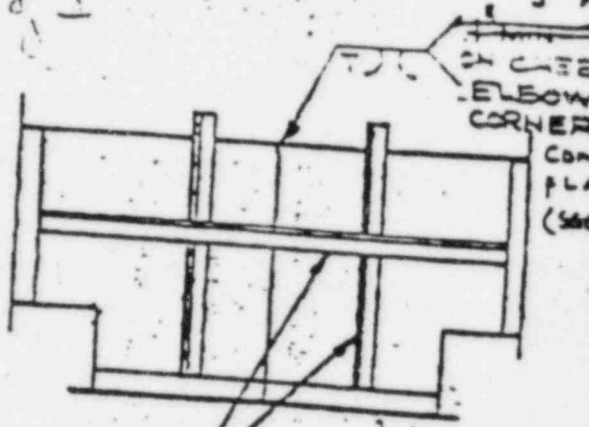
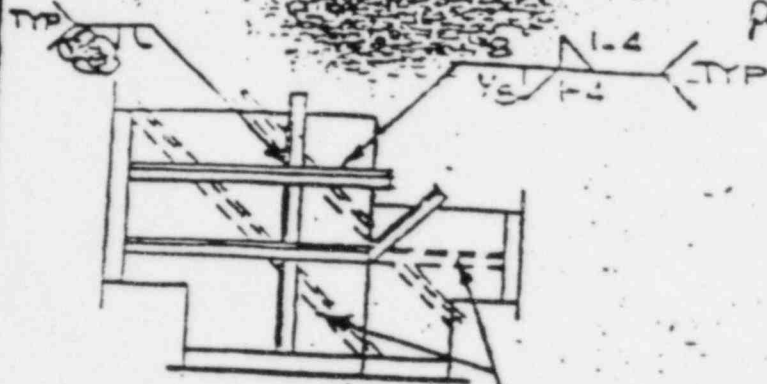
WELDER		DATE	WELDING PROCEDURE NO.	REV NO.	TYPE	SIZE	PRICE
PS	7/4/83	7/4/83	SH-SWP-305A-1		E-9018	1/2	2460
PS	7/6/83	7/6/83	" -305-3		"	"	"
PS	7/6/83	7/6/83	" -301-1		E-9018	1/2	2460
PS	7-31-83	7-31-83	" 305A-1		E-9018	1/2	2460
PS	7-7-83	7-7-83	" -300A-3		ER70S-3	1/2	2460
PS	7-27-83	7-27-83	" -300A-4		"	"	"
PS	7-11-83	7-11-83	" -300-11		"	"	"
WELDER		DATE	WELDING PROCEDURE NO.	REV NO.	TYPE	SIZE	PRICE
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WELDING							
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NESTED FITTINGS

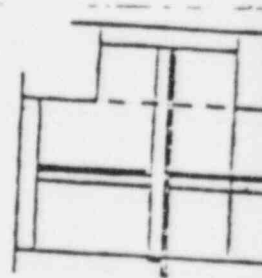
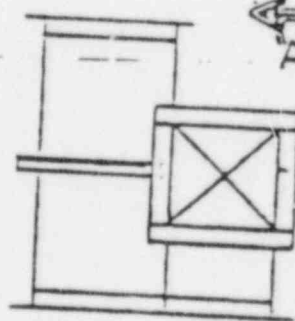
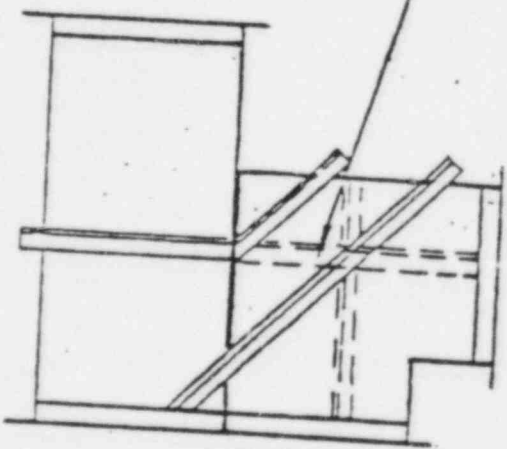
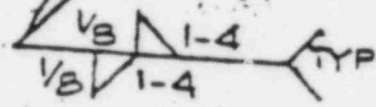
NR 83-132

Page 2 of 2

TYP. OF ALL FITTINGS



ANGLE CONFIGURATION IS ACCEPTABLE PROVIDED MAX. PANEL SIZES ARE WITHIN LIMITS GIVEN IN 1S, 2S, ETC. ALTERNATE



APPROVED AS PER CPCL 1S SIZE 12" X 3" CLS



SECTION 'A-A'

NOTE:

1. FOR THE REQUIRED AMOUNT, SIZE, & SPACING OF STIFFENERS, REFER TO 1S, 2S, 3S, 7S, & 8S.

2. ORIENTATION OF ANGLE LEG IS OPTIONAL.

3. WHERE 'T' SPECIFIES WELD SIZE, WELD NEED NOT EXCEED

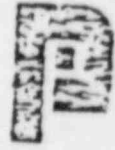
THICKNESS OF THINNER PART BEING JOINED.

NOTES ON PAGES 11 & 145 - 148 & 149 - ARE APPLICABLE

2

Pullman Construction Industries, Inc.

Subject Description:
STIFFENER LOCATION A125
NESTED FITTINGS
SPECIAL CONSTRUCTION



Rev. Date Revwd. Date Appvd.

Project: CAROLINA POWER AND LIGHT COMPANY
SHARON HARRIS WILSON POWER PLANT

Date Approved

Page No. 18 A

P. O. Box 101, New Hill, N. C. 27562

Date: 10-14-83

MEMORANDUM TO: AL RACER

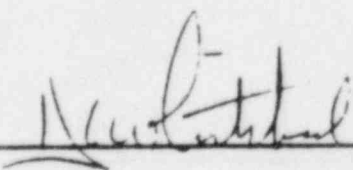
FROM: D. C. Whitehead

SUBJECT: SURVEILLANCE REPORT NO. QAL B3-ELU

The QA Surveillance Sub-Unit has recently completed a QA Surveillance of activities within your area of responsibility.

The attached surveillance report is being submitted to you to assist you in evaluating the results of the surveillance.

If you have any questions regarding this surveillance, do please contact me.



DCW: jp

Attachment

cc: Mr. G. L. Forehand, W/A via Mr. D. A. McGaw
Mr. E. V. Hate', W/A
MR RANDY HANEY, W/A
MR. GEORGE SIMPSON, W/A
MR. BILL LANGELOIS, W/A
MR. CHAN LAY DAVIS, W/A

A126

A126

CA-64
V. 1
12/27/83

CAROLINA POWER AND LIGHT COMPANY
CORPORATE QUALITY ASSURANCE DEPARTMENT

QA SURVEILLANCE REPORT

CASC/CASO NO: 038

DATES PERFORMED:
9-26-83 - 10-7-83

PAGE 1 OF 4

VEILLANCE ACTIVITY/AREA/LOCATION/ELEVATION:

Pipe Hanger Installation (Preliminary)

M ID NO.: SEE SUMMARY

RIPTION: SEE SUMMARY

LITY CLASS: SEISMIC CAT 1

REFERENCE DOCUMENTS:

COA-2846

W.P. 110 E/B

TP-34 E/B

PERSONNEL CONTACTED:

Randy Huxley (CI)

PHASE (CIRCLE ONE) ☐ N/A

INSTALLATION

INSPECTION

E-INSTALLATION

WITNESS

PST-INS

WITNESS

PST-INS

MARY:

A SURVEY WAS CONDUCTED 9-26-83 - 10-7-83
CONCERNING THE ADEQUACY OF THE EXISTING PIPE
HANGER INSTALLATION PROGRAM. DURING THIS SURVEY
18 PIPE HANGERS THAT HAD NOT UNDERGONE EI'S INSTALLATION
INSPECTION WERE RANDOMLY SELECTED AND
WERE EXAMINED FOR PROPER: IDENTIFICATION, LOCATION
ORIENTATION, ELEVATION, GEOMETRY, FITUP, EMBED
AND BASE PLATE TOLERANCES. THE SUBJECT PIPE
HANGERS WERE "TACKED UP" INTO POSITION AND WERE
READY FOR PRELIMINARY INSPECTION AS DETERMINED
BY THE CRAFT "SIGN OFF" ON THE PIPE HANGER
INSTALLATION TRAVELERS IE, EXHIBIT #3 OF W.P. 110.
OF THE 18 PIPE HANGERS SELECTED, 13 WERE
REJECTABLE AND 5 WERE ACCEPTABLE PER THE
INSTALLATION TOLERANCES/REQUIREMENTS SPECIFIED
IN W.P. 110 E/B. 73% OF THE HANGERS CHECKED
WERE IMPROPERLY INSTALLED.

PERFORMED BY:

[Signature]
Clay Rhoads

DATE 10-7-83

DATE 10-7-83

DATE

A126

QA SURVEILLANCE REPORT
CONTINUATION SHEET

THE FOLLOWING PIPE HANGERS WERE DETERMINED TO BE
INSTALLED CORRECTLY - 1-SW-H 3447 R/OA,
-CC-H-1465 R/26, 1-SW-H 3477 R/OA, 1-IA-H-200 R/31
-CX-H-2290 R/031

THE FOLLOWING PIPE HANGERS WERE DETERMINED TO
BE INCORRECTLY INSTALLED: (PRELIMINARY INSTALLATION)

- 1-EA-H 59 R/031 Hanger "window" is $3/16"$ too small
- * 1-SI-H 1231 R/OA GAP BETWEEN ITEM #5 EMBEDDED PIPE
EXCEEDS $3/16"$. ITEM #5 IS NOT LEVEL
ITEM #5 LAP AT EMBED IS $1/8"$ SHORT
DESIGN RADIUS IS $47'-2 5/16"$
AS BUILT RADIUS IS $47'-3 1/2"$
- 1-FP-H-2170 R/30 NO VENT HOLES IN $4" \times 4" \times 1/2"$ TUBE STEEL
AS REQUIRE PER HANGER SKETCH
- 1-CS-H-736 R/251 WELDED BEAM ATTACHMENT IS TURNED
 90° FROM DESIGNED ORIENTATION
- 1-SF-H-1224 R/031 THE GAP BETWEEN ITEM #1 EMBEDDED
EXCEEDS $3/16"$
- 1-FP-H 2307 R/OA ORIENTATION OF ITEM #3 IS APPROX $1"$
OFF SET
- * 1-FP-H 2307 R/OA INSUFFICIENT LAP ITEM #3 TO BEAM
IS $1/4"$ TOO SHORT
- W-EH-H 119 R/35 INCORRECT WELD PREP FOR BRACE
ITEM #2 SHOULD BE BEVELLED FOR FULL PEN. W.
HANGER IS $1 3/8"$ OFF OF DESIGNED LOCATION

QA- 65
REV. 0
2/21/83

CAROLINA POWER AND LIGHT COMPANY
CORPORATE QUALITY ASSURANCE DEPARTMENT

QASC/QASS IC. 93-9
PAGE 3 OF 4

QA SURVEILLANCE REPORT
CONTINUATION SHEET

- * 1-SW-H 2082 R/2L INSUFFICIENT LAP ITEM #1 TO ITEM #2
IS 1/2" SHORT
- 1-SW-H 2082 R/2L ITEM #2 IS APPROX. 5° OUT OF PLUMB
- 1-SI-H 1231 R/OA IDENTIFICATION NUMBER HAS BEEN
GROUND OFF OF ITEM #5
- 1-SW-H 378 R/E TEMPORARY STEEL IS WELDED TO
ITEM #4 NO VENT HOLES IN TUBE
STEEL ITEM #4; #E
- 1-AF-H 245 R/OA AS INSTALLED ITEM #1 DIRECTLY
INTERFERES WITH ~~THE~~ ^{THE} HAND
WHEEL ON VALVE # 3AFV-89-SB-1

DUE TO THE SHORT PERIOD OF TIME BETWEEN THE
INSTALLATION AND THE PRELIMINARY INSPECTION OF
THE ABOVE PIPE HANGERS THIS SURVEY WAS CONDUCTED
BY ASSISTING PIPE HANGER CONSTRUCTION INSPECTOR
IN PERFORMING THE PRELIMINARY INSPECTIONS

THE SURVEILLANCE BY CPA OF PRELIMINARY
INSTALLATIONS RESULTED IN A REJECTION RATE IN ~~AN~~ ^{OF}
EXCESS OF 72% AND THIS IS CORROBORATED BY THE
INSPECTION/REJECTION RATES FROM C.I. AS FOLLOWS:

		ACCEPT	REJECT	AS BUILT REJECTION	%
MAY 83	PHASE I	424	273	43	9
	PHASE II	89	106	0	5
JUNE 83	PHASE I	325	235	27	4
	PHASE II	132	138	0	5
JULY 83	PHASE I	284	311	15	5
	PHASE II	86	117	0	5
AUGUST 83	PHASE I	198	263	32	6
	PHASE II	0	0	0	0

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(Preliminary)	ACCEPT	REJECT	→ Rejected	% RPK
Phase I	261	177	22	43.20
Phase II (Final)	0	0	0	0

NOTE: DURING THE MONTHS OF AUGUST AND SEPTEMBER OF 1983 NO PLAXE II/FINAL ALPENTICS WERE PERFORMED BY C.I.

QA-1
9/23/83
Rev. 12

CAROLINA POWER & LIGHT COMPANY
CORPORATE QUALITY ASSURANCE DEPARTMENT
DEFICIENCY AND DISPOSITION REPORT
(Procedure CQC-2)

DDR No. 2327
Page 1 of
RPT No. 1-2000-007

Item/Activity Name or Description <u>Chemical and Volume Control</u>	Shop Order <u>N/A</u>	Code Class <u>3</u>	Quantity <u>1</u>	Unit <u>1</u>	Quality Assurance No. (PO & Item No.) <u>QA-435035</u>
Serial, Heat or Other Identification No. <u>1-CS-264-1 HT. # M13058</u>	Supplier or Manufacturer <u>Saito West Fab. Co.</u>		Type of Procurement <input type="checkbox"/> CP&L PO <input type="checkbox"/> Transfer <input checked="" type="checkbox"/> A-E PO <input type="checkbox"/> NSSS PO		
Violation (Specification, Drawing, Procedure or Other) <u>CAR SH M 30 Revilla Part Two Para. 10.03</u>			NCR No. <u>NA</u>		Reporting Inspector/Sign. & Date <u>Glenn P. Hill / 11-30-83</u>

Deficiency Details: Heat number for subject spool piece at field weld 394 is, as listed in the data package, M 3058. Heat number stamped on pipe is M13058.

DDR Evaluation			
<input checked="" type="checkbox"/>	Construction Phase		
<input type="checkbox"/>	Engineering Phase		
<input type="checkbox"/>	QA Program Violation		
<input checked="" type="checkbox"/>	Specification Deviation		
<input type="checkbox"/>	Procedural Deviation		
<input type="checkbox"/>	Unacceptable Workmanship		
<input type="checkbox"/>	Damage/Defect		
<input type="checkbox"/>	Other		
<input checked="" type="checkbox"/>	Not Reportable*		
	Site	QA	HPES
	QA/QC	Engr.	NPCD
Eval. By -	<u>GLF</u>		
Date	<u>12-2-83</u>		

* DETERMINED NOT TO BE REPORTABLE UNDER 10CFR21 & 10CFR50.55(e)

Location: 254' El. Pipe Tunnel
Design Line: # 3CS3-57 SN 1 & 2
Nom. Wall: .216
Nom. Size: 3" OD

ASME

SECTION III

Hold Tag Applied 11-30-83 GPA.

Glenn P. Hill J. A. 12-2-83
QA/QC Specialist/Engineer Date

Final Disposition: Hold Tags Removed ☐

Remarks:

OK 12/5/83
KAD
Rev 12/18
DPX 12-5-83

Accepted By: QA/QC Specialist/Engineer Date
Verified By: QA/QC Inspector Date
Reviewed By: QA/QC Specialist/Engineer Date

Distribution:

Orig: Director - QA/QC SHNPP
cc: Proj. Gen. Mgr./Sr. Res. Engr.
Gen. Mgr. (SU/Operations)
Initiating QA/QC Specialist
Accounting
Mgr. - QA/QC - Harris Plant
☐ Mgr. HPES ☒ Byed ISom
☒ Start-Up
☐ NSSS Site Rep.
☒ ANI
☐ NRC Resident Inspector

ANI Concurrence (ASME Code Section III Items Only):

 Authorized Nuclear Inspector Date

Report Closed:

 Director - QA/QC - Harris Plant Date

A127

A127

CP&L, ex-employee settle dispute on Harris plant safety

By TODD COHEN
Staff Writer

Carolina Power & Light Co. has reached a settlement with a former employee at its Shoups Harris Nuclear Plant who had said that he was fired and blacklisted from jobs in the nuclear industry after voicing concerns with company officials about safety violations at the plant.

"Chan Van Vo has agreed to withdraw the charges and complaints he has filed against CP&L, and to release any further claims," CP&L spokesman Elizabeth M. Bean said in an interview. "CP&L has agreed to accept Chan Van Vo's resignation, and all other claims arising out of Chan Van Vo's employment have been resolved between the parties to their mutual satisfaction."

Ms. Bean declined to elaborate. She said the

settlement had been reached in October.

Van Vo lodged his complaints filed with the U.S. Department of Labor and the Federal Equal Employment Opportunity Commission, Ms. Bean said. Spokesmen for both agencies declined to comment, saying complaints are confidential.

Van Vo said in a telephone interview that he had received some money from the utility — "but not much" — in the settlement. He said that under the terms of the settlement, he could not release the amount he received.

The settlement also reclassified his departure from a termination to a resignation, he said.

Van Vo, who had worked for CP&L for five years until he left in February, now is working as a foreman for a piping contractor in Springfield, Va.

In the wake of Van Vo's charges, opponents of the plant filed contentions — arguments for why an operating license should not be granted — with the U.S. Atomic Safety and Licensing Board, said Charles A. Barth, an attorney for the Nuclear Regulatory Commission.

The board, an agency of the NRC, is charged with resolving questions raised by plant opponents who have intervened in the case. The board will recommend to the commission whether to issue a license for CP&L to operate the plant, which is scheduled to begin commercial operations in 1986.

Barth said in a telephone interview from Washington that the NRC had not completed its analysis of Van Vo's charges but that all eight contentions based on those charges appeared to be "worthless" and "do

not in our mind provide a basis to raise safety questions."

Barth said the board already had denied contentions that documents tracing the history of plant materials were missing; that the program designed to assure that the plant was built properly had failed; that concerns about that program were not properly documented; and that construction inspection personnel and personnel charged with monitoring construction quality were not sufficiently independent.

Still pending, Barth said, are contentions that documents about plant material were falsified; that documents about plant material were missing; that a pump in the plant constituted a safety problem; and that workers had been harassed and intimidated.

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF PUBLIC AFFAIRS
REGION II-ATLANTA

ST-2000
note carefully
2

MB

11

A14

A14

MEMORANDUM TO CASE FILE

TYPE ACTION

- ☒ RECORD OF CONVERSATION
☐ CASE REVIEW / STATUS
☐ OTHER

PARTICIPANTS

B. Uryc
 J. Vorse

FILE NO.

84-0143

DATE RECEIVED

JAN 16 1985

TIME

0830

CONFIDENTIALITY REQUESTED YES NO

SUMMARY

Yesterday B. Jones advised me that the Harris ASLB had admitted the Van Vo Harassment issue as a contention in the hearing. Jones requested I advise Vorse of this fact and ensure OI follows this on a priority basis.

I talked with Vorse this morning about the above and told him that Robinson was supposed to be following up on the review of the DOL investigation re the harassment issue and that there was some urgency re this matter. Vorse advised that he would have Robinson follow up as soon as possible.

PAGE 1 OF 1

PREPARED BY

BRUNO URYC

DATE PREPARED

JAN 16 1985

ACTION REQUIRED

REVIEWED BY

DATE

A15

OFFICIAL USE ONLY

DO NOT DISCLOSE

A15

VAN VO ALLEGATIONS

A. October 6, 1984 - Affidavit

1. Discharge piping from SG feed pump 1A-NNS was cold-sprung to weld pipe to pump. Subsequently, pump was found to be misaligned.
2. Nonconformances are being documented on "speed letters". Ex. speed letter on SG feed pump 1A-NNs misalignment.
3. False documentation being used for pipe support material. Purchase Order 21022, a voided number, was used for pipe support material. See DDR-1775, 1776, 1784, 1795 and NCR QA-255.

B. November 11, 1984 - Interview

1. Page 12, Same as A3
2. Page 17, Field Engineers not allowed to write non-conformances.
3. Page 17, Field Engineers must ask supervisor's permission to talk to NRC.

4. Page 32, CI being pressured against writing NCR's. Ex. Inspector "Tank" Ward wrote 1000 NCR's in one month, CPL tried to get rid of him. Ex. Inspector Vincent, in six months NCR number jumped from 1500 - 2400.
5. Page 32, RFT program, systems being turned over w/only 50% of the documentation. Turnover from construction to startup.
6. Page 44 - 47, Pipe support, CC-H-105, Records destroyed - in trash barrel, records recreated. Howard, Fulcher in vicinity of barrel.
7. Page 50 - 53, Pipe support records being destroyed.
8. Page 59 - 61, DDR's being resolved by interoffice memos, disposition unknown - DDR 2317, 2327, 1914 and QA 83-860 surveillance.
9. Page 63 - 63, CPL changed from DDR's to NCR's to make the nonconformance numbers look better. One nonconformance could cover many items - EX. One had 36 pages.
10. Page 65 - 68, SG feed pump misalignment same as A.1 Roy Settle, Equip installation was told by Willet he does not want to hear of problem anymore.

11. Page 91, Temporary hangers, cable, eye bolts horse shoe shaped plates - still installed during transfer - permanent hangers not yet installed.
12. Page 98 Non-Q fasteners substituted for Q fasteners in pipe support material, documented and accepted by DR. Dr. Elleman was called about it and he said it was safe.
13. Page 100, Item B-9, 36 page nonconformance was a DDR
14. Page 101, FCR-H-1145 Rev. 1 - MS & SGF Reclassified non-seismic.
15. Page 101 - 103 DDR 1030 Generic weld deficiency - instead of writing several nonconformances, should have been addressed in a more controlled fashion.
16. Page 103 WP-110 Rev. 8, Hanger Installation Procedure, has 1200 generic FCR's applicable and 1000 clarification requests.
17. Page 105 Same as B.2
18. Page 106 Same as A.2
19. Page 108 Same as A.4 - Pressure on CI can be seen based on 90% turnover.

20. Page 110 QC sign-off welds w/deficiency.

r. November 1984 - Unsigned Van Vu Affidavit

1. Same as B.14

3. Piping Systems and Supports

a. Analysis

The resident inspectors conducted 13 routine inspections in this area. Inspections included review of program and procedures; observation of work activities and review of records in the areas of: pipe welding, structural welding, welder qualification, welding filler material control, welding repair, pipe supports, pipe storage and preservice inspection.

The licensee's work on safety-related piping and pipe supports accelerated during the assessment period. Significant problems were encountered in the erection of pipe supports. The licensee, after receiving NRC violations in this area, stopped all hanger inspections from July until December 1983. During this period the licensee initiated an in-depth study on all phases of pipe and hanger erection with emphasis on initial engineering/quality control review of work package and design changes. All work and inspection procedures were revised and additional training was conducted for engineering, craft and inspection personnel. All construction activities were placed under the resident mechanical engineer. The piping group was reorganized and staffing level was increased from 24 to 117 personnel in the piping group. A resident engineer was assigned to the hanger group and staffing levels in this area were approximately 300 percent. The majority of these newly assigned personnel have experience from recently completed plants, i.e. Waterford, St. Lucie and Callaway.

A revised inspection program was implemented December 1983 and requires inspection of all previously inspected hangers. This program, in addition to increased staffing, incorporates a detailed inspection checklist similar to those used at recently completed nuclear sites. The licensee conducted an independent audit on this program in March 1984 with no major deficiencies noted.

This program now has the highest level of construction activity on site. To insure successful completion it will require strict management attention.

The following violations were identified by the resident inspectors:

- (1) Severity Level IV violation for failure to follow procedure for hanger inspection. (Report 83-22)
- (2) Severity Level IV violation for failure to provide a controlled QA program for the installation of piping systems. (Report 83-26)
- (3) Severity Level IV violation for failure to control fastening material. (Report 83-29)
- (4) Severity Level V violation for failure to control special processes. (Report 83-18)
- (5) Severity Level V violation for failure to support piping in accordance with procedural requirements. (Report 83-06)
- (6) Severity Level V violation for failure to comply with procurement requirements. (Report 83-22)

b. Conclusion:

Category 2

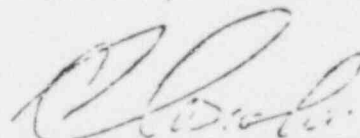
4. Safety-related Components

a. Analysis

The resident inspectors conducted nine routine inspections in this area. These inspections covered equipment and material receipt; storage; rigging; handling and installation. The procedures and controls utilized by the licensee during these observations demonstrated evidence of good

ME-115.5

- 5) All existing hangers with \odot or \ominus symbols will require a full inspection of the hanger at a later date. This may also require reinspecting the approximately 100 Phase II hangers.
- 6) Construction procedures are also being modified to require a technical review of revisions to hanger after Phase II acceptance with clear directions as to any rework required. Revisions prior to Phase II will also be clearly noted on the hanger sketch by construction engineering.
- 7) Excess hanger material in the field will be returned to the warehouse, surplus room, or scrap areas as appropriate.
- 8) Work packages not actively being worked in the field in support of past/upcoming RFT's or support of present pipe erection will be pulled from the field.
- 9) Special will redirect craft personnel in the requirement of not tampering with or removing another craft's work. It will also be emphasized that no work can be performed without a work package.



R. F. Fossolo

ATTN:is

- Mr. R. L. Chiang
- Mr. G. L. Fossolo
- Mr. L. L. Fossolo
- Mr. G. L. Fossolo
- Mr. G. L. Fossolo
- Mr. E. G. Fossolo
- Mr. E. G. Fossolo
- Mr. E. G. Fossolo, Jr.
- Mr. E. G. Fossolo
- Mr. E. G. Fossolo

A70

1914	8/25/83	safety Injection Piping
1915	8/24/83	valve inspect
1916	8/15/83	pipe hanger w/D
1917	8/24/83	pipe spool Mod -
1918	8/14/83	pipe hanger M/S
1920	—	SW. non weld fitting -
1921	—	SW min. wall
1922	—	SW - min —
1923	—	
1929	—	FW pipe by pass hold per
1925	—	Material is true while a weld
1930	-	PSM no certification of ID transfer
1932	SW	PSFM dis —
1933	SI	weld def -
1934	SW	min wall work
1889	feedwater	by pass hold per
1890	hanger	weld def -
1895	8/19/83	hanger weld def
1903	hanger	weld def -
1904		
1911	CC	damage per A71

1862. 8-12-83 cracked weld def
- 1863 8-15-83 C.S.P. filler metal
- 1868 - 8-12-83 C Volume with weld joint
by pass
- 1873 ^{weld.} 8-15-83. weld def. wavy
- 1875 ~~PO. 435122~~ N. Mat'l SW
- 1881 8-17-83 pipe hange
incorrect heat NO
- 1882 Mat'l. traceability
- 1844 8-4-83 SW crack & flange
- 1847 8-10-83 cleanliness Impropr
inspec
- 1852 8-12-83 CC pipe Mat'l under
- 1855 incorrect valve rivet
- 1857 8/12/83 coll sold pull
- 1858 FW pipe
- 1859 chemical volume control
pipe
- 1860 Valve orientation

1812 8/3 -
 1815 SW weld def
 1816 SW
 1817. 8-3/83 SW Insp violation
 1821 SW min wall violation
 1834 hanger NO ID for Vibration
 1784 Pipe hanger Weld def
 1786 Cont spray done hangers weld def -
 1791 cut pipe without QC ver for
 1795 improper weld Insp 7-29-83
 1796 SW
 1797 Pipe hanger weld def - 7-29/83
 1802 Pipe hanger lack of penetrator
 1806 SW Pipe Insp. violation
 1764 7/24/83. low C.S pipe weld def
 1765 — CVC S
 1766 CC pipe

1774 7-2685 SW pipe
 1777 Pipe hanger weld def-
 1779 PET-
 1780 Mat'l issue whole on hold
 1783 Pipe hanger weld def.
 1707 hanger By pass hold piece
 1710 CH } Wrg heel No.
 1721 SW }
 1725 Hanger weld def-
 1682 6/30/83 SW wrg spot piece
 1686 6/30/83 CS. shrinkage
 1687 6/30/83 weld def-
 1688 —————
 1704 } hanger weld def-
 1705 }
 1655 6/27/84 hanger weld def-

Engineer says he left CP&L under pressure

By TODD COHEN

Staff Writer

An engineer who worked at Carolina Power & Light Co.'s Shearon Harris Nuclear Plant has charged that he was fired and blacklisted from jobs in the nuclear industry after voicing concerns with company officials about safety violations at the plant.

"They urged me to make it easier on myself by resigning and said I would have a hard time getting another nuclear industry job if I did not resign," Chan Van Vo said in an affidavit released at a news conference Monday in Raleigh.

Van Vo, who had worked for CP&L for five years until he left in February, said in a telephone interview Monday from his home in Fayetteville, "I did not resign. They terminated my job."

The 16-page affidavit was released by Robert Guild, a Charleston, S.C., lawyer who represents Van Vo. Guild told reporters that he had asked the U.S. Nuclear Regulatory Commission to investigate Van Vo's charges. Guild said he also had asked the U.S. Department of Labor to order that Van Vo be reinstated in his job.

Thomas S. Elieman, CP&L's vice president for corporate nuclear safety and research, said in an interview that the company was investigating Van Vo's charges. Elieman, who attended the news conference, declined to comment on the investigation except to say the company was "interviewing the people that are involved. We're looking into the technical issues."

But a company official who asked not to be identified said, "Some of the issues (raised by Van Vo) had been earlier looked into and resolved."

Charles A. Barth, an attorney for the NRC staff, said in a telephone interview that the staff had been investigating Van Vo's charges for more than a month.

"We will say nothing until our investigation is completed," Barth said. "We are presently checking on Van Vo very carefully."

He added, "We know of nothing that would lead us to conclude that they (CP&L) cannot operate it safely."

Barth was in Raleigh for hearings by the federal Atomic Safety and Licensing Board into the safety of the Wake County plant, which is scheduled to begin commercial operation in 1986. The licensing board, an agency of the NRC, is charged with resolving questions raised by opponents of nuclear power who have intervened in the case. The board will recommend to the commission whether to issue the license.

A72

A72

Ex-CP&L engineer says he lost his job with company after making complaints

Continued from page 1C

material at the plant; a breakdown in programs to assure the quality of safety-related pipe-hanger installations and inspections; violation of NRC requirements to maintain the independence of inspections from cost and scheduling pressures and destruction of documents to assure quality.

"Although I am not opposed to nuclear power, my experience with CP&L causes me to have serious doubts about CP&L's commitment to nuclear safety and about the as-built quality of construction at the Shearon Harris Nuclear Power Plant," Van Vo said in the affidavit.

"On many occasions I have brought safety concerns and construction deficiencies to the attention of my supervisors only to face lack of interest and hostility, and in one case only to find my documentation of a serious safety concern discarded in my supervisor's trash can the next day," he said.

Van Vo said he had pursued his complaints up CP&L's chain of command, including visits to E.E. Utley, executive vice president, and to M.A. McDuffie, senior vice president.

Van Vo, a native of South Vietnam who became a United States citizen after emigrating to the United States in 1975, said McDuffie had told him, "This is the U.S. This is CP&L, not Vietnam. Here (your supervisor) is your lieutenant, and you are only a

soldier. You must obey orders."

Van Vo said in the interview that he had applied — unsuccessfully — for about 50 jobs in the nuclear industry since being fired and was working as a manual laborer at a plastics company in Seagrove, near Asheboro. His salary at CP&L was about \$31,000 a year and now is about \$17,000, Van Vo said.

"I'm positive my name is blacklisted," he said.

Barth said the Labor Department concluded 1½ weeks ago that Van Vo had been fired "for cause." Labor Department officials could not be reached for comment late Monday. But Guild said the department's field staff in Raleigh had concluded it was "unable to substantiate (Van Vo's) claim."

"That's sort of expected at this stage," Guild said. "They don't have any other evidence."

Guild represents the Government Accountability Project, a public interest group based in Washington, that represents "whistleblowers" who work in government agencies and in the nuclear industry. He said the group had been asked to assist in the Shearon Harris case by opponents of the plant, including the Conservation Council of North Carolina and the Kudzu Alliance.

John Runkle, attorney for the Conservation Council, said he hoped to introduce Van Vo's affidavit at the hearings before the Atomic Safety and Licensing Board.

A72

CP&L has obtained a permit from the NRC to build the Harris plant. Under federal law, the company must be licensed by the NRC to operate it.

Van Vo, 45, said in the affidavit that he had resigned after being urged to do so by supervisors. He said he had complained to his supervisors and other company officials about safety problems, including the improper fitting of a pipe to a nozzle on a pump that feeds water to the plant's steam generator. That water is turned into steam in the generator and then pumped to a turbine. The steam runs the turbine, which in turn generates electricity.

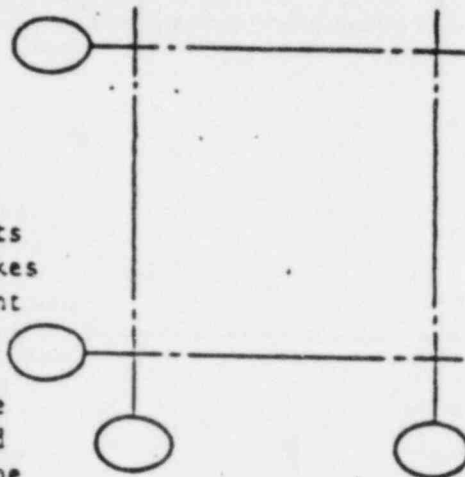
Guild said Van Vo's affidavit also provided details on the falsification of documentation on safety

See EX-CP&L, page 2C

A72

General:

This sketch is to provide to the field direction as to how to temporarily support permanent plant pipe for flushing and testing. Where possible, permanent plant supports are to be completed; but where time makes it impractical to complete the permanent plant support, a temporary support per the guidelines of this sketch should be erected. The location should be the lessor of 2 pipe diameters or 2'-0" and a minimum of 6" from the location of the pipe attachment of the permanent hanger, and should not be located where it will interfere with the erection of the permanent plant hanger. If the guidelines of this sketch are not applicable for the support, then engineering should be consulted for direction. All temporary for 24" diameter pipe and larger will be designed by engineering. The discipline mechanical engineer will provide a list of the required supports and the direction of restraint for flushing and testing.



LOCATION PLAN

Procedure:

The type pipe support this sketch provides direction for is the one directional cable sling type hanger. For the Y-directional supports, use the loads provided in table number one. From table one, each of the components may be sized in tables 2 thru 5. If the situation arises, components may be doubled to provide double the load capacity. For example: Two turnbuckles may be used in the place of one to double the load capacity of the turnbuckles. The maximum load from table one must not exceed the maximum load of each of the components. For lateral type supports, the loads can be found in table 6. The same procedure applies for lateral supports as the Y-directionals for component selection.

Acceptance:

1. Do not put temporary hangers at equipment nozzles without engineering approval.
2. Welding engineering will inspect all temporary welds and sign on the as-builts for acceptance.
3. Craft will orange spot paint temporary hangers except those which are partially permanent constructed. These will be tagged as temporary supports.

4. The field engineers will as-built all temporary supports in the following manner:

AUG 23 1983

(1) Location of all temporary hangers

(2) As-built of all hangers which do not meet the requirements of this sketch.

A74

SHEARON HARRIS N.P.P.

CAROLINA POWER & LIGHT • SHEARON HARRIS

SYSTEM

INSTALLATION OF TEMPORARY
PIPE HGRS. FOR FLUSHING

DWG. #

SSIC-A 1A39

SHEET 1 OF 6 REV. 0

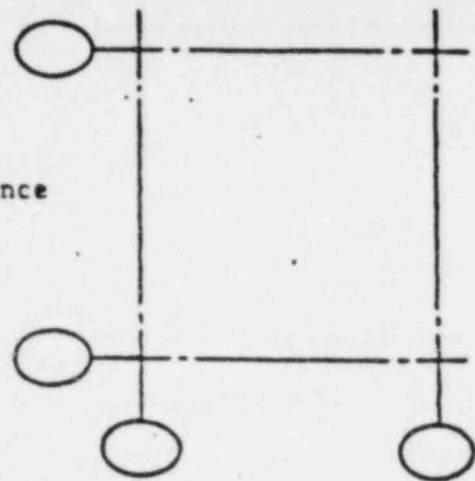
DATE 8-22-83

A74

Tables:

- Table #1 Pipe Size vs Load
- Table #2 Turnbuckles
- Table #3 Cable Size
- Table #4 Cable Clamp Numbers and Distance
- Table #5 Welded Lug Attachment
- Table #6 Lateral Support Loads

N



LOCATION PLAN

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AUG 23 1983

SHEARON HARRIS N.P.P.

CAROLINA POWER & LIGHT • SHEARON HARRIS

SYSTEM

INSTALLATION OF TEMPDRARY
PIPE HGRS FDR FLUSHING

DWG # SS/C-A 1030

SHEET 2 OF 6 REV. 0

DESCRIPTION

APP

CHK

BY

DATE

REV.

DESCRIPTION

APP

CHK

BY

DATE

REV.

DATE

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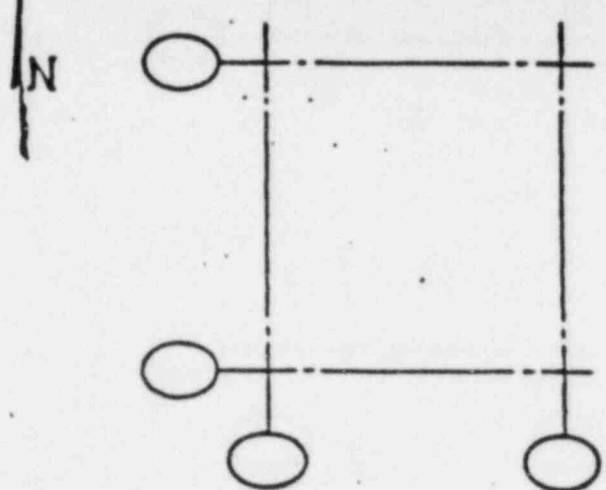


TABLE 1

LOCATION PLAN

PIPE SIZE (IN.)

LOAD (lbs)

1	17
1 1/2	36
2	58
2 1/2	96
3	144
4	252
6	585
8	1040
10	1774
12	2453
14	3082
16	4120
18	5188
20	6598

RECEIVED
DOCUMENT CONTROL
AUG 23 1993

SHEARON HARRIS N.P.P.

CAROLINA POWER & LIGHT • SHEARON HARRIS
SYSTEM
INSTALLATION OF TEMPORARY
PIPE HGRS. FOR FLUSHING.

DWG. #/ 55CA 1039
SHEET 3 OF 6
REV. 0

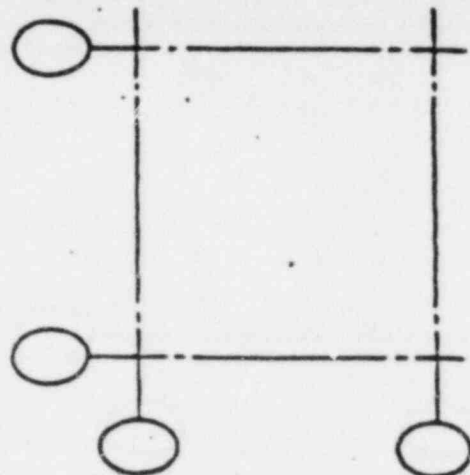
DATE	BY	CHK	APP	DESCRIPTION
11-22-93	SK	SK		

TABLE 2

TURNBUCKLE
ROD SIZE

MAX. LOAD

3/8 (IN)	610 (lbs)
1/2	1130
5/8	1810
3/4	2710
1	4960
1 1/4	8000
1 1/2	11630



LOCATION PLAN

TABLE 3

TABLE 4

CABLE SIZE	MAX LOAD	ROPE DIA.	No CLIPS	SPACING
1/4 (IN)	1100 (LBS)	1/4 - 3/8 (IN)	3	2 1/4 (IN)
3/8	2500	7/16 - 5/8	3	3 3/4
1/2	4300	3/4 - 1 1/8	4	6 3/4
5/8	6600	1 1/4 - 1 1/2	5	7 1/2
3/4	9400			
7/8	12800			

RECEIVED
DOCUMENT CONTROL
AUG 23 1983

SHEARON HARRIS N.P.P.

CAROLINA POWER & LIGHT • SHEARON HARRIS
SYSTEM

INSTALLATION OF TEMPORARY
PIPE HGRS. FOR FLUSHING

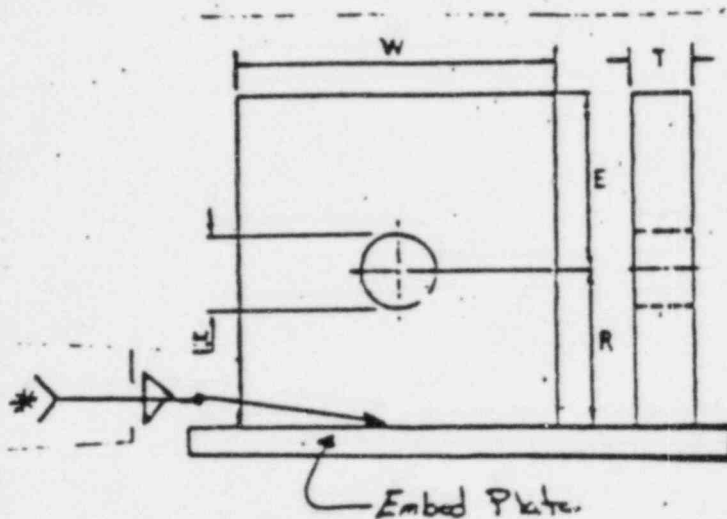
DWG. #
SSIC-A 1130

SHEET REV.
4 OF 6 0

DATE
8-22-83

TABLE 5

Max. Load Lbs.	Inches				
	E	H	R	T	W
610	1½	¾	1½	¾	2½
1130	1½	¾	1½	¾	2½
1810	1½	¾	1½	¾	2½
2710	1½	¾	1½	¾	2½
4960	2½	1½	1½	¾	3
8000	3	1½	2	¾	4
11630	3½	1½	2½	¾	5
15700	3½	2	2½	¾	5
20700	4	2½	3	¾	6
27200	4½	2½	4	¾	8
33500	4½	2½	4	1	8
41580	5	3½	4	1	8
50580	5	3½	4	1	8
60480	5	3½	4½	1	9
71280	6	3½	4½	1½	9
82890	6	4	4½	1½	9



* Use 1/4" fillet weld for loads up to 5,000 lbs. Use 5/16" fillet weld for loads greater than 5,000 lbs. but not more than 10,000 lbs.

NOTE: The 6" ceiling strip plates are rated at 5,000 lbs. per foot load and the 8" ceiling strips are rated at 10,000 lbs. per foot load.

For some installations, it may be necessary to weld two pad eyes to the embed plate in order not to exceed the plate's rated load capacity. Engineered plates may need preheat so the thickness must be verified.

RECEIVED
DOCUMENT CONTROL

AUG 23 1983

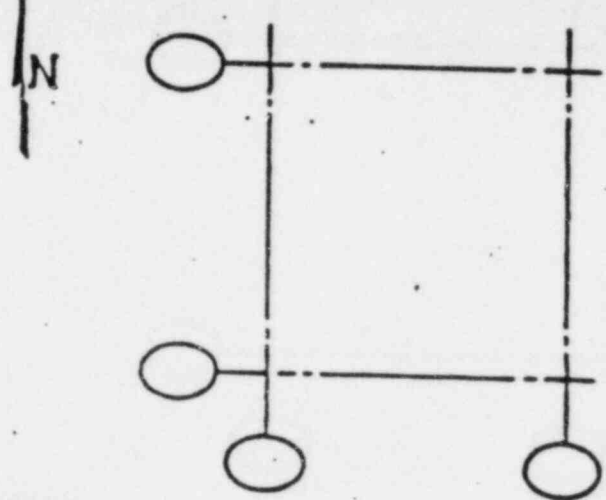
SHEARON HARRIS N.P.P.

CAROLINA POWER & LIGHT • SHEARON HARRIS
SYSTEM

INSTALLATION OF TEMPDRARY
PIPE HGKS. FOR FLUSHING

DWG #
SS10-A 1730

SHEET REV.
506 0



LATERAL DYNAMIC PIPE LOADING

TABLE 6

LOCATION PLAN

Pipe Size	Load (Lbs.)
1	2
1-1/2	3
2	6
2-1/2	9
3	14
4	23
6	49
8	85
10	132
12	185
14	224
16	294
18	377
20	460
24	660
30	1039
36	1505

RECEIVED
DOCUMENT CONTROL

AUG 23 1983

SHEARON HARRIS N.P.P.

CAROLINA POWER & LIGHT • SHEARON HARRIS

SYSTEM

INSTALLATION OF TEMPORARY
PIPE HGRS. FOR FLUSHING

DWG #
SSIC-A 1039

SHEET
1 OF 6
REV. 0

DESCRIPTION

APP
CHK
BY

DATE

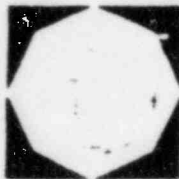
REV.

DESCRIPTION

APP
CHK
BY

DATE

REV.



**TIDEWATER
SUPPLY
COMPANY**

P.O. Box 22006
Greensboro, NC 27420

Alex Fuller work #
919-362-2263

919/292-2661
800/632-0304

Employment Security Commission

Notice of Claim NCUI 551 Rev 682
sent to CP+L

He fills out form at Fy office

Initial Claim for NCUI 500 Rev 482
Benefits and notice
to last employer

No misconduct

he was discharged for performance

CP+L
Box 93

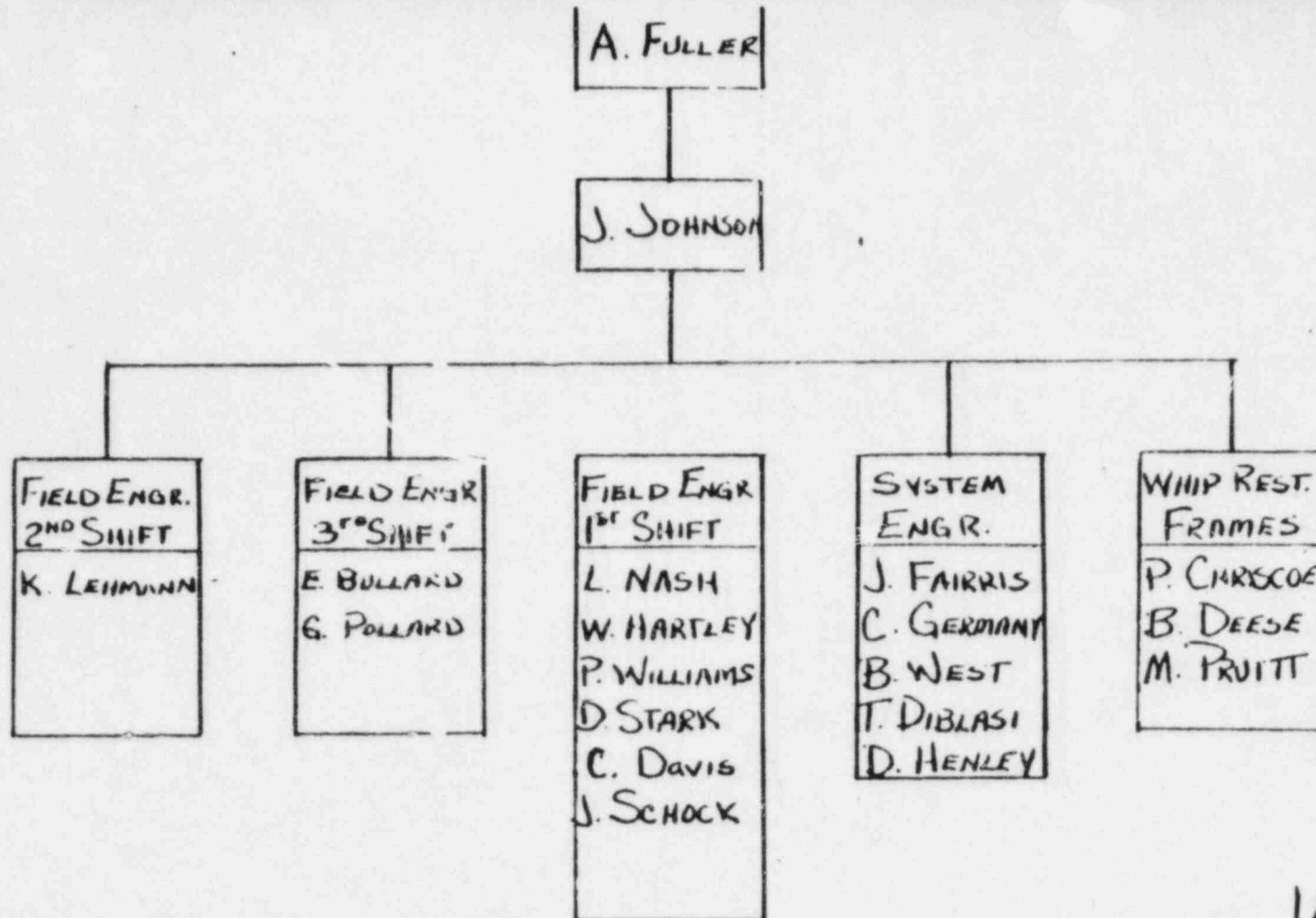
Employee Relation
Adm'n Bldg

New Hill 27762



A75

A75 **CM**
HOIST



11/14/83

J. FAIRKIS	B. WEST	C. GERMANY	T. DIBLASI	D. HENLEY
005 RC	2070 CT	6175 FP	3080 CF	5105 LD
0005 CS	4080 CC	6135 IA	3070 CE	5112 EH
0060 CS	7065 BR	6110 SA	6245 MD	3010 SG
0065 BR/CS	2080 SI	5095 EA	7062 WS	3025 ES
0075 SP	2085 SI/RH	3060 HD/HY	3005 FW	3055 ES
0115 SP	2090 SI	6272 CA	3050 FW	4082 (..)
0060 CB	2110 PM	3030 MS	4040 SC	5100 LO
0070 LT	7110 SF	3035 MS	4115 SC	5020 LO
0100 PP	7115 SF	3020 MS	4067 SW	4015 CW
	3100 SP	6160 HY	4065 SW	4020 CL
		5025 MS	3065 AF	P&D
		7130 WL	3040 AS	6190 CO
		7045 SA	3015 BD	6150 NI
		6162 OX	3067 AC	4030 MP
		6165 CG	6310 WN	4005 ES
		6205 FM	7055 MD	4086 CH
		5050 HY	6285 WL	4085 CX
		6242 DR	6230 WL	7070 W/G
		5060 HY	6235 TD	
		6270 DW	6240 RL	
		7060	4010 AT	
			6177 CA	

A77

A77

Weekend Rotation

	<u>Hunger 1st Shift</u>	<u>Hunger 2nd & 3rd Shift</u>	<u>Frames</u>
Nov 12, 13	C. Germany	E. Bullard	M. Pruitt
Nov. 19, 20	C. Davis	G. Pollard	B. Deese
Nov. 26, 27	_____	Thanksgiving	_____
Dec. 3, 4	W. Hartley	K. Lehmann	P. Chriscoe
Dec 10, 11	L. Nash	E. Bullard	M. Pruitt
Dec 17, 18	P. Williams	G. Pollard	B. Deese
Dec. 24, 25	_____	Christmas	_____
Dec. 31, 1 st	_____	New Year's	_____

The above is the weekend rotation schedule for the balance of this year. The purpose of this schedule is to have personnel available to support the crafts on weekend work. If no work is scheduled on your weekend to work it will not be necessary for you to work. These schedules will be issued quarterly and everyone who is compensated for overtime will be given the opportunity to work equally.

Jim Johnson
11-9-83

August 1, 1983

MS-11557

MEMORANDUM TO: Mr. M. F. Thompson

FROM: E. E. Willett

SUBJECT: Shearon Harris Nuclear Power Plant
Project Review (7-19-83) Action Items 14 & 16

The following is a list of supervisors and engineers who are assigned to RFT completions in the Turbine Building for both pipe and hangers:

Piping Supervisor, D. P. (Don) Knepper, Ext. 2120
Hanger Supervisor, Jim Johnson, Ext. 2162
Piping Supervisor, Arthur Jebson, Ext. 4082 (Air Systems Only)

<u>RFT No.</u>	<u>System Description</u>	<u>Pipe Engr.</u>	<u>Hanger Engr.</u>
3010	Steam Gen. Blowdown	W. Ponder	J. Shock
3015	Steam Gen. Chem. Addition	D. Dasburg	J. Johnson
3020	Main Steam	D. Dasburg	L. Newton
3025	Extraction Steam	D. Dasburg	J. Shock
3035	Steam Dump System	D. Dasburg	L. Newton
3040	Aux. Boiler Steam	W. Ponder	J. Johnson
3050	Feedwater (Main)	D. Dasburg	D. Stark
3060	Heater Vents, Drains, etc.	D. Dasburg	E. Bullard
3067	Aux. Condensate	W. Ponder	J. Johnson
3070	Condensate	B. Freeman	L. Newton
3075	Condensate Polishers	A. Patterson	L. Newton
3080	Condensate Make-up	A. Patterson	L. Newton
4010	Condenser Vacuum	D. Simmons	V. Davis
4015	Circulating Water	C. Williams	V. Davis
4060	Normal Service Water	C. Williams	P. Williams
4065	Emergency Service Water	C. Williams	P. Williams
5015	DEH Control	B. Freeman	No Hangers
5020	TG Lube Oil	B. Freeman	V. Davis
5025	Gland Seal	B. Freeman	E. Bullard
5050	Generator Gas	A. Patterson	V. Davis
5060	Seal Oil Transformer	A. Patterson	V. Davis
6135	Instrument Air	A. Patterson	D. Stark
6140	Service Air	A. Patterson	D. Stark
6150	N2 Supply	B. Freeman	V. Davis
6160	H2 Supply	D. Burke	V. Davis
6165	O2 Supply	D. Burke	E. Bullard

6165	CO2 Supply	D. Burke	E. Bullard
6175	Fire Protection	L. Coble	E. Bullard
6200	Turbine Lube Oil	D. Simmons	J. Jackson
6272	Acid/Caustic	W. Ponder	D. Stark
7055	Oily Waste & Separator	W. Ponder	W. Hartley

As you know, we changed from the area concept to the system concept for piping and hanger field support. Also, note the large number of systems in the Turbine Building. For these reasons, I believe that the involvement of three first-line supervisors and the availability of 16 engineers can provide the support that is needed.

Through proper contacts, scheduling, and setting of priorities, I believe the frustrations and inadequate support in the Turbine Building will be eliminated.

EEW/sh

EEW/sh

cc: Mr. A. G. Fuller
Mr. J. V. Smith
Mr. Roy Johnson
Mr. Noel Caudle
Mr. P. F. Foscolo
Mr. J. L. Fowler
Mr. J. L. Fowler, Engr.
Mr. J. M. Parsons

PRIMARY ENGR.	SYSTEMS	SECONDARY ENGR.
D Stark	6175, 6135, 6140, 5095 5100, 3060, 6272, 3030 3035, 3020	L. Newton
P. Williams	4040, 4115, 4060, 4065, 3065, 7060,	J. Shock
V. Davis	6190, 6150, 4030, P+D 4015, 4020, 5020, 6160 5105	L. Newton
J. Shock	5112, 3010, 3025, 3055 4082, 7045, 6162, 6165	P. Williams
W. Hartley	6310, 7055, 6285, 6230 6235, 6240	L. Nash
L. Nash	3040, 6272, 3067, 7070 3015	W. Hartley
J. Kirby	4086, 4085	J. Shock, J. Jackson
J. Jackson	6265, 5050, 6242, 5060 6270, 4010, 7130, 5025	J. Kirby
L. Newton	3080, 3070, 6245, 7062 3005, 3050	V. Davis D. Stark

July 1983

Route

June 21, 1983

MS-11347

MEMORANDUM TO: Mr. M. F. Thompson

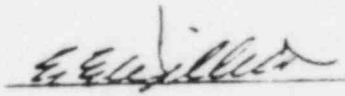
FROM: E. E. Willett

SUBJECT: Shearon Harris Nuclear Power Plant
Restructuring of Piping and Hanger Personnel

Effective June 16, 1983, Mr. J. V. (Jim) Smith will assume the responsibility of Lead Piping Supervisor reporting to me. Messrs. Freshwater, Knepper, and Jebson will report to Jim. Their duties and responsibilities remain as explained in my memo MS-11094 (attached).

Also effective June 16, 1983, the hanger group under Alex Fuller will be substructured to include three groups. Ms. Ann Coates will assume lead responsibility for the hanger work package group. Mr. Paul Howard will assume lead responsibility for NSSS hangers and all large frames. A lead engineer will be appointed at a later time for Radwaste and BOP hangers. The duties and responsibilities for these lead persons will be similar to those described in MS-11094.

The attached functional organization chart reflects these changes.



EEW/sh

Attachments (2)

cc: Mr. J. V. Smith
Mr. A. G. Fuller
Mr. S. N. Freshwater
Mr. D. P. Knepper
Mr. A. L. Jebson
Mr. A. G. Fuller (11094)
Mr. P. W. Howard
Ms. Ann Coates

A81

A81

RESIDENT MECHANICAL ENGINEER
E. F. WILLETT

LEAD PIPING ENGINEER
J. V. SMITH

OFFICE CLERK
JOANN MASSEI

PRINCIPAL ENGINEER - HANGERS
A. G. FULLER

LEAD ENGR. - PIPING
TURBINE - BOP
D. P. KNEPPER
J. COBLE
D. DASBURG
C. ELLIOTT
W. FONDER
C. WILLIAMS
D. SIMMONS
A. KEATON
E. MITCHELL
B. FREEMAN
A. PATTERSON
M. COPELAND
D. BURKE
H. MCCARTY
P. GARDNER
S. MCDONOUGH
C. RITTENOUR
K. TRIVETT
J. PHILLIPS

LEAD ENGR. - PIPING
RADWASTE
A. L. JEBSON
C. THOMAS
E. MONROE
J. HATHAWAY
W. PANKOE
C. JOHNSON
R. FROMM
N. PARNELL

LEAD ENGR. - HANGERS
USSS - LARGE FRAMES
P. W. HOWARD
P. CHRISDOE
B. DEESE
K. LEHMANN
G. POLLARD
M. STEARLY
R. FICHERA
M. FULCHER
N. CORNWELL
G. POLLARD
A. BELL

LEAD ENGR. - HANGERS
RADWASTE - BOP
P. WILLIAMS
R. TURNER
E. BULLARD
J. SHOCK
L. NEWTON
J. LINEBERGER
J. JACKSON
J. KIRBY
V. DAVIS
W. HARTLEY
J. JOHNSON
D. STARK

LEAD TECH. - HANGER
WORK PACKAGES
ANN COATES
M. HAWKINS
K. RADFORD
B. KENDRICK
B. PRICE
*
*
*

* - AUTHORIZED POSITIONS - VACANT

6-21-81 A81

A81

6-17-83

3-2

Hot

Bulk

linal

PM, SI

hmann

CC

PL, SP, RH

Williams

SW, SC

rice

MS, FW, SF, GS

cuton

DW, PW

Wagon

Il. D

FP

ark

SA, IA

alley

WL, MD

WG, WS, WG, VI, SB, BO, CF, ES, HO, HV

AF, AS, AC, CE

PD, CO, CB, LT, OP, NI, HY, FC, CD

AE, CW, CL, MP, LO, EF, FC, CA, WH

CS, CT, BR

CH, CX

May 22, 83

Bullard

Jackson

Williams
Turner

SG

AF

PLW

SL

BD

AS

DW

SW

MS

AL

CA

ES

CE

WN

FW

PD

HO

Kirby

Stearley

Lehman

CH

CS

CC

CX

CT

RC

BR

SP

RI

SI

PM

Davis

ARTLEY

AE

IA

WL

CW

SA

MD

CL

NI

WC

MP

HY

VG

LO

FP

SF

GS

CB

EE

FC

A83

A83

April 21, 1983

MS-11094

MEMORANDUM TO: Mr. M. F. Thompson

FROM: E. E. Willett

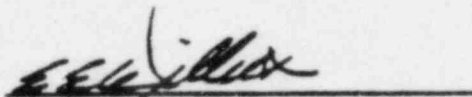
SUBJECT: Reassignment of Piping Personnel

Effective April 25, 1983, I am reassigning piping personnel as shown on the attached, functional organization chart. This reassignment of personnel will provide better support to system RFT's and bulk quantities.

A preliminary listing of system assignments for the lead piping engineers is attached behind the organization chart. Each lead piping engineer will divide the systems among his personnel. These system assignments will be finalized and made available by April 27, 1983.

The lead engineers will be responsible for ensuring system completions per the RFT schedule and priority lists, and they will be responsible for supporting bulk quantities. They will be required to participate in the RFT status meetings as their systems are scheduled for discussion, and they will be required to participate in the weekly discipline schedule meetings. Their system engineers may be called upon to participate in these meetings from time to time.

As stated above, primary system responsibilities will be assigned to the engineer. However, flexibility will be maintained among the three groups to allow for adjusting to peaks and to share in support of those systems such as service water that cross building boundaries.



EEW/dh

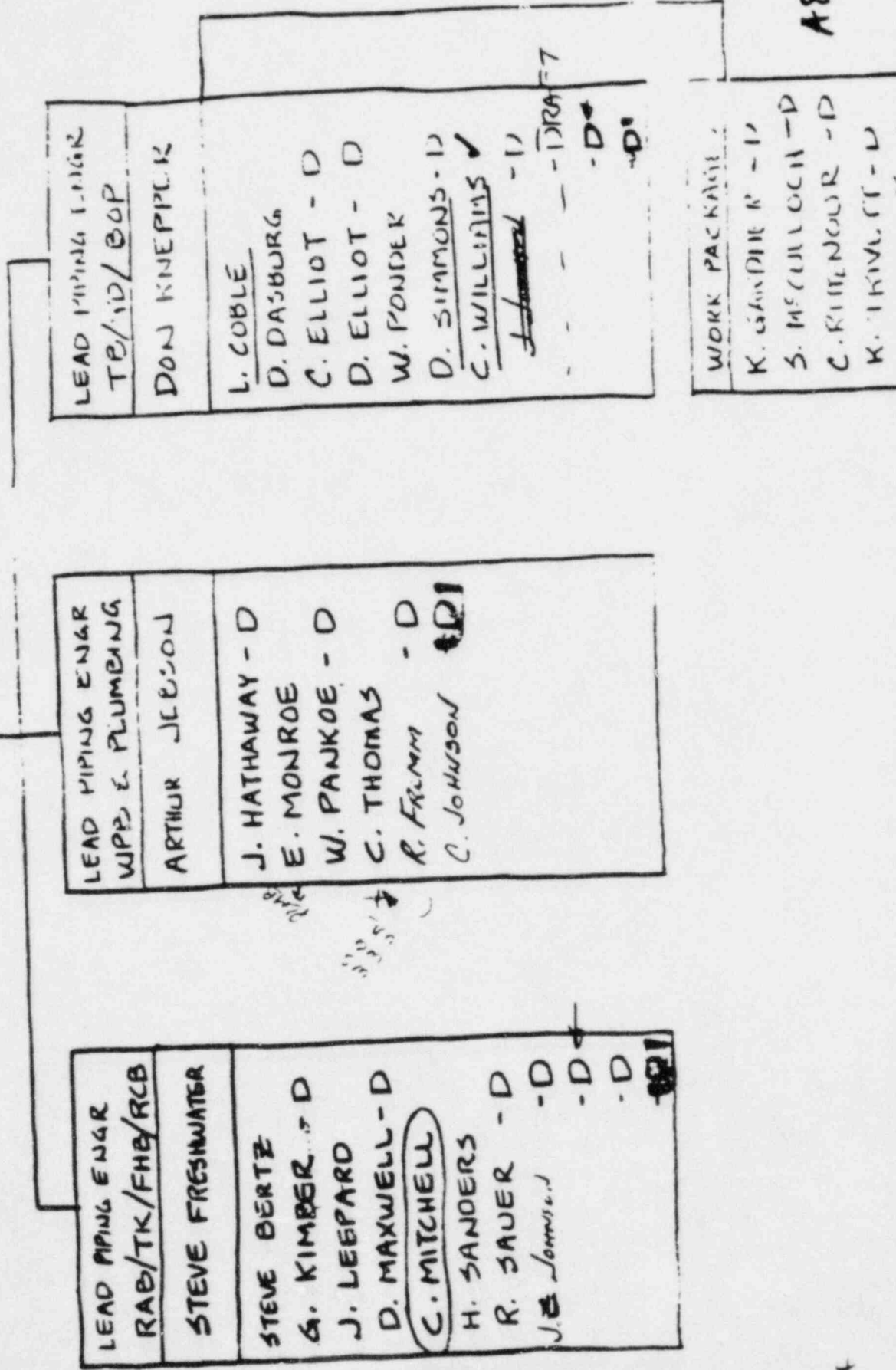
Attachment

cc: Mr. R. M. Parsons
Mr. P. P. Foscole
Mr. M. F. Thompson, Jr.
Mr. N. Caudle
Mr. A. Capps

A84

A84

RESIDENT ENGINEER
MECHANICAL
E.E. VALLETT



D. P. KNEPPER (48)

3010	SG BLOWDOWN
3015	SG CHEM ADD.
3020	MAIN STREAM
3025	EXTRACTION STREAM
3035	STEAM DUMP
3100	STEAM CYC. SAMP
3115	STEAM GEN WET LAY
4015	CIRC WTR SYS
4020	CIRC WTR TRT
5015	D. E. H. SYS
5020	TG L. O.
5025	GLAND STM SYS
5030	EXHAUST HOOD
5050	GEN. GAS SYS
5060	H2 SEAL OIL
6200	L. O. STOR & TRANS.
6262	UPFLOW FILT
6270	DEMIN WTR
6265	POT. WTR
6310	WASTE NEUT
3050	FW SYS
3060	WTR DR, VT, LC
3065	AUX FW
3070	COND

3075	COND POLISH
3080	COND M. U.
4010	CONDENSER VAC
5100	DSL F. O.
5105	DSL L. O.
5110	DSL JACKET WTR
5112	DSL START AIR
4030	CT MAKE UP
4035	CT BLDN
4060	NSW
4065	ESW
4115	ESC
6135	IA
6140	SA
6130	N2 SYS
6160	H2 SYS
6190	AIR COMP
6272	ACID & CAUST
6175	FP
6210	SEWAGE TRT
6162	O2 SYS
6165	CO2 SYS
7055	OILY WASTE
6225	OIL DRAINS

S. N. FRESHWATER (26)

2110	R. C. MU WTR
7063	BORON RECOV
8020	RCB PENET
8100	PENET PRESS
4086	WPB CHILL WTR - <i>Johnson</i>
8070	RCB PRESS
2005	RX COOL.
2050	PRESS PIP
2115	R. C. SAMP
8180	ROD DRIVE CLG
4080	CCW
7122	CASK DECON & SPRAY - <i>Johnson</i>
2060	CVCS
2065	BORON TH. REGEN.
2080	HI-HD SI
2085	LO-HD SI
2090	PASSIVE SI
2105	GROSS FAIL FUEL DET
4085	ESSEN CW
7110	SFP CLG
7115	SFP CLEAN
2070	CONT SPRAY
3040	AUX STM
3067	AUX COND
3120	AUX BLR F. O.
8310	AUX BLR HOUSE

A. L. JEBSON (15)

4082	WPB CCW -
6235	FLOOR DR -
6242	SECOND. DR -
7062	SECOND. WASTE -
6285	FILT B. W. -
7130	SPENT RESIN -
7045	SOLID WASTE -
6220	STORM DRAINS -
6215	SEWAGE DR. -
6245	LAUND/HOT SHR -
6230	CHEM DR -
7060	LIQ WASTE -
6240	RAD. EQUIP DR -
7070	GASEOUS WASTE -
7075	RADWASTE SAMF -
4086	WASTE -
7122	WASTE -

CJ-4

100

3

3

1951-17-

3-14-83

Memo To : File

From : Alca Fuller

Subject: Assignment of Personnel

Effective immediately, the personnel listed below are assigned to the zones below. This is being done to more effectively utilize personnel.

Bruce Deese > Frames
Pat Chaiscoe

William Hartley Waste Processing Building, Yard areas

Phil Williams Fuel Handling, Tank, A-3,4-216, A-3,4-216 Unit 2

Jim Kirby A-1,3,4,5,6, 7,8-261 A-5,6-261 Unit 2

Mark Fisher 261-286 Containment

Ed Bullard 221-236 Containment

Van Vo Davis Turbine, A-2-261

Rodney Turner A-2,3,5-236 A-5-236 Unit 2

Karl Lehmann A-1-190, A-1-216, 286 and 305 RAB

Johnny Jackson > A-1,4,6,7,8-236 A-6,7,-236 Unit 2

Neal Cornwall

cc Ed Willett

George White

Devin Corley

Mark Robott

Bill Saylor

Steve Freshwater

A85

A85

DBULLARD
MARK FULCHER

> CONTAINMENT

2/14/83

HAN DAVIS

- TURBINE

A1 - A4 261 RAB

254 PIPE TUNNEL

SCREENING STRUCTURE

HIL WILLIAMS -

A3, A4 286 RAB

216 PIPE TUNNEL

FUEL HANDLING 236, 261, 286
TANK 236

4T CRISCO

- A2, A3 236 RAB

JOHNNY JACKSON - A1, A4 236 RAB

A. LEHMANN - A1, A2 190 RAB

A1, A2 216 RAB

ALL 286 RAB

ALL 305 RAB

WILLIAM HARTLEY - A5, A6, A7 236 RAB

WASTE PROCESSING

WATER TREATMENT

AUX BOILER

TIM KIRBY - A5, A6, A7 261 RAB

BRUCE DEEKE - FRAMES
A86

A86

Alex Fuller

3031

January 17, 1983

MS-10649

MEMORANDUM TO: Mr. M. F. Thompson

FROM: E. E. Willett

SUBJECT: Shearon Harris Nuclear Power Plant
Reassignment of Mechanical Personnel

In order to provide more effective support to the field and to RFT's, I am making the following reassignments and clarifications of responsibilities:

I. PERSONNEL REASSIGNMENTS

- A. The Pipe Hanger Work Package personnel will report to Alex Fuller effective January 10, 1983.
 - 1. Ann Coates
 - 2. Kenny Radford
 - 3. Caroline Butterson
 - 4. Brenda Kendrick
 - 5. Sheila Fasolt
- B. Rick Eichera will transfer from Pipe Hangers under Alex Fuller effective January 17, 1983.
- C. Wallace Ponder and Charles Williams will transfer from Area Piping Support to RFT Support. They will report to Don Knepper effective January 17, 1983.

II. CLARIFICATION OF RESPONSIBILITIES

A. Mechanical Office Engineer

This group is supervised by a Project Engineer Mechanical. The group is responsible for preparation and control of pipe work packages and mechanical status reports. The group coordinates with Mechanical personnel, other RFT disciplines, start-up engineers, and RFT engineers for preparation, control, and completion of work items. This group is responsible for completion of Mechanical RFT's.

- 1. Coordinate Mechanical RFT Systems with the RFT Turnover group for Pipe and Hangers.
- 2. Prepare detailed RFT reports and boundaries that identify work activities and responsible organizations for completion of the work.

4. Assist in the preparation and control of work items required for RFT completion such as:
 - a) PSM's
 - b) FCR/PW's
 - c) Pipe Cleanliness
 - d) Pipe Hydros
 - e) Records Review
5. Attend the regularly scheduled RFT meetings and report on action items to the NPCD Turnover group. Provide feedback to the Resident Engineer Mechanical, Lead Piping Engineer, and Lead Hanger Engineer.

B. Lead Piping Engineer

This group is supervised by a Project Engineer Mechanical. The group is responsible for technical support to the piping crafts, and it is divided into lead building engineers. Technical support to crafts consists of preparing and/or interpreting design documents and work procedures, investigation of field problems, preparation of field changes (FCR/PW, PSM, PP), resolution of nonconformances, and coordinating hydrostatic tests for buried or embedded pipe. The group also prepares material take-offs and requisitions for site purchased material. The group coordinates with crafts, Mechanical personnel, other NPC disciplines, NOD start-up engineers, and NPES engineers for resolution of field problems.

C. Lead Hanger Engineer

This group is supervised by a Principal Engineer Mechanical. The group is responsible for providing work packages and technical support to the hanger crafts, and it is divided into lead building engineers. Technical support to crafts consists of preparing and/or interpreting design documents and work procedures, investigation of field problems, preparation of field changes (FCR/PW, Non-seismic Hanger Mods, and PHP), and resolution of nonconformances. The group coordinates with crafts, Mechanical personnel, other NPC disciplines, and NPES engineers for resolution of field problems. This group also prepares material take-offs and requisitions for site purchased materials.

D. Lead HVAC and Equipment Engineer

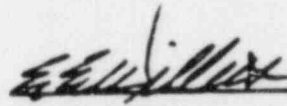
This group is supervised by a Project Engineer Mechanical. This group is responsible for technical support to the sheet metal, iron worker, and millwright crafts, and it is divided into a lead engineer HVAC and a lead engineer Equipment. Both groups are responsible for preparation and control of work packages for their respective crafts.

HVAC technical support to crafts consists of preparing and/or interpreting design documents and work procedures, investigation of field problems, preparation of field change requests (FCR/PW), and resolution of nonconformances for HVAC ductwork and HVAC supports.

Equipment technical support to crafts consists of preparing and/or interpreting design documents and work procedures, investigation of field problems, preparation of field change requests (FCR/PW), and resolution of nonconformances for equipment storage, setting, and maintenance.

Both groups coordinate with crafts, Mechanical personnel, other NTC disciplines, MOD start-up engineers, and HPES engineers for resolution of field problems.

I believe the above changes to be of a nature that will benefit the project and project personnel. As the work changes, I will continue to evaluate adjustments.



EEW/sh

cc: Mr. A. M. Lucas
Mr. S. Radford

LEAD PIPING
ENGINEER

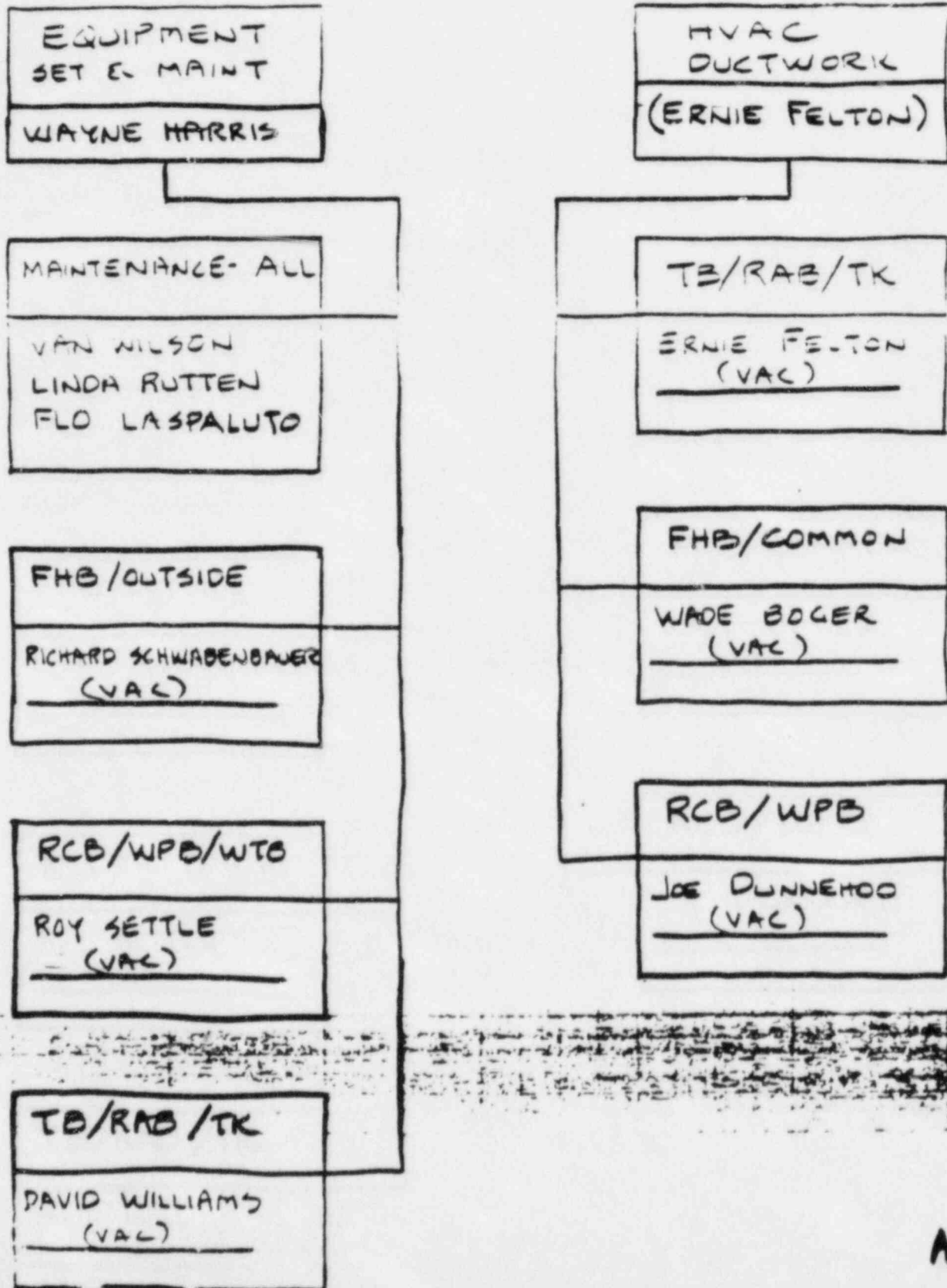
WPB		RAB / TK
ARTHUR JEBSON WALT PANKOE TOM WORTHY CHASE THOMAS		HANK SANDERS ROBIN SAUER <u>(VAC)</u>
FHB		RCB
STEVE BERTZ		CLIFF MITCHELL <u>(VAC)</u>
PLUMBING & DRAIN - PB		YARD, MIX BLDG PIRE MATERIAL
EUGENE MONROE		DAVID SIMMONS LARRY COBLE <u>(VAC)</u>
TB / DGB		
DARREN DASSBURG		

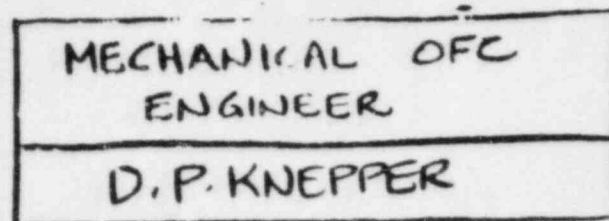
LEAD HANGER
ENGINEER

HANGER WORK PACKAGES		RHB
CAROLINE BUTTERTON ANN COATES SHIELA FASOLT BRENDA KENDRICK KENNY RADFORD		PAT CHRISCOE JIM KIRBY KARL LEHMAN (VAC) JOHNNY JACKSON RODNEY TUNER RICK FLEMING
WPB & YARD BLDG		TB/RAB/DGB 261
WILLIAM HARTLEY		CHAN VAN VO DAVIS
RCB		FHB/TK
ED BULLARD MARK FULCHER		PHIL WILLIAMS
		FRAMES / MISC
		PAUL HEWARD BRUCE DEESE

EQUIPMENT &
HVAC

EQUIPMENT &
HVAC





PIPE WORK
PACKAGES

YEELY GARDNER

SHARON MCCULLOCH

CHERI RITENOUR

(VAC)

(VAC)

(LIC)

RFT

WALLACE PONDER

3015 CHEM ADD

3040 AUX STM

3067 AUX COND

3120 AUX F.O.

6270 DW

6272 A/C

RFT

CHARLES WILLIAMS

4040 SC

4065 ESW

4115 SC

6175 FP

(LIC) (LIC)

615

614

61

RES. ENGR.
MECHANICAL

E. E. WILLET

PIPING

S.N. FRESHWATER

WPB

C.S. THOMAS
D. QUILLEN
(E.C. MITCHELL)
M.L. COBLE

RCB

E.C. MITCHELL

FHB

S. L. BERTZ

RAB/TK

H.B. SANDERS
C.T. McGUIRE(D)

YARD/MATERIAL

C. R. WILLIAMS
R.W. RICH (D)

PLUMBING

W. E. MONROE

TR

D. M. DASHBORG

HANGERS

A. G. FULLER

WPB

W.C. HARTLEY

RCB

P. W. HOWARD
E. BULLARD

FHB/TK

T. UNDERWOOD(D)

RAB

W. P. CHRISCOE
J. D. KIRBY (D)
M.J. TAGGART(D)
P. WILLIAMS (D)
J. JACKSON (D)

TR

V. V. DAVIS

MECH. OFC. ENGR.

D.P. KNEPPER

W. R. PONDER

G. A. COATES
K.A. GARDNER(D)
C. RITTENHOUR(D)
K.L. RADFORD (D)
C. GOWER (D)
P. SMITH (D)
S. McCOLLUM(D)
B. KENDRICK(D)

EQUIP./HVAC

E.M. McLEAN

EQUIPMENT

W. T. HARRIS

J. V. WILSON
R. SCHWABENBAUER
R.T. SETTLE (D)
F. OWENS (D)

TEMP/CO-OP

G. POLLARD (C)
D. OAKLEY (S)
J. LEEPAR (S)
L. BROCK (S)
C. LITAKER (S)
B. ALLEN (S)
K. PARKER (S)
M. HOLLOWAY(S)
T. HOWARD (S)
P. McCAIN (S)

MECHANICAL PERSONNEL

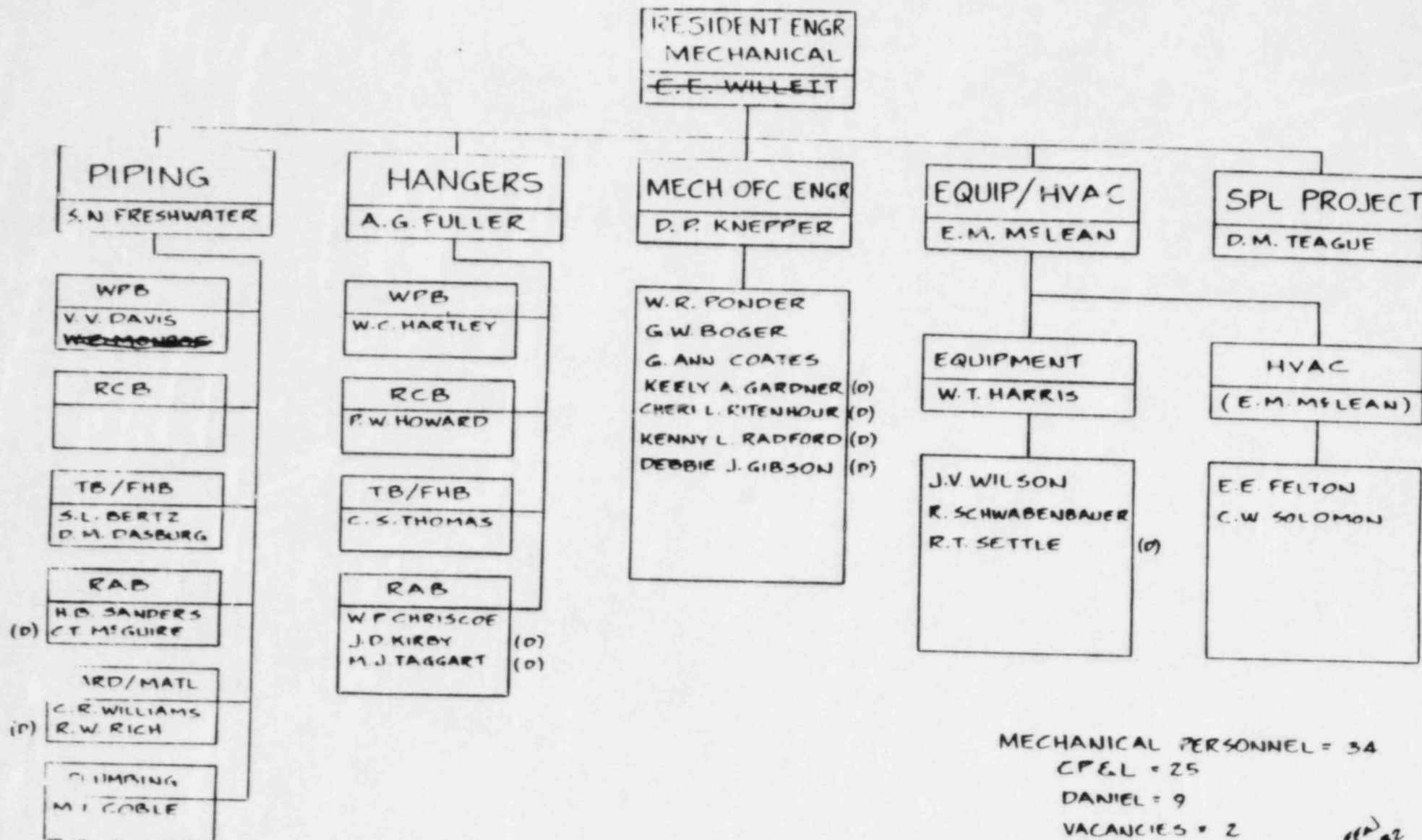
CP&I = 27

(D) = DANIEL = 16

(S) = SUMMER SODEN

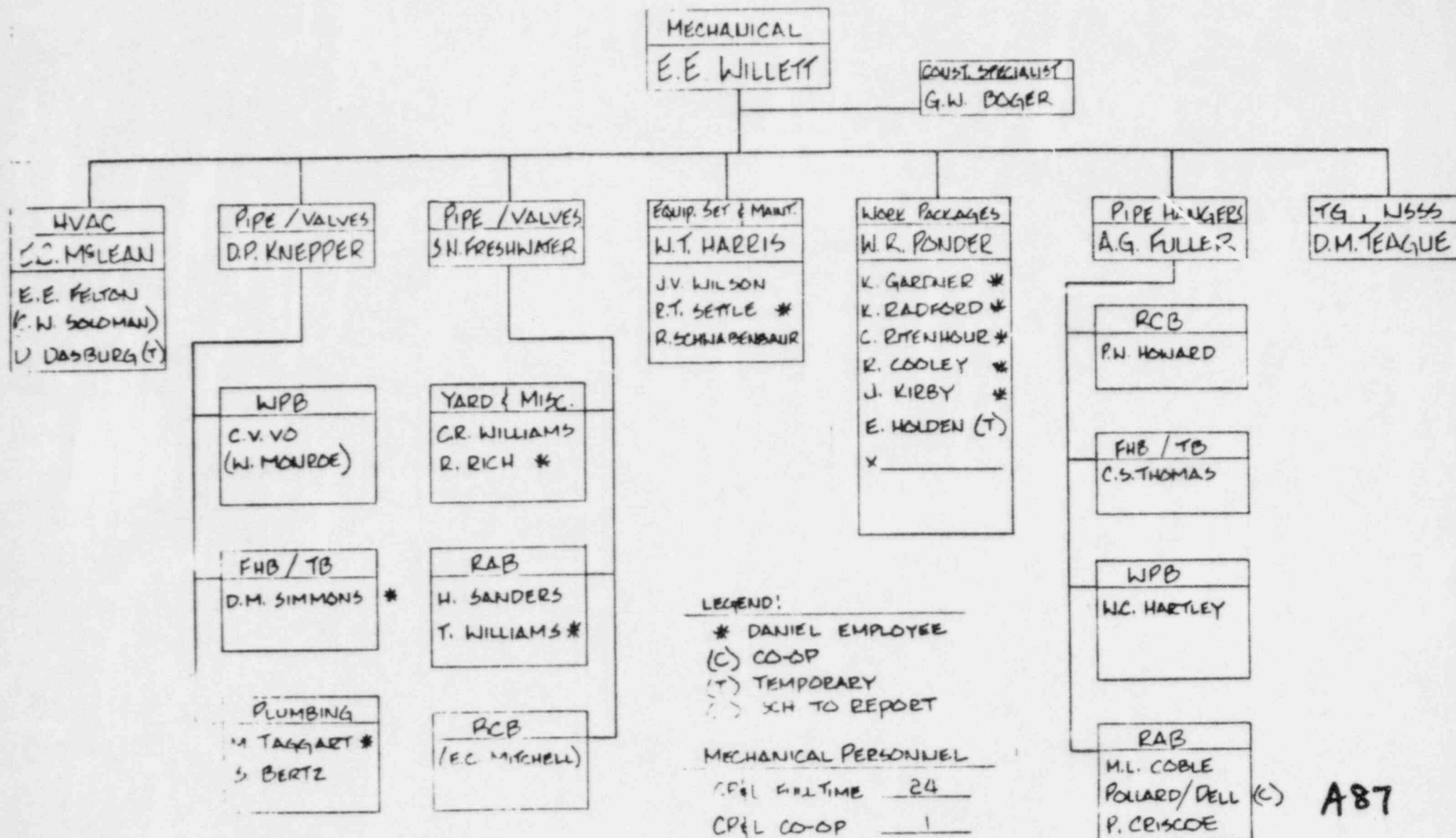
(C) = CO-OP = 1

A87



MECHANICAL PERSONNEL = 34
 CP&L = 25
 DANIEL = 9
 VACANCIES = 2

11/1/82



A87

A87
EEL
7.1.01

CP&L

Carolina Power & Light Company

ED McLEAN
Vice President & General ManagerP. O. Box 101, New Hill, N. C. 27562
February 12, 1980

Company Correspondence

TO: Mr. A. M. Lucas MS-7053

FROM: C. S. Hinnant

SUBJECT: Shearon Harris Nuclear Power Plant
Re-assignment of Personnel Within the Mechanical Engineering Group

In an effort to better utilize the personnel available and to provide better support for the crafts as we expand the mechanical effort, I recommend the following changes:

1. Split piping and hanger field support with Ed McLean heading the piping unit and Tom French heading the hanger unit. With the addition of the second clerk in the Work Package Group, Wallace Ponder can adequately handle this work unit which frees French for assistance with hangers, restraints, and snubbers. As shown on the attached organization chart, the Work Package Group as well as Wayne Harris, William Hartley, and Mike Bowen would report to French.
2. The duties and responsibilities of the Piping Field Support and Mechanical Office Engineer groups are not significantly changed and are outlined on the attached chart.
3. Ernie Felton will be transferred to Buddy Cline's group to assist with HVAC hangers, duct, and pipe insulation.

The new outline of Group responsibilities will be as follows:

MECHANICAL OFFICE ENGINEER

1. Working with Planning and Scheduling and the crafts, provide technical support for mechanical equipment landing and ensuring that access routes are available for setting equipment.
2. Administer the equipment storage and maintenance program.
3. Requisition, review vendor manufacturing documents, and expedite delivery of all permanent plant site purchased piping.

~ Piping

A88

A88

February 12, 1980

4. Supervise all mechanical drafting (if performed on site) for field pipe routing, weld maps, as built drawings and all similar type efforts required to support the field and fabrication shop efforts.
5. Act as site authority on BOP specification interpretation, calling the design engineer, in conjunction with PPED, only on significant items.
6. Act as primary coordinator on NSSS order, Westinghouse turbine order and New York equipment orders except pipe, valves, and hangers.
7. Coordinate constructability reviews and construction technique reviews to insure most efficient designs and methods are utilized.
8. Coordinate the landed equipment field storage and maintenance program. This includes providing continuity between the warehouse and field storage and maintenance program as well as providing engineering support and resolution of DDR's, NCR's, etc., associated with the field storage program.

HVAC/INSULATION SUPPORT

1. Coordinate and administer site activities associated with HVAC duct work fabrication by an offsite contractor and installation by site forces.
2. Review HVAC duct fabrication contract proposals to ensure that they are complete both from technical and commercial aspects. After a contract has been executed with a vendor, ensure that the supplier meets the requirements set forth in the contract to protect the interests of Carolina Power and Light.
3. Provide direct support of construction craftsmen at place of work for installation of HVAC seismic duct hangers, HVAC duct, air handling equipment, chillers and heating units, etc., from issue through construction and turnover effort. This includes interpreting drawings, processing design change notices, FCR's, RCI's, etc. Maintain communication with Power Plant Engineering and Ebasco discipline engineers.
4. Select materials, order field purchased insulation materials, and provide field support for pipe, equipment, and tank insulation including reactor vessel and primary loop. Mirror insulation supplied by Westinghouse.
5. Design temporary mechanical support systems including welding gas distribution system as required to support construction.

February 12, 1980

PIPING FIELD SUPPORT

- Sick* *at* *the* *plant* *to* *be* *fixed*
1. Provide direct support of construction craftsmen at place of work for installation of permanent plant piping and valves including both power piping and plumbing and drainage. This includes interpreting drawings, processing design change notices, FCR's, RCI's, etc. and maintaining communications with Power Plant Engineering and Ebasco discipline engineers.
 2. Anticipate potential field problems and aggressively seek solutions in a timely manner in order to minimize adverse construction impacts.
 3. Coordinate and administer field aspects of the plumbing and drainage fabrication contract including manufacturing releases and ordering field purchased materials.
 4. Resolve NCR's, DDR's, and DR's identified by CI and QA groups in an expeditious manner to keep work moving while maintaining quality.
 5. Work closely with the craftsmen in the field to perform a Mechanical Area Engineering function to keep piping and valve installation moving in an efficient and orderly manner.
 6. Coordinate and act as test director for hydro testing of embedded and buried piping.
 7. Coordinate and administer site activities associated with Southwest piping fabrication contract. This includes expediting, PFED liaison, and problem solving associated with pipe spools, and valves on Ebasco orders.

HANGER FIELD SUPPORT

1. Provide direct support of construction craftsmen at place of work for installation of permanent plant pipe hangers, pipe restraints, and snubbers. This includes interpreting drawings, processing design change notices, FCR's, RCI's, etc. and maintaining communications with Power Plant Engineering and Ebasco discipline engineers.
2. Anticipate potential field problems and aggressively seek solutions in a timely manner in order to minimize adverse construction impacts.
3. Develop and provide details and guidelines for 2" and under non-seismic pipe hangers and supports.
4. Resolve NCR's, DDR's, and DR's identified by CI and QA groups in an expeditious manner to keep work moving while maintaining quality.

February 12, 1980

5. Work closely with the craftsmen in the field to perform a Mechanical Area Engineering function to keep hanger installation moving in an efficient and orderly manner.
6. Coordinate and administer site activities associated with Bergen Paterson and PB&I hanger and restraint contracts. This includes expediting, PPED liaison, and problem solving associated with hangers, restraints, and snubbers on the above orders.
7. Develop mechanical work packages by isometric consisting of the isometric drawing, weld data cards, hangers, material receipt status, building completion status, etc., for units of work that can be worked by field forces. File packages and maintain a master record of work for isometrics for which all design information and material is on site and ready to be worked. Working with planning and scheduling and Daniel Construction, issue packages to field to support the approved construction schedule. Keep management informed through use of a summary reporting system of all isometrics that are available for work. Release work packages only as requested by Piping Superintendents to avoid excessive numbers of drawings in the field that will continually be undergoing revisions. Releases may be in two parts with hangers released ahead of and separate from the pipe spool package. Notification is to go to QA at time of release. Retrieve packages for which work is completed and maintain file of completed packages.
8. Maintain computer material and construction status tracking system for pipe spools, valves, and hangers. Provide summary of material available for work and work completion to management on a regular basis.

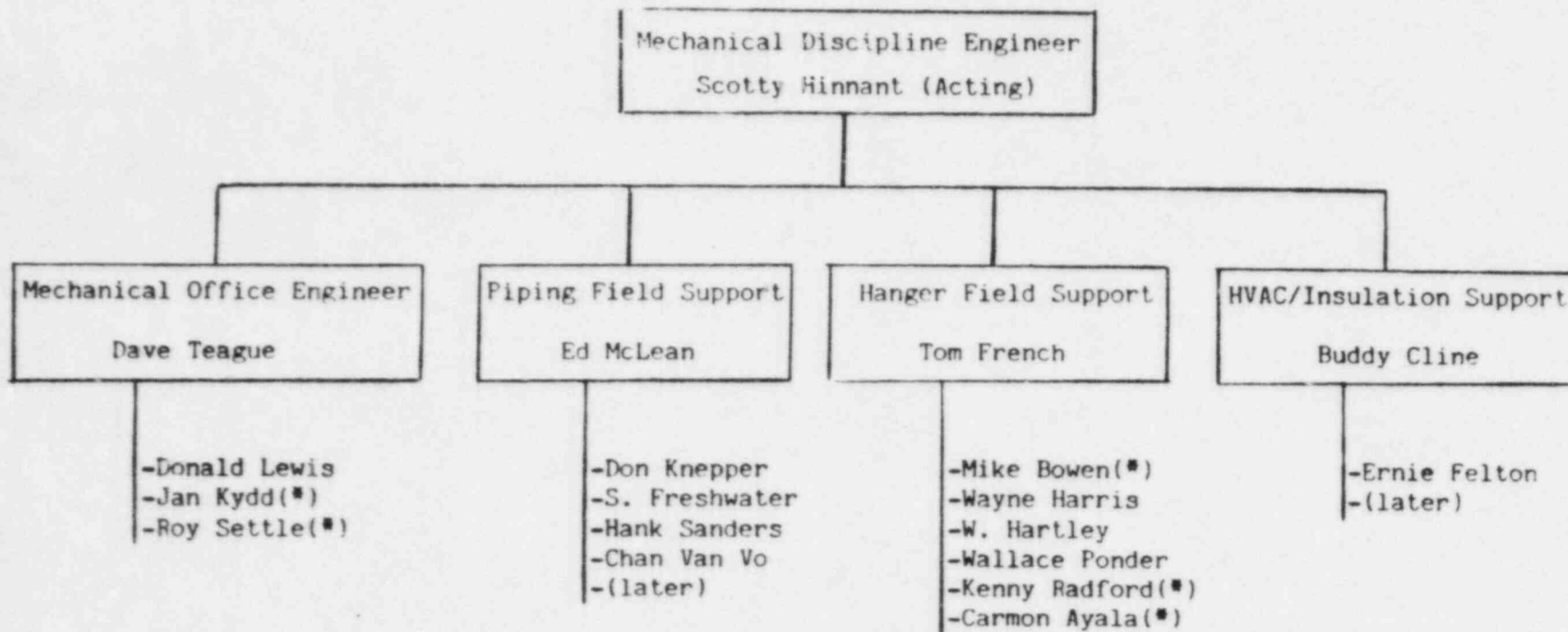
Please provide me with your comments or concurrence at your earliest convenience.

C. S. Hinnant
C. S. Hinnant

CSH/ps

Attachment

MECHANICAL ENGINEERING PERSONNEL ASSIGNMENTS



*Daniel Employee



Carolina Power & Light Company

P. O. Box 101, New Hill, N. C. 27562

April 30, 1980

Company Correspondence

TO: File MS-7294

FROM: C. S. Hinnant

SUBJECT: Shearon Harris Nuclear Power Plant
Authorization for Electrical and Mechanical Engineers
to Sign FCR/PW and Close-out of DCN's

Procedure AP-IX-05, Field Change Request (FCR), and AP-IX-15, Implementation of DCN's, FCR's, and PW's, calls for the Discipline Engineer to sign and close out FCR's, PW's, and DCN's.

The following are hereby designated as having the authority to act in my stead in signing and closing out FCR/PW's and DCN's for the Discipline Engineer:

Electrical and Instrumentation:

Tony Cockerill
Jim Bell
Ron Varner
Jamie Ingram
Gary Rogers

HVAC:

Buddy Cline
Ernie Felton

Mechanical and Hangers:

Ed McLean	Wayne Harris
Don Knepper	William Hartley
Hank Sanders	Wallace Ponder
Steve Freshwater	Dave Teague
Chan Van Vo	Donald Lewis
Tom French	Jan Kydd
Roy Settle	

Please see me if there are any questions on this matter.

C. S. Hinnant
C. S. Hinnant

CSH/ps

cc: Mr. R. M. Parsons
Mr. A. M. Lucas
Ms. Jackie Sugar
Mr. G. L. Forehan
Mechanical/Electrical Engineers

A89

A89

Hanger No:

<p>1 INSP. FITUP GAP & INCREASED FILLET WELD SIZE <u>COMMENT</u></p> <p>initial Date</p>	<p>2 INSP. DOCUMENT REV. VS PACKAGE REV. <u>COMMENT</u></p> <p>initial Date</p>
<p>3 VERIFY EMBED THICKNESS <u>COMMENT</u></p> <p>initial Date</p>	<p>4 VERIFY PHASE I INSPECTION <u>COMMENT</u></p> <p>initial Date</p>
<p>5 VERIFY INSP. DATE FOLLOW LOGICAL ORDER & MATCH DOCUMENT APPLICABLE ATTNE <u>COMMENT</u></p> <p>initial Date</p>	<p>6 VERIFY FITUP GAPS LIST BY CI/FE ARE CLEARLY UNDERSTANDABLE <u>COMMENT</u></p> <p>initial Date</p>
<p>7 VERIFY CI/FE LIST GAP ON ALL INSP. AFTER 10-21-81 <u>COMMENT</u></p> <p>initial Date</p>	<p>8 VERIFY LATEST REV. IS PLACED BY INSP. & DATE ON WDR <u>COMMENT</u></p> <p>initial Date</p>

A90

A90

Hanger No:

<p>9</p> <p>VERIFY WDR REFLECTS AS WELDED CONDITION <u>COMMENT</u></p> <p>initial date</p>	<p>10</p> <p>VERIFY WELD SYMBOLS ARE ON WDR <u>COMMENT</u></p> <p>initial date</p>
<p>11</p> <p>VERIFY NO IMPROPER DRAWN INCORRECT OR MISSING WELD SYMBOLS <u>COMMENT</u></p> <p>initial date</p>	<p>12</p> <p>VERIFY OFFICE & FIELD COPY OF WDR IS SAME INFORMATION <u>COMMENT</u></p> <p>initial date</p>
<p>13</p> <p>VERIFY HANGER REINSP. CLOSEOUT PACKAGES ARE CLEAR RELATIVE TO WELDING STATUS <u>COMMENT</u></p> <p>initial date</p>	<p>14</p> <p>VERIFY SECTION III OF WDR IS COMPLETELY FILLED OUT. <u>COMMENT</u></p> <p>initial date</p>
<p>15</p> <p>VERIFY WDR IS PROPERLY ASSIGNED VS S/SPEC. 034 <u>COMMENT</u></p> <p>initial date</p>	<p>16</p> <p>VERIFY WELDS ON SKEWED TEE JOINTS ARE NOT UNDERSIZE <u>COMMENT</u></p> <p>initial date</p>

Hanger No:

17	VERIFY SW ON DWG WERE MADE IN THE SHOP	18	VERIFY GEOMETRY, LOCATION IN SPACE & EMBED VS TOLERANCE WP. 110
<u>COMMENT</u>		<u>COMMENT</u>	
initial date		initial date	
19	VERIFY MATERIAL SUBST. ARE DOCUMENT	20	VERIFY FW ACCEPTANCE CRITERIA PER CGC.19 & AWS D1.1
<u>COMMENT</u>		<u>COMMENT</u>	
initial date		initial date	
21	VERIFY BILL OF MATERIAL MATCH THE INSTALLED MEMBERS.	22	VERIFY PREHEAT WAS DOCUMENTED IF HANGER MEMBERS THICKER THAN 1/2"
<u>COMMENT</u>		<u>COMMENT</u>	
initial date		initial date	
23	VERIFY FW LENGTHS ARE EQUAL TO LENGTH ON HANGER SKETCH	24	VERIFY FLEXIBLE CONNECTIONS ARE RECOGNIZED & PROPER INSP.
<u>COMMENT</u>		<u>COMMENT</u>	
initial date		initial date	

A90

A90

Hanger No:

<p>25</p> <p>VERIFY HANGER NOT ATTACHED EMBED W/ THREAD STUD UNTIL CIVIL INSP. OF EMBED IS VERIFIED <u>COMMENT</u></p> <p>initial date</p>	<p>26</p> <p>VERIFY SW ON DWG ARE INSP. IF THEY ARE ACTUALLY FW & PROPER NOTE ON TRAVELER & WDR <u>COMMENT</u></p> <p>initial date</p>
<p>27</p> <p>VERIFY THE JOINTS LISTED ON WDR ARE UNIQUE. <u>COMMENT</u></p> <p>initial date</p>	<p>28</p> <p>VERIFY GENERIC FCR'S ARE USED APPROPRIATELY. <u>COMMENT</u></p> <p>initial date</p>
<p>29</p> <p>CHECK & VERIFY SW & THEIR EXISTANCE. <u>COMMENT</u></p> <p>initial date</p>	<p>30</p> <p>VERIFY D/C HAS THE REV. MENTIONED ON COMPUTER PRINTOUT <u>COMMENT</u></p> <p>initial date</p>
<p>31</p> <p>DOES THE TERMINAL ACCURATED SHOW STATUS OF HANGER <u>COMMENT</u></p> <p>A90 initial date</p>	<p>32</p> <p>VERIFY CUT MEMOS OR WORK DIRECTIVE IN THE QA/QC. OFFICE FILES <u>COMMENT</u></p> <p>A90 initial date</p>

115J Simard (INPO) 14-JUL-82 11157 AM

SUBJECT: PILOT EVALUATIONS

THE TEAM OF INDIVIDUALS ASSIGNED FOR THE CONSTRUCTION PROJECT EVALUATION PROGRAM HAS COMPLETED TWO PILOT EVALUATIONS. THE PURPOSE OF THE PILOTS HAS BEEN TO VERIFY AND UPGRADE THE CRITERIA TO DEVELOP THE METHODOLOGY AND TO TRAIN THE TEAM. IN THE PROCESS, A NUMBER OF "GOOD PRACTICES" HAVE BEEN NOTED THAT ENHANCE QUALITY IN CONSTRUCTION. TWO THAT WERE CONSIDERED NOTEWORTHY ARE LISTED BELOW:

1. PLEXIGLASS USED IN CONCRETE FORMING

ONE UTILITY USES PLEXIGLASS IN FORMS FOR PLACING CONCRETE. THE PLEXIGLASS IS USED TO FORM ONE SIDE OF WALLS, ONE FOOT THICK, AND IS USED IN AREAS AND AROUND BLOCKS. THE PLEXIGLASS IS USED IN AREAS AND AROUND BLOCKS. THE PLEXIGLASS IS USED IN AREAS AND AROUND BLOCKS. ONE-HALF INCH PLEXIGLASS IS USED IN AREAS AND AROUND BLOCKS. FOUR TIMES AS MUCH AS WOOD IS USED IN AREAS AND AROUND BLOCKS. AFTER THE CONCRETE IS PLACED, THE PLEXIGLASS IS REMOVED AND REUSED.

DISADVANTAGES ARE THAT THE PLEXIGLASS WILL USUALLY CRACK WHEN CONCRETE IS PLACED. IT IS ALSO MORE EXPENSIVE THAN WOOD. IT MUST BE USED WITH CARE TO BE EFFECTIVE.

HANDLER: [REDACTED]

A91

A91

FORM NO 577
REV. 1/82

INTEROFFICE MEMO

DATE

DEPARTMENT

1) ~~3~~ Pull random samples ≈ 50 complete PI
concentrate on land crans we all agree
surplus material
changes on as built sketches

2) Check extra material in the field.
How much do we have in the field from about

— TO BE APPROVED Substitutions

— TO BE FILED

— NOTE AND RETURN

— TO BE SIGNED

— PER CONVERSATION

— AS REQUESTED

— PLEASE INVESTIGATE

— NOTE AND FILE

— YOUR COMMENT PLEASE

— PLEASE SEE ME

— FOR YOUR INFORMATION

— TO BE CHECKED

— PLEASE TAKE CHARGE OF THIS

— PLEASE CALL ME

— PREPARE REPLY FOR MY SIGNATURE

— TO BE DISTRIBUTED

— REPLY REQUESTED BY

DATE

MESSAGE

CMR construction material report

3) Extra CMR's

4) CMR's that don't match what is actually there

5) Properly filled out CMR's

6) work with CMR on understanding what needs
to be checked and resolve problems.

7) Get copies of all rev's and all dev notes
SUMMARIZE FROM changes

DEPARTMENT

APR

NRC

John York on site 6/6

pipe hangers (look at what we've done
welds inspected
location (Exit 10:30 Friday 6/10)
geometry

damaged hanger? after phase I

CT-H-309 bent clip

CS-H-2457 splice plate wrong size

RH-H-165 wrong clip

SI-H-29 material substitution problem

11 hangers

scribe marks on socket weld

50-400/83-20 report

② PWHT structural steel { restraint for loop #1
looked at 3 inside

① previous items IFT 402/83-05-01 checked

③ hangers

reinspected 10 ph I hangers (various ph
O+1 for welding (QC) no problems

3/4" @ CS 2457
guide

splice plate material/size
4x4 x 3/8 actual } not enough
5x5 x 3/8 design } by C.I.

@ RH 165

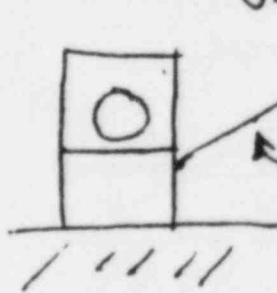
tube steel with clip
BP catalogue call for clip
to be use only on pipe
and where it was
actually on tube steel



mixed by C.I.

@ SI 29

box type



{ 6x4 x 1/2 design
6x4 x 3/8 actual }

Material
control
problem

{ 8 other larger ID #'s
marked on piece
and crossed out }

$4 \times 4 \times \frac{3}{8}$ actual } not enough
 $5 \times 5 \times \frac{3}{8}$ design } by C.I.

@ RH 165

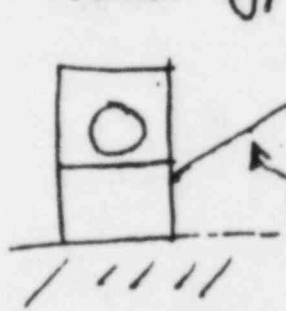
tube steel with clip
 BP catalogue call for clip
 to be use only on pipe
 end where it was
 actually on tube steel



missed by C.I.

@ SI 29

box type



$6 \times 4 \times \frac{1}{2}$ design
 $6 \times 4 \times \frac{3}{8}$ actual

other larger ID #'s
 marked on piece
 and crossed out

Material control problem

3 ^{1/2} @ CS 2457

splice plate material/size
4x4 x 3/8 actual } not enough
5x5 x 3/8 design } by CI

Q RH 165

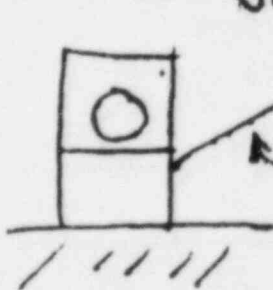
tube steel with clip
BP catalogue call for clip
to be use only on pipe
end where it was
actually on tube steel



mined by CI

Q SI 29

box type



{ 6x4 x 1/2 Design
6x4 x 3/8 actual

Material
control
problem

{ 8 other longer ID #'s
marked on piece
and cranked out