NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA ST., N.W., SUITE 3100
ATLANTA, GEORGIA 30303

December 4, 1981
GM-29

TO: C. Burger, Section Chief, Division of Resident and Reactor Project Inspection

FROM: G. F. Maxwell, SRI Harris site

SUBJECT: Allegations concerning QA welding inspector

On the afternoon of November 24, 1981, I was approached by a construction inspector, who will remain anonymous, who had concerns about welds which had been inspected and accepted by a CP&L inspector named _____ has been assigned to the QA welding inspection organization at the Harris site for approximately [illegible] He was hired in to assist in the hanger re-inspection program which commenced approximately [illegible] 1980 and ended near [illegible] 1981.

Prior to my conversation with the complainant, I had been approached by a welder and one other CP&L QA welding inspector concerning the performance of _____ inspections. During the conversation on November 24, I was informed that _____ had been inspecting and accepting welds which should not have been accepted. For example, I was told by the complainant that if the weld was in a difficult location, _____ would not acquire the appropriate scaffolding to allow him to have access to the weld to be inspected.

I informed the complainant that I can not perform an investigation into _____ performance based on heresay, that I would need specific unsatisfactory welds to aid me in making the determination. The complainant assured me that within two weeks I would be provided with a list of five to ten welds which _____ had inspected and accepted which otherwise should be rejected.

He further stated that the welds which he would provide me with were non-safety related pipe welds. Upon return to the site (after Thanksgiving) on November 30, I was approached by a CP&L QA welding inspector who asked me what I was going to do about _____ unsatisfactory performance. I made an attempt to inform Region II supervision of this concern, however, I was not able to on that day. Subsequently I decided to commence gathering information concerning the three allegations I have received concerning _____

At about 11 a.m. November 30, I informed the CP&L QA welding supervisor of the potential concerns which the NRC may have with _____ The supervisor indicated that he needed time to look into this matter.

Later in the day during my routine inspections in the field, I encountered a welder who complained that _____ had inspected and accepted unsatisfactory

92 90

welds which were made on a seismic I pipe hanger which is numbered I obtained the inspection package late in the afternoon for the pipe hanger in question.

During the morning of December 1, I contacted the QA welding supervisor and asked him to assist me during an inspection of the hanger in question. During the inspection no flagrant rejectable conditions were observed either by me or the supervisor on the aforementioned hanger. However, I observed a rejectable condition on a hanger located just adjacent to the aforementioned hanger and was advised by both the QA welding supervisor and the responsible welding forman that the hanger which contained the rejectable condition had never been inspected and accepted by QA welding.

Later in the day I made an independent review of the records and found both of them to be incorrect, that in fact the hanger had been inspected and accepted by on December 22, 1980.

On December 2 the QA welding supervisor and the CP&L project manager selected ten additional hangers which had been inspected and accepted by both of them reinspected the ten hangers and found all welds to be acceptable. After work hours on December 3 I selected 3 pipe hangers which were located in very inaccessible areas and conducted an inspection of the welds which were still clean enough to inspect. No rejectable conditions were noted.

During the morning of December 4 I interviewed the site QA/QC director who informed me that he plans to require in the future supervisory audits to be conducted on each individual QA welding inspector to ascertain their satisfactory performance. However, he denies any QA program problem exists with the performance of his current inspectors.

Currently, I plan to give CP&L a violation contrary to 10CFR 50.55a(a)(1). The citation will be failure to inspect to the quality standards required by the applicable AWS-D.1.1-1975 requirements for new bridges.

If I receive additional information to substantiate the concerns made known to me, this violation could be made against 10CFR 50 Appendix B criterion 9 or 10.

In my opinion CP&L has not conducted sufficient audits of in-process welding activities nor have they conducted sufficient in-process monitoring of welding activities, including inspection of welds commensurate with the activities being performed.

This opinion has been voiced also by other Region II inspectors such as Ed Girard and most recently by Jim Coley during their visits to the site. If Region II decides to conduct an extensive audit of CP&L's audit program or monitoring program, as they relate to ongoing activities, I suggest that the necessary technical IE inspection personnel be made a part of the assigned team.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA ST., N.W., SUITE 3100
ATLANTA, GEORGIA 30303

December 4, 1981
GM-29

F. C. Lewis
H. R. Herdt
C. E. Alderson

12/9/81
J. H. Bu...

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(112)

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1.4 Definitions

The following definitions are provided to provide a uniform understanding of selected terms as they are used in this standard.

Certification (Personnel)–The action of determining, verifying, or attesting in writing to the qualifications of personnel.

Construction Phase–A period which commences with receipt of items at the construction site and ends when the components and systems are ready for turnover to operations personnel.

Contractor–Any individual or organization entering into a contract to furnish items or services to a purchaser. The term contractor includes the terms Vendor, Supplier, and Subcontractor or sub-tier levels of these where appropriate.

Examination–A critical investigation of items by nondestructive methods.

Inspection–A phase of quality control which by means of examination, observation or measurement determines the conformance of materials, supplies, components, parts, appurtenances, systems, processes or structures to predetermined quality requirements.

Item–Any level of unit assembly, including structures, system, subsystem, subassembly, component, part or material.

Owner–The person, group, company, or corportation who has or will have title to the facility or installation under construction.

Project–A planned series of activities including all actions necessary to provide, utilize and maintain a facility or a portion thereof.

Qualifications–The characteristics or abilities gained through training or experience, or both that enable an individual to perform a required function.

Quality Assurance–All those planned and systematic actions necessary to provide adequate confidence that an item or a facility will perform satisfactorily in service.

Quality Control–Those quality assurance actions which provice a means of control and measure the characteristics of an item, process or facility to established requirements.

Testing–The determination or verification of the capability of an item to meet specified requirements by subjecting the item to a set of physical, chemical, environmental or operating conditions.

Other terms and their definitions are contained in ANSI N45.2.10, Quality Assurance Terms and Definitions.

1.5 Referenced Documents

Other documents that are required to be included as a part of this standard are either identified at the point of reference or described in Paragraph 6 of this standard. The issue or edition of the referenced document that is required will be specified either at the point of reference or in Paragraph 6 of this standard.

2. GENERAL REQUIREMENTS

2.1 Planning

Plans shall be developed for assigning or staffing and training an adequate number of personnel to perform the required inspections, examinations, and tests and shall reflect the schedule of project activity so as to allow adequate time for assignment or selection and training of the required personnel. The need for formal training programs shall be determined, and such training activities shall be conducted as required to qualify personnel responsible for inspection, examination, and testing; and other appropriate technical support personnel whose work can directly or indirectly affect the quality or reliability of those items delineated in the scope of this standard.

2.2 Certification

Each person who verifies conformance of work activities to quality requirements shall be certified by his employer as being qualified to perform his assigned work. This certification shall be supported by appropriate measures such as education or training, testing, evaluation, and periodic review to assure the initial and continued proficiency of each person. The effective period of certification shall be established and at the end of the effective period of certification, each individual shall be recertified in accordance with the requirements of this standard. Personnel involved in the performance, evaluation and supervision of nondestructive examinations need only be certified in accordance with the requirements specified in SNT-TC-1A[1] and supplements.

2.2.1 Training. When training programs are required they shall include indoctrination of personnel with the technical objectives of the project; the codes

[1] SNT-TC-1A and Supplements, "Recommended Practice for Nondestructive Testing Personnel Qualification and Certification", issued by the Society for Nondestructive Testing, 914 Chicago Avenue, Evanston, Illinois 60202.

and standards that are to be used; and the quality assurance elements that are to be employed, with guidance regarding their limitations and capabilities. On-the-job participation shall also be included in the program, with emphasis on firsthand experience gained through actual performance of processes, tests, examinations, and inspections.

2.2.2 Proficiency Testing. In accordance with the requirements of SNT-TC-1A and supplements, tests shall be devised for determining the capability and proficiency of personnel who perform nondestructive examinations, and each person who performs these examinations shall be tested to demonstrate his capability. The results of these tests shall be documented and placed in the personnel file (see paragraph 5) and shall be considered in the evaluation described in paragraph 2.2.3.

2.2.3 Evaluation of Performance. The job performance of inspection, examination and testing personnel shall be evaluated initially and at periodic intervals not to exceed two years, and the results of each evaluation shall be reviewed to determine the capability of the individual. If it is determined that the capabilities of an individual are not in accordance with the qualifications specified for the job, that person shall be removed from operations until such time as he has been trained in the needed skill and has been re-certified as being qualified to perform the work.

2.2.4 Certificate of Qualification. The qualifications of personnel shall be documented in an appropriate form. The certificate shall include the following information.

(1) Employer's name
(2) Person being certified
(3) Activity qualified to perform
(4) Level of capability
(5) Effective period of certification
(6) Signature of Employer's Designated Representative
(7) Basis used for certification

3. QUALIFICATIONS

The requirements contained within this section are intended to define the minimum capabilities that qualify personnel to perform quality assurance functions that are within the scope of this standard. The capability requirements of nondestructive examination personnel shall be as specified in SNT-TC-1A and supplements. The capability requirements of other personnel covered by this standard shall be as specified in the following paragraphs.

The qualifications have been defined in terms of three levels of capability. The categorization of requirements that are defined are not intended to be limiting with regard to company position or professional status, but are merely a convenient method of defining functional activities.

3.1 Levels of Capability

Three levels of capability for persons who perform inspections and tests, or who participate in the approval of procedures, the handling of data or test results, or the control of reports and records are delineated below. The education and experience requirements specified for the various levels should not be treated as absolute when other factors provide reasonable assurance that a person can competently perform a particular task. Other factors may be demonstrated capability in a given job through previous performance, examination, completion of proficiency testing.

3.1.1 Level I. To be considered for certification, a candidate must satisfy the following requirements:

High school graduate, plus one year of experience in quality assurance, including testing or inspection (or both) of equivalent construction and installation activities.

3.1.2 Level II. To be considered for certification, a candidate must satisfy one of the following requirements:

(1) Graduate of a four-year accredited engineering or science college or university, plus two years of experience in quality assurance including testing or inspection (or both) of equivalent construction and installation activities.
(2) High school graduate, plus four years of experience in testing or inspection (or both) of power plant, nuclear plant, heavy industrial, or other similar equipment or facilities.

3.1.3 Level III. To be considered for certification, a candidate must satisfy one of the following requirements:

(1) Graduate of a four-year accredited engineering or science college or university, plus five years of experience in quality assurance including testing or inspection (or both) of equivalent manufacturing, construction and installation activities. At least two years of this experience should be associated with nuclear facilities, or if not, the individual

5.4 Prior experience may be applied to the experience level requirements for more than one inspection/testing activity provided the requirements of 5.3 above are met.

6.0 PHYSICAL QUALIFICATION

6.1 QA/QC inspection personnel shall meet the physical requirements for the particular CP&L classification involved at initial hiring.

6.2 Contracted personnel employed to augment CP&L QA/QC inspectors shall meet the physical requirements of their employers.

6.3 QA/QC and augmented inspection personnel shall be tested to assure:

1. Natural or corrected near distance acuity such as being capable of reading the J-1 letters on a standard Jaeger's test-type chart or equivalent test type.

2. The capability for distinguishing and differentiating contrast between colors as demonstrated by practical demonstration or test performance.

6.4 Personnel that fail the near distance acuity or color sense testing may be evaluated and, through satisfactory demonstration of capability to perform the required inspections, found acceptable for certification for a sub-category of inspection. The personnel records shall reflect the evaluation process used and any inspection limitations imposed.

6.5 The tests specified in 6.3 (or as allowed by 6.4) shall be conducted on an annual basis.

7.0 INDOCTRINATION AND TRAINING

7.1 Newly assigned personnel (CP&L and augmented) will be trained in the performance of their intended assignments. Training shall be accomplished through a program consisting of indoctrination and on the job training (OJT) under the direct supervision of qualified personnel. The degree of training will depend on the evaluation of previous experience and training.

7.1 (cont.) Emphasis will be on firsthand experience gained through actual performance of processes, tests, examinations and inspections. As the inspector in training develops proficiency, he may be allowed to perform certain functions with minimal supervision; however, he will not be permitted to "sign-off" hold points in verification of quality requirements for work activities.

7.2 Personnel performing QA/QC activities shall be indoctrinated in those project informational areas necessary for effective coordination and accomplishment of their assigned activities and responsibilities. Indoctrination shall be documented on QA/QC Personnel Indoctrination Check-Off (Form QA-47) and consist of, but not be limited to:

1. Organization and Organizational Relationships
2. Introduction to appropriate site personnel
3. Duties and Responsibilities
4. CP&L - CQA/CQC procedures, instructions, reports, records and filing system.
5. Technical objectives of construction site CQA/CQC procedures
6. Codes and Standards to be employed

7.3 Appendix A to this procedure specifies the training time required for the individual inspection testing activities. Where the inspector in training has been previously certified for the inspection/testing activity by another organization, the classroom* hours may be reduced by one-half and the OJT** hours may be reduced by two-thirds.

Notes: *Classroom training includes lectures, discussions, and demonstrations of the uses of documents, tools and equipment related to the inspection/testing activity; and the administration of appropriate examinations and tests.

**Where equally applicable to more than one inspection/testing activity, OJT time may be applied to each of the appropriate activities.

7.4 Formal training administered by the Discipline QA/QC Specialists to develop or maintain the proficiency of inspection personnel shall be documented. These training records shall include the following information:

1. Name of Instructor
2. Subject Matter
3. Date
4. Time Spent
5. List of Attendees

6.3.7 (cont.)

Any problems noted with items a or b will be handled as an "in-process" conditions unless it involves a pipe hanger in "Phase II" of the installation process, as described in Reference 2p, in which case it will be handled as a nonconformance in accordance with Reference 1d.

6.3.9 The QC Inspector shall monitor welding activities within his assigned area(s). Activities monitored will include, but not be limited to the following:

a. Fitup of non-full penetration joints (configuration, gap cleanliness). Enter on appropriate QA-34 Form.
b. Correct welding procedure utilized.
c. Qualification of welder to procedure and position.
d. Specified filler metal being used.
e. Preheat technique and temperature satisfactory. (Use temperature indicating crayon or contact pyrometer.)

Deficiencies noted with items b, c or d and any other deficiencies which cannot be corrected by routine rework shall be handled as nonconformances in accordance with Reference 1d.

6.3.10 The QC Inspector shall perform the required visual inspections in accordance with Reference 1h and initiate the NDE Requests when the specified NDE holdpoints are reached.

6.3.11 Minor surface defects detected by visual inspection will be identified on the item by marking the defective areas with black marking ink and indicating the nature of the defects. The QC Inspector will enter the weld identification/description and check the appropriate "reject" box on both the QA and craft foreman's copies of the QA-34 Form. These are in-process defects and not reported as nonconformances.

6.3.12 When a weld is found rejectable by NDE, the QA Inspector will enter the weld identification/description and check the appropriate "reject" box on both the QC and craft foreman's copies of the QA-34 Form. He will forward a copy of the NDE report ot the craft foreman.

a. If the defect is in the weldment, rework is considered "in-process" and not reported as a nonconformance.

8.0 QUALIFICATION PRIOR TO CERTIFICATION

Prior to assignment to perform specific inspection/testing functions, QA/QC personnel shall meet the minimum requirements for the assignment as delineated in Appendix A. Classroom, self-study and practical demonstrations shall be performed and documented in accordance with Reference 3.

9.0 CERTIFICATION

9.1 QA/QC Specialists (Supervisors)

9.1.1 Discipline QA/QC Specialists (supervisors) are assigned supervisory and technical responsibilities based on combinations of formal education, training, previous work experience, completion of indoctrination and demonstration of ability and knowledge to satisfactorily perform their assignments. Discipline QA/QC Specialists are considered qualified to perform the following functions as applicable to the activities within their assignments:

1. Train, qualify and supervise QA/QC personnel in inspection, monitoring and testing assignments.

2. Develop and administer oral and written qualification examinations.

3. Evaluate capabilities and performance of QA/QC personnel.

4. Evaluate results of examinations, inspections and tests.

5. Develop and prepare new QA/QC procedures and instructions.

6. Review QA/QC and Construction procedures and instructions for appropriate commitments and requirements.

7. Technical review of site generated documents which furnish documentary evidence of the quality of nuclear safety related items and of activities affecting quality.

QA/QC PERSONNEL EXPERIENCE & TRAINING REQUIREMENTS

INSPECTION/TESTING ACTIVITIES	MOS. EXPERIENCE REQUIRED			HRS. TRAINING	
	HIGH SCHOOL	2-YR ENGR/TECH 4-YR NON-ENGR	4-YR ENGR	CLASS-ROOM	OJT
WELDING					
ASME Code Weld Inspector	6	3	1-1/2	9	80
Non-Code Pipe Weld Inspector	4	2	1	9	40
Structural Weld Inspector	4	2	1	9	80
Seismic Hanger Weld Inspector	4	2	1	9	80
Pool Liner Weld Inspector	4	2	1	9	40
Containment Liner Erection Welding Monitor	4	2	1	9	40
Stud Welding Inspector	4	2	1	4	40
Post Weld Heat Treatment Inspector	2	1	1/2	4	40
Weld Control Surveillance	2	1	1/2	9	80
MISCELLANEOUS (Non-inspection/testing activities)					
QA/QC Specialist (supervisor) 1. Civil 2. Electrical & Instru. 3. Material Control 4. Mechanical 5. Records 6. Welding	72	48	2-	N/A	
QA Records Clerk	2	N/A	N/A	8	

SS No.

Inspection/Test Activity: Seismic Hanger Weld Inspector

Prerequisite Certifications: None

Function	Hours	Date	Rating	Certified Inspector
1. Verify fit-up of full penetration welds. 2. Verify pre-heat of weld joints with base material greater than 1½" thick. 3. Review applicable installation drawings FCR's, PW's, DCN's, etc. for correctness and requirements. 4. Identify missing, incorrect and confusing weld symbols. 5. Verify weld type and configuration agree with the drawing. Verify that the welder is qualified. . Verify that the items to be welded are in the accept status. 8. Inspect weld at it's completion is in accordance with applicable procedure and initiate request for NDE required. 9. Verify that specific items checked are entered on a weld inspection checklist and attached to the QA-34 Form. 10. Submit completed QA-34 and associated documents to the Welding QA/QC Specialist.				
Knowledge & use of procedures & specs				
Ability to use drawings/diagrams				
Knowledge of DCN's, FCR's, PW's & RCI's				
Application of inspection/testing techniques				
e of inspection tools/aids				

Reviewed By: _____ Date _____

QA/QC Specialist

Name _____ SS No. _____

Inspection/Test Activity: Seismic Hanger Weld Inspector

Required Reading	Rev.	Date Completed	Initials
Procedures			
CQA-1			
CQA-4			
CQC-1			
CQC-2			
CQC-21			
QCI-19.1			
NDEP-10			
NDEP-601			
MP-03			
MP-05			
MP-06			
MP-07			
MP-08			
MP-09			
MP-10			
MP-13			
MP-18			
MP- 30			
WP-110			
Specifications			
Site Specifications 031			
033			
034			
Codes & Standards			
AWS D1.1			
Other			
None			

Reviewed By: _____ Date _____

QA/QC Specialist

The SHNPP Project complies with Regulatory Guide 1.58 (8-73) with the following clarifications to ANSI N45.2.6-1973:

CP&L Power Plant Engineering and Site Construction Activities

Section 2.2.4: Certification of Qualifications
CP&L will provide certification of inspection, examination and testing personnel qualifications. However, it is CP&L's intent that certification of qualification will not distinguish levels of capability for other than non-destructive examination (NDE-MT,PT,UT,RT) personnel.

Section 3.1: Qualifications
With the exception of NDE, CP&L does not intend to qualify and certify inspection personnel to levels of capability as described in this paragraph.

Section 3.2.1: Physical
CP&L requires potential employees to complete a medical examination to assure satisfactory medical condition. In addition, CP&L requires that site inspection, examination, and testing personnel be checked annually to assure that they possess the physical characteristics necessary to satisfactorily perform their assigned tasks. These physical characteristics are normal color vision and near vision acuity. These characteristics are checked by means of a color perception test utilizing pseudoisochromatic plates and the standard Jaeger test, respectively, administered by qualified personnel.

Section 3.2.2: Technical
CP&L inspection personnel will meet the appropriate requirements of this paragraph; however, other than NDE, personnel will not be classified by levels of capability.

For NSSS Suppliers, AE, and Vendor Personnel

For other than NDE personnel, it will be the responsibility of the organization employing such inspection, examination, and testing personnel to assure the physical and technical capability of these personnel to perform their assigned tasks in accordance with the organization's standard procedures.

1.59 Design Basis Floods for Nuclear Power Plants (8-73)

The SHNPP Project complies with Regulatory Guide 1.59.

1.60 Design Response Spectra for Seismic Design of Nuclear Power Plants (Revision 1, 12-73)

The SHNPP project complies with Regulatory Guide 1.60 (Revision 1, 12-73) with the following clarifications and exceptions:

For the Seismic Category I Main Dam, Auxiliary Dam and Auxiliary Dike the seismic stability analysis is presented in Appendices 2E and 5E.

(8-73)

The SHNPP Project complies with Regulatory Guide 1.58 (8-73) with the following clarifications to ANSI N45.2.6-1973:

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QA 34 REV 3

SEISMIC I WELD DATA REPORT

(PROCEDURE CQC-19)

PG 1 OF

1. UNIT	2. BUILDING	3. ELEV.	4. LOCA.	5. COMPONENT/HANGER ID.	6. DRAWINGS, REV. & SHT. #	7. WELD PROC.	9. WELD INSTRUCTIONS
DISCIPLINE ENG.		DATE	WELDING ENG./FOREMAN	DATE		8. WELD ML. TY.	

I

1 NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
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

FOREMAN: Roy Mallard DATE: 7-21-81

II

4 WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A[ ] R[ ] DATE

III

2 WELDER(S) QUALIFICATION A ☐ R ☐ | 3. MAT'L STATUS A ☐ R ☐ | NCR/DDR # | QA/QC INSPECTION | DATE

IV

* JOINT I.D. OR DESCRIP. & QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP			ROOT NDE						FINAL NDE												VAC BOX			PWHT			INSP INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC
							VT			MT/PT			VT			MT/PT			RT			UT											
		H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R			
1 Fillets	SH95													X	✓																BT	8/1/81	
1 Flare bevel	SH95													1																	PT	8/1/81	
2 Flare bevel	SH95														✓																PT	8/1/81	PC@ to Embed Missing Weld
2 Flare bevel	SH95														✓																	8-7-81	

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY _____ INITIALS _____ DATE

QA/QC SPECIALIST / DESIGNEE _____ DATE

REMARKS:

* USE QA-34A TO LIST ADDITIONAL WELDS

QA 34 REV 3

SEISMIC I WELD DATA REPORT

(PROCEDURE CQC-19)

PG. 1 OF ___

I

1. UNIT	2. BUILDING	3. ELEV.	4. LOCA.	5. COMPONENT/HANGER ID.	6. DRAWINGS, REV. & SHT. #	7. WELD PROC.	9. WELD INSTRUCTIONS
1	RAB	236	zone 6	PD-H-1693	1-236-1-PD-H-1693	1A4R0	N/A

DISCIPLINE ENG.	DATE	WELDING ENG./FOREMAN	DATE	8. WELD ML. TY.
[illegible]	6-11-81	[illegible]	6-19-81	E7018

II

1 NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
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

FOREMAN: N/A DATE N/A

III

1 WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A ☑ R ☐ DATE 8-7-81

2 WELDER(S) QUALIFICATION A ☑ R ☐ | 3. MAT'L STATUS A ☑ R ☐ | NCR/DDR # N/A | QA/QC INSPECTION [illegible] DATE 8-7-81

IV

* JOINT I.D. OR DESCRIP. & QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP			ROOT NDE						FINAL NDE												PWHT			INSP. INITIALS	DATE	DESCRIPTION OF REPAIR OR REWORK
							VT			MT/PT			VT			MT/PT			RT			UT			VAC BOX						
		H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R			
19 Fillet Welds	SH-95												N																			

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY [illegible] 6/18/81
INITIALS / DATE

QA/QC SPECIALIST / DESIGNEE ___ DATE ___

REMARKS

* USE QA-34A TO LIST ADDITIONAL WELDS

(PROCEDURE CQC-19)

BUILDING	3. ELEV.	4. LOCA.	5. COMPONENT/HANGER ID.	6. DRAWINGS, REV. & SHT. #	7. WELD PROC.	9. WELD INSTRUCTIONS
SAB	1236	Zone 6	PD-H-1702	16236-1 PD-H-1702	1A4RO	N/A
PIPING ENG. Ludlow	DATE 6-11-81	WELDING ENG./FOREMAN	DATE 6-18-81		8. WELD MT. TY. E7018	

DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES
WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS
QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN: N/A DATE: N/A

CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A☐ R☐ DATE

WELDER(S) QUALIFICATION A☐ R☐ | 3. MAT'L STATUS A☐ R☐ | NCR/DDR* | QA/QC INSPECTION | DATE

JOINT I.D. OR DESCRIP. QTY OF WELDS		WELDER SYMBOL(S)	PREHEAT H	PREHEAT TEMP	FITUP H A R	ROOT NDE VT H A R	ROOT NDE MT/PT H A R	FINAL NDE VT H A R	FINAL NDE MT/PT H A R	FINAL NDE RT H A R	FINAL NDE UT H A R	FINAL NDE VAC BOX H A R	PWHT H A R	INSP. INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC.
Linked	Q/A	SI-5						✓	✓					P.T	7/25/81	arc strikes, undercut
⑤ TO ⑥	Q/A	SI-5							✓					P.T	7/25/81	arc strikes, undercut
5 fillets	Q/A	SI-5							✓					PT	8/1/81	
PC ⑤ TO Embed	Q/A	SI-5						✓						[illegible]	8/1/81	
[illegible] TO ⑥	Q/A	SI-5						✓						[illegible]	8/2/81	

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY [illegible] INITIALS 6/18/81 DATE

QA/QC SPECIALIST / DESIGNEE DATE

REMARKS:

* USE QA-34A TO LIST ADDITIONAL WELDS

WELDER: [illegible] SYM

INSPECTION REQUIREMENTS: CLEAN ☐ FIT UP ☐ FINAL ☐

NONDESTRUCTIVE TEST INSPECTION REQUEST *

WELDER: SYMBOL

CLEAN ☐ FIT UP ☐ FINAL ☐

DWG./ISO. SHEET

FOREMAN

LOCATION

ELEV.

TIME

DATE

JOINT HANGER

DETAIL

NONDESTRUCTIVE TEST INSPECTION REQUEST *	FOREMAN	LOCATION	ELEV.	TIME	DATE
WELDER: Jenkins SYMBOL 51-5		DWG./ISO. * 4-6-256-1	SHEET	JOINT HANGER * CD-H-1752	
INSPECTION REQUIREMENTS: CLEAN ☐ FIT UP ☐ FINAL ☐ VISUAL ☒ LP ☐ MP ☐				DETAIL	
REWORK ☐ NEW ☒					

COMMENTS: Rev. 0/2- PC _____ TO PC _____

pc 6 to Embed one Stiffener weldment

pc 1 to pc 6

INSPECTOR T. Timan ACCEPT ☐ REJECT ☐ HOLD ☐ DATE 7/25/81

*This form for Information Only-NOT A QA RECORD.

96

95

A 34 REV 5

SEISMIC I WELD DATA REPORT

(PROCEDURE CQC-19)

1. UNIT	2. BUILDING	3. ELEV.	4. LOCA.	5. COMPONENT/HANGER ID.	6. DRAWINGS, REV. & SHT. #	7. WELD PROC.	9. WELD INSTRUCTIONS

DISCIPLINE ENG.	DATE	WELDING ENG./FOREMAN	DATE	8. WELD ML. TY.

1 NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
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

FOREMAN: DATE:

1 WELD TYPE & CONFIGURATION CHECKED WITH DWG('S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A☐ R☐ DATE

2 WELDER(S) QUALIFICATION A ☐ R ☐ | 3. MAT'L STATUS A ☐ R ☐ | NCR/DDR # | QA/QC INSPECTION | DATE

* JOINT I.D. OR DESCRIP. & QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP			ROOT NDE						FINAL NDE																PWHT			INSP INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC
							VT			MT/PT			VT			MT/PT			RT			UT			VAC BOX										
		H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R			

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY _____ INITIALS _____ DATE

_____ QA/QC SPECIALIST / DESIGNEE _____ DATE

* USE QA-34A TO LIST ADDITIONAL WELDS

REMARKS:

(PROCEDURE C[illegible]

			3. COMPONENT/HANGER ID.
		ENTIRE SYSTEM	DATE

98

DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION

DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PL[illegible]

COMPLETE WELDING OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS

QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN: McLEOD DATE 6/9/[illegible]

WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A[ ]R[ ] DATE

WELDER(S) QUALIFICATION A ☐ R ☐ | 3. MAT'L STATUS A ☐ R ☐ | NCR/DDR # | QA/QC INSPECTION | DATE

* JOINT I.D. OR DESCRIP. & QTY OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP			ROOT NDE						FINAL NDE														VAC BOX			PWHT			INSP. INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC.
							VT			MT/PT			VT			MT/PT			RT			UT													
		H	TEMP.	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R			
5 Fillets	5I-2												✓			✓																		SM	6/6/82	ARC Strike, grinded
5 Fillets 1/2	5I-5												✓			✓			✓			✓												SM	6/6/82	Undercut (above 3M 4/8/82

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP. GREATER THAN LISTED

QA/QC INSPECTION & NI AND/OR VERIFIED BY.

QA/QC SPECIALIST / DESIGNEE DATE

REMARKS:

* USE QA-34A TO LIST ADDITIONAL WELDS

A 34 REV 3

SEISMIC I WELD DATA

(PROCEDURE CQC-

I

1. UNIT	2. BUILDING	3. ELEV.	4. LOCA.	5. COMPONENT/HANGER ID.
—				

DISCIPLINE ENG.	DATE	WELDING ENG./FOREMAN	DATE
Kenny Culp	3-31-81	Liddell	4-3-81

7. WELD PROC.	9. WELD INSTRUCTIONS
104	
8. WELD ML. TY.	
E7018	

II

1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
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

FOREMAN: R. Carr — DATE: 4-7-81

III

1. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A ☐ R ☐ — DATE 4-7-81

2. WELDER(S) QUALIFICATION A ☑ R ☐ — 3. MAT'L STATUS A ☐ R ☐ — NCR/DDR # — QA/QC INSPECTION — DATE 4-7 to 8-81

V

* JOINT I.D. OR DESCRIP. & QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT H	PREHEAT TEMP.	FITUP H	FITUP A	FITUP R	ROOT NDE VT H	ROOT NDE VT A	ROOT NDE VT R	ROOT NDE MT/PT H	ROOT NDE MT/PT A	ROOT NDE MT/PT R	FINAL NDE VT H	FINAL NDE VT A	FINAL NDE VT R	FINAL NDE MT/PT H	FINAL NDE MT/PT A	FINAL NDE MT/PT R	FINAL NDE RT H	FINAL NDE RT A	FINAL NDE RT R	FINAL NDE UT H	FINAL NDE UT A	FINAL NDE UT R	FINAL NDE VAC BOX H	FINAL NDE VAC BOX A	FINAL NDE VAC BOX R	PWHT H	PWHT A	PWHT R	INSP. INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC.
All welds	SI 59 D 29												✓		✓																GAD	4/5/81	NOT WELDED PER DRWG
All welds	SI 59 D 29												✓																		MH	4/6/81	Per AWS-D1.1-79 25.1.4.2

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP. GREATER THAN LISTED

QA/QC INSPECTION & NDE (HOLDPO...) AND/OR VERIFIED BY

QA/QC SPECIALIST / DESIGNEE — DATE

REMARKS: * All welds acceptable per AWS D1.1-79

* USE QA-34A TO LIST ADDITIONAL WELDS

Federal Agencies & CP&L To Investigate Charges

by James Hobbs

federal agencies and
are investigating charg
unprecedented workmen
safety. In the past week
and drug use charges
raised by four workmen at
Shearon Harris nuclear
construction site in last week's
Western Wake Herald.

The Nuclear Regulatory
Commission's (NRC) prime
concern is the four workers' charges
of poor welding and lax enforcement
of safety rules.

The Occupational Health
and Safety Agency's (OSHA)
Director of Compliance
Bob Taylor's official view
on the charges is presently being
withheld pending digests of
reports by those working
on the case.

Taylor did say that they will
be investigating accusations
of poor welds and
alignment problems involving
the condenser as well as
charges of drug use among
workers within the site.

The $4 billion nuclear plant
which will be the second largest
in the nation is being
built primarily by Daniel Construction
Company. Some
two years are working at the
site. The four workers are
employed by main operations in
the engineering and
construction phases.

Bob Mauldin of the Atlanta office said the
commission would investig
the men's accusation
particularly those related to
welding areas of the plant. We
have to be responsive to the
charges.

Mauldin guarantees absolute
confidentiality for any worker who has
information about workmen
safety and reports them to him
or the Department of Labor law
enforcement officials who in
turn provide complete confidentiality
for the person.

OSHA Director Taylor stressed
that the public would
not be told
who filed
complaints
but that
the
Commission
will be
required to
investigate
all charges.

Mauldin said CP&L's
Harris
Plant
Manager
Mr. Parsons
will be
informed of the
safety problems
concerning
hard hat and handrail

Other problems are construction
will be detailed in the OSHA
report to Daniel.

Mauldin also said he
assures will take a close look at
the condenser bid. One of the
workmen charged that the bid
which should be square is
warped and warped.

Accusations about drug use
while on the job will also be
investigated Montague said.

We will be as diligent as we
can in this area of workmen
will provide information that
will assist CP&L in providing
concrete information on where
drugs are being used on the
site. Confidentiality will be
maintained concerning the so
urce of the information. Mont
ague assured.

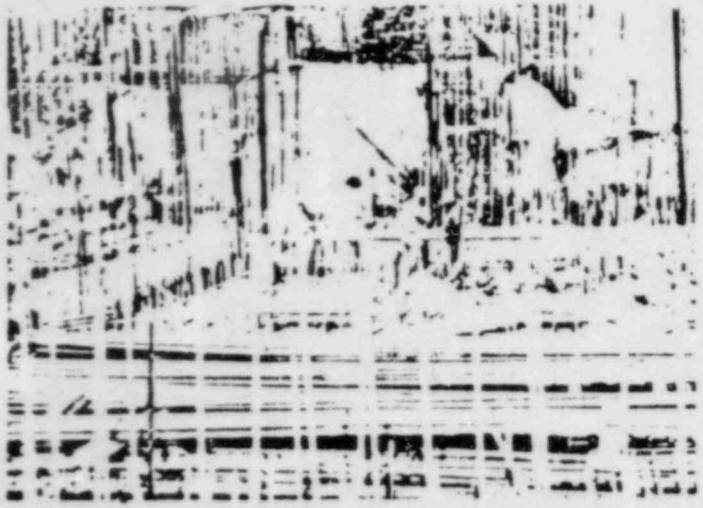
Workmen charge that welds on the prefabricated West
inghouse lid which will cover
the condenser. Montague ag
reed were not up to par
inspectors caught the defects
and Westinghouse will be
charged to post cost.

The four workmen charged
Daniel Construction with hir
ing inexperienced workmen
who often produced shoddy
work overlooking on the job
drug use and neglecting fed
eral safety regulations. They
called the nuclear construction
site a bargain basement
power plant while detailing
many of their charges.

All four men requested
anonymity for fear they would
lose their jobs and be black
balled from other construction
jobs.

Since the publication of last
week's article two other wo
rkmen have complained about
safety workmanship and dr
ug use. They too requested

(See Workmen Charge, Page 3)



Two federal agencies and CP&L are investigating charges of poor workmanship, inadequate safety procedures, and on the job drug use at the Shearon Harris Nuclear Construction site in New Hill. Four Daniel workmen listed numerous charges in last week's Western Wake Herald.

Workmen Charges Under Investigation By CP&L

Continued from page 1

their identity be withheld.

A welder who works near the containment unit criticized the methods used to pour concrete because air pockets often prevent concrete from filling the entire area.

Welds in critical areas he said are X rayed. But "They (Daniel) are having a hard time getting the welds done right so it's taking more time. Often they have to grind out and redo the welds in critical areas. If they had more experienced welders they would not get a done shoddy job.

Safety both workmen said is a problem at the site.

Scaffolds one said are normally not made right. The carpenters often don't make safety handrails or kick rails. Kick rails prevent tools from falling and hitting another worker. Many complaints involve falling objects striking workmen below.

But the workmen added "Safety problems are due largely to the workmen who don't care. There are a lot of stupid people working out there.

Another workman interviewed since the charges were levied said "Daniel and CP&L people are making obvious and significant attempts to correct safety and welding problems."

Supervisor and management level people have been "scattered all over the job since the charges appeared in your paper."

OSHA inspection officers spent two days at the job site, the workman said, pointing out safety violations.

100 99

Letter To Editor:

Daniel Employee Praises Accuracy Of Construction Story

To the Editor

As an employee of Daniel [illegible] for on the [illegible] Harris project I was not surprised at the information contained in your recent article as most employees there were not surprised. The information was accurate though it is an error to suggest drug use pervades the site as inferred.

Your readership should be aware the article created quite a stir among management of both Daniel & CP&L, wholesale members of which appeared from nowhere the morning after your revelations appeared in print. Your stand was courageous and much to the point. One would feel as though you were an employee at the site.

Mr. Jackson Ward, OSHA safety officer, a conscientious individual, made a lengthy inspection on the site with particular attention to the condensor area. Virtually all employees in that area have since been corrected the safety problems related there to. To be fair to CP&L and Daniel it is clear they are rapidly and sincerely trying to correct their errors and generally mend their ways in both safety (most noticable) and quality craftsmanship also stressed the group meetings.

With regard to the issue of craftsmanship generally and welding in particular it would be inaccurate to claim these men don't do quality work as most craftsmen welders can do as much as is expected of them. That is the problem. Shearon Harris difficulties lie in the haphazard, vaguely interested rarely seen on the job in the dirt and noise management.

All the problems you refer to are of management only. The craftsmen will do only what is expected of them. No more. While talk about quality and safety has been cheap at the site, the men see larger, plainer signs of current management's real interests and in fact abilities.

The plain truth is, few managers above supervisor trainee level are ever seen on the job. What do they know of safety and quality? Therefor the men including lower level supervision, perceive a weakness of significant interest in these areas. In fact, employees view management as callous and indifferent to their needs generally.

Eye catching reminders exist as one merely approaches the site, driving to work. Entering one of two routes, one is engulfed in a great dust cloud as the road from Old Hwy. 86 is not properly maintained even tho thousands of taxpayers pass over it weekly and on to the site parking area, in a great cloud of all pervasive, choking dust, extremely destructive to the thousands of employee car engines (and lungs) daily subject to it.

Once in the gravel parking lot, with its routes for cars but none for people, one skids, slides and skates thru the slippery clay mud for several hundred yards to his area of work. The Daniel/CP&L has all manner of earth moving and rock hauling equipment, then regard for the safety and well being of the craftsmen building that reactor is manifestly evident before he even picks up his tools.

The afore described mud holes and other related safety accumation, and supply shortcomings shout like an arc beacon to the days are not of a calculated plan, but of yawn — indifference.

You have, as responsible news reporters should, kicked the proverbial hornet's nest and now they swarm — for the time being.

A Daniel employee

Editor's Note: Western Wake Herald policy normally requires name and address from the individual writing a Letter to the Editor. The workman submitting this letter provided proper information but requested that the newspaper withhold his name from public print. The request will be honored since the workmen interviewed in last week's article were also unidentified.

Letter To Editor:

Subscriber Charges Sensationalism

To the Editor

Please cancel my subscription to the Western Wake Herald effective immediately. This action is requested due to the lack of ethical journalism demonstrated by your story "Daniel Building a Bargain Basement Power Plant."

This type sensationalism at the expense of accurate and unbiased reporting reeks of the National Enquirer which also cannot be found in my home.

To base an entire story on 4 of 4000 workmen's remarks leaves much to be desired in terms of accurate sampling techniques. I am sure that in a group of 4000 construction workers, as with any other cross section of society, opinions similar to those expressed in your story can be obtained on any subject.

I subscribed to your paper to assist the students of Apex High School. Next year I will donate directly to the school.

C. S. Hinnant

CP&L Says Charges UNTRUE!

[illegible] Editor:

[illegible] May [illegible] an article containing a [illegible] allegations against the construction of the Shearon Harris Nuclear Power Plant. The common thread which runs through the allegations is that the job is unsafe, Daniel pays low wages and gets unskilled craftsmen, welds are indiscriminately [illegible] and torn down, and the quality is poor. These allegations are irresponsible, untrue and unfair to both CP&L and Daniel.

You point out that the men believe that I am manipulating statistics when I cite the good safety record which Daniel has achieved. The statistics are a matter of record. The accident rate is substantially below one half the national average and there has been no death or disabling injury. It is alleged that if a worker is injured, the company tries to blame him so that it will not have to pay workmen's compensation claims. We need to point out that the company pays these claims in accordance with state law, whatever is a law.

I stand by my statement that many workmen fail to follow safety procedures. According to a National Safety Council study, unsafe acts are a contributing factor in over [illegible] of the accident cases. I think we can relate this situation somewhat to vehicle accidents. Rarely is the vehicle at fault — it is usually the driver.

One of the workers is quoted as saying "on-the-job training should not occur at a nuclear facility." The implication is that all should be experienced journeymen. This worker is out of touch with reality. How does a worker reach journeyman status if he cannot train under other experienced workers? This is an accepted process throughout the construction industry and any other workplace where skilled work must be accomplished.

So the Daniel work force is composed of some less experienced workers training under a group of highly skilled long-term employees. This combined with multiple training programs at the site has produced craftsmen and construction of which we are justly proud. CP&L is also quite proud of the fact that local people can be trained to the necessary skills level allowing them long-term employment without having to leave the area. These training programs also allow Daniel to hire more women and minorities.

Your article alleges that numerous skilled people leave the job because it does not pay enough. The facts do not bear out this allegation. The three most common reasons given by those employees voluntarily [illegible]

[illegible] the job are that they cannot find housing in the Apex area [illegible]

[illegible] the workers that Daniel should be importing craftsmen from [illegible] some other area of the country, I would have to disagree. More nuclear power plants have been constructed in the southeast and with southern [illegible] than in any other area of the country. You say that the men Daniel should [illegible] or [illegible] but [illegible] trained workmen [illegible] are hired [illegible] wages [illegible]

[illegible] produced in [illegible] are about [illegible] a large majority of [illegible] North Carolina are [illegible] simply can[illegible] We are proud of the [illegible] displayed by our workers.

Your article points out that [illegible] reinforcement workers [illegible] rebar and another [illegible] coming in, [illegible] out the reinforcement and put in pipe or welding plates. This is done at times to accommodate a change in design. At other times it is done on purpose to facilitate construction and to work within prescribed tolerances. The point is that except in the rarest of cases these changes are made prior to pouring the concrete around the entire assembly and this is when changes are easily made. Since the decisions for changes are made by engineering personnel, the field craftsmen at times may not know the reasons.

You also cited a situation where some defective welds were detected in parts of the condenser steel. It was not made clear that our inspection process worked as it should have. We detected the situation and the manufacturer, not CP&L, is bearing the cost of repairs. As previously mentioned, the welder is not expected to nor does he need to know who is paying for the cost of changes or corrections.

You cited a case where a welder continued to weld after flunking a test. The point which was not made clear was **that there are numerous weld procedures or tests tailored to the different job requirements. It is perfectly appropriate that a welder continue to weld under a procedure for which he has qualified but he is not allowed to weld under a procedure which he has flunked.**

Insofar as the **allegation concerning drug use on the site**, let me repeat what you were told prior to your writing the article. Drug and alcohol use are absolutely forbidden on the site. Any employee caught using either at the site is immediately terminated.

As for the implication we should have an undercover drug agent on site, let me remind you that is a police decision. We cooperate fully with local law enforcement agencies. However, if we had one working we wouldn't tell you, since he would immediately lose part of his protection if we did.

I hope I have set forth the facts about the Harris plant construction. I believe that had you interviewed a representative cross section of the workers instead of only a few dissidents, the story would have been substantially different and much fairer.

To assure the quality necessary in construction of a nuclear power plant, there is a comprehensive system of checks and balances built into all of the construction and inspection process, particularly welding. We maintain our open door policy and extend another invitation for you to acquaint yourself with its thoroughness. I have enough confidence in the system to feel that you may [illegible] change your viewpoint.

Sincerely,

Burt [illegible]

[illegible] Power Area [illegible]

Shearon Harris

VOL. 24 NO. 11 APEX, NORTH CAROLINA

Nuclear Power Workers Charged

Donnell Buildings A "Blast"

THURSDAY, MARCH 20, 1980 — 25¢ PER COPY

[illegible] Power Plant

By [illegible]

[illegible] construction workers at CP&I's [illegible] [illegible] Construction Company of hiring [illegible] inexperienced [illegible] who are building a [illegible] power plant." The workers believe the [illegible] that people living around the plant ought to be concerned.

Nuclear Regulatory Commission (NRC) officials, who [illegible] acknowledge they inspect [illegible] than 10 percent of the work. [illegible]

[illegible] CP&I inspectors [illegible] 100 percent of the work. [illegible]

[illegible]

failed

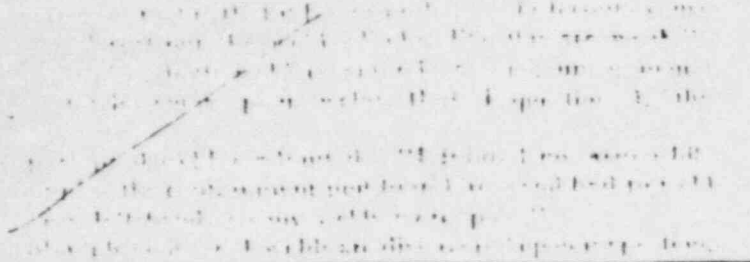
test, but they still let me work as a welder in the [illegible] unit," an inexperienced welder said.

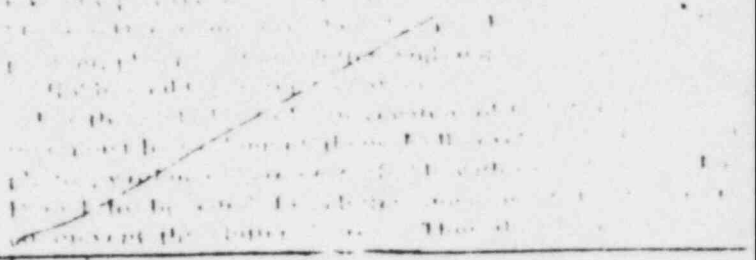
• "I can [illegible] kind of [illegible] The men [illegible] for dinner [illegible] take their stuff and then [illegible] to work [illegible]" said.

• "If federal OSHA [illegible] inspectors came out right now, they [illegible] to the large number of [illegible]" welder said.

• [illegible]

[illegible]





Cutchin

[redacted]

List of

INITIALS OF SITE QA/QC INSPECTION PERSONNEL

Memo to file 12-9-87

Name	Initials
Andy Bartrom	AB.
Ed Betz	
James Brown	
Emma Jean Burton	EB
Richard Bussey	RB.
James Cagle	JWC
Herb Casanova	HTC
Jerry Cates	JC
Robert Cates	
Pete Cook	
Don Crispino	
Gina Cullins	GC
George Daniel	GD
Rick Demling	RD
Ken Douglas	KAD
Bud Driggers	
Tommy Gilbert	TG
Bruce Giles	
Bill Godbold	
Glenda Goodman	
Robin Groves	
Dyanne Hardy	DH.
John Holland	DH
David Holler	
Bobby Miller	BM

Name	
Barbara Howe	
Don Hudson	
Margaret Hundley	
Rhett Hunt	
Eric Hunter	
Dudley Jacobs	
Sandy Jenkins	
Gene Kelly	
Kendel Kirks	
Jay Kremer	
John Langdon	
Tom Lee	
Walt Leggett	
Pam McCurdy	
Judi McDonnell	
Ward Mercer	
Lil Meyer	
Cheryl Miller	
Glenn Milner	
Dale Mize	
Rich Moore	
Steve Mountcastle	
David Myers	
Carl Osman	
Jean Parker	
Bill Pere	
Nguyen Van Phung	
Don Prince	
Al Rullian	
Jerry Rohrbough	
Jim Rowles	

Marc Davis

John Harrell

Reginald Faulkner

Gil DeBarros

Alan Kinsey

Mark Tallon

James Hampton

Eugene Martin

Rose Briere

John Swindell

Alan Lowe

Dwight Estes

Ian Simpson

David Jarvis

Robert Steele

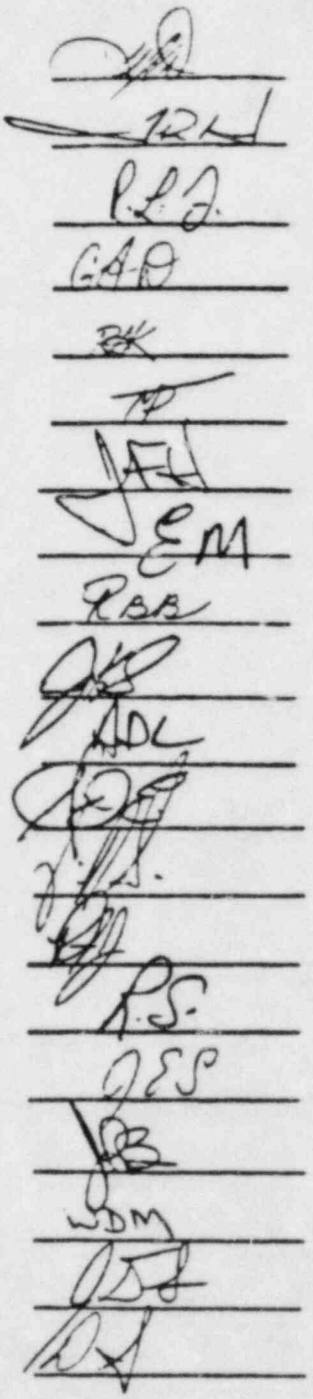
John Scoates

John R. Bain

Wayne Martin

Jim Storey

Douglas Sudduth



James Hutt

Robert St. Pierre

Judy Sauerbier

David Shockley

Bobby Smith

Ricky Strickland

Don Sugg

Cyndi Talbott

Frank Taylor

Pete Tingen

Cynthia Turner

Vernon Veglia

Terry Wait

Richard Warren

Paul West

Tom West

David Whitehead

Additions:

Robert L. St. Pierre

John Barber

Sheila Freeman

Mark Hale

Margaret Hundley

Rich Moore

Clay Rhodes

Don Sands

Bobby Smith

Don Smith

Len Stanley

Janie Weeden

Tony Watt

Tom McMillan

Carolina Power & Light Company

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Richard Bussey	RB
James Cagle	JWC
Herb Casanova	HJC
Jerry Cates	JC
Robert Cates	RC
Pete Cook	PAC
Don Crispino	DJC
Gina Cullins	GC
George Daniel	GD
Rick Demling	RWD
Ken Douglas	KED
Bud Driggers	
Tommy Gilbert	TG
Bruce Giles	
Bill Godbold	
Glenda Goodman	GG
Robin Groves	RG
Dyanne Hardy	DH
John Holland	
David Holler	
Becky Holter	

Barbara Howe

Don Hudson

Margaret Hundley

Phett Hunt

Eric Hunter

Dudley Jacobs

Sandy Jenkins

Gene Kelly

Kendel Kirks

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John Langdon

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Rich Moore

Steve Mountcastle

David Myers

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Jean Parker

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Don Prince

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Clay Rhodes

Don Sands

Bobby Smith

Don Smith

Ken Stanley

Janie Wester

Tony West

Patricia Whitehead

	Initials
Marc Davis	
John Harrell	
Reginald Faulkner	
Gil DeBarros	
Alan Kinsey	
Mark Tallon	
James Hampton	
Eugene Martin	
Rose Briere	
John Swindell	
Alan Lowe	
Dwight Estes	
Ian Simpson	
David Jarvis	
Robert Steele	
John Scoates	
John R. Bain	
Wayne Martin	
Jim Storey	
Douglas Sudduth	

QA 34 REV 5

SEISMIC I WELD DATA REPORT

PG 1 OF

(PROCEDURE QAC-19)

1. UNIT	2. BUILDING	3. ELEV.	4. LOCA.	5. COMPONENT/HANGER ID.	6. DRAWINGS, REV. & SHT. #	7. WELD PROC.	9. WELD INSTRUCTIONS
					CT-H-459 A-1 R10-1	8. WELD ML. TY. 1A4 E7018	

DISCIPLINE ENG.	DATE	WELDING ENG/FOREMAN	DATE
R. Conley	4-22-81	[illegible]	4-27-81

1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
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

FOREMAN: McLEOD DATE 6

1. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A ☐ R ☐ DATE

2. WELDER(S) QUALIFICATION A ☐ R ☐ | 3. MAT'L STATUS A ☐ R ☐ | NCR/DDR # | QA/QC INSPECTION | DATE

* JOINT I.D. OR DESCRIP. & QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP	ROOT NDE				FINAL NDE										PWHT			INSP. INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC
					VT			MT/PT	VT			MT/PT			RT			UT		VAC BOX					
		H	TEMP	H A R	H A R	H A R	H A R	H A R	H A R	H A R	H A R	H A R	H A R	H A R	H A R	H A R	H A R	H A R	H A R	H A R	H A R			
5 Fillers	SI-5																					SMM	4/8/82	ARC Strike ground
5 Fillets ½	SI-5																					SMM	4/8/82	Undercut 1 spot SMM 4/8/82

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY _____ INITIALS _____ DATE 4/8/82

QA/QC SPECIALIST / DESIGNEE _____ DATE _____

REMARKS

* USE QA-34A TO LIST ADDITIONAL WELDS

Angle Hangers
3-31-82

	Rev. No.	QA Inspector	Welder's Symbol	Weld Symbol Missing/Incorrect	Weld Symbol Unclear	Weld Operation (groove, fillet, etc.)	Weld Location	Weld Type as Detailed	Extra Weld(s)	Missing Weld	Remarks
A-2-261-1-CW-H-162	0/A	JR	B 16		A	C	C	e	P	T	
A-2-261-1-CW-H-272	0/A	JR	B 16		A	C	C	e	P	T	
A-2-261-1-CW-H-273	0/A	JR	B 16		A	C	C	e	P	T	
A-2-261-1-CW-H-277	0/A	JR	SI 98		A	C	C	e	P	T	
A-2-261-1 CX-H-1637	0/A	JES	SI 66		A	C	C	e	P	T	
A-2-261-1-CW-H-193	0/A	JES	SI 5		A	C	C	e	P	T	
A-2-261-1-FW-H-89	1/A	JES	SI 66		A	C	C	e	P	T	
A-2-261-1-CX-H-1532	0/A	JES	SH 73		A	C	C	E	P	T	
A-2-261-1-CW-H-188	0/A	JES	SH 71		A	C	C	E	P	T	
A-2-261-1-CW-H-182	0/A	JES	D 30		A	C	C	E	P	T	
A-2-261-1-CH-H-1538	1/B	JES	SH 73		A	C	C	E	P	T	
A-2-261-1-SW-H-2144	5/1	JES	SH 95	-	A	C	C	E	P	T	
A-2-261-1-FW-H-88	1/A	JES	SH 95		A	C	C	E	P	T	
A-2-236-1-CW-H-976	0/A	JR	D 91		A	C	C	e	P	T	
A-2-236-1-CW-H-1[illegible]	3/B	JR	SB 74		A	C	C	e	P	T	
A-2-236-1-CX-H-1635	1/B	JR	SI 16				√				REJECT
A-2-236-1-FW-H-[illegible]	3/D	JR	C 94		F	C	C	e	P	T	
FX-1-236-1-PM-H-278	2/3	6A D	D 11		A	C	C	e	P	T	
A-2-236-1-CX-H-236	3/B	6A D	D 64		A	C	C	e	P	T	
A-2-236-1-SW-H-1233	1/2	6A D	SI 3		A	C	C	e	P	T	

Hangers

4/1/82

	Rev. No.	QA Inspector	Welder's	Weld Symbol Missing	Weld Symbol Unclear	Weld Overrun (greater than)	Weld Undersize	Weld Type Not as Drawing	Extra Weld(s)	Missing	Remarks
2-5 236-1-WG-H-510	3/1	JR	C 93				✓				Reject
2-5-236-1-WG-H-511	1S/1	JR	C 93		A	C	C	e	P	T	
2-6 236-1-WG-H-736	4/E	JR	C 93		A	C	C	e	P	T	
2-6-236-1-WG-H-1767	2/A	JR	C 93		A	C	C	e	P	T	
3-1-216-1-RH-H-28	5/C	JE S	SI 5		A	C	C	e	P	T	
A-1-216-1-PD-H-941	1S/2	JE S	D 61		A	C	C	e	P	T	
A-1-216-1-PD-H-943	1S/2	JE S	P 61		A	C	C	e	P	T	
A-1-216-1-PD-H-678	1/B	JE S	D 71		A	C	C	e	P	T	
2-5-236-1-WG-H-518	2S/1	JR	O 93				✓				Reject
F-2-236-1-PD-H-278	O/A	JR	C 43				✓				Reject
T-1-261-1-FW-H-74	1S/2	JE S	SI 86								Reject
A-1-236-1-WL-H-2326	1S/1	JE S	D 30	-	A	C	C	e	P	T	
A-2-281-1-CX-H-1562	O/A	JE S	SI 98		A	C	C	e	P	T	
~~A-2-261-1-CX-H-~~											
2-6 236-1-CS-H-1083	O S/2	KO	SM 71		A	C	C	e	P	T	
E-2-236-1-CC-H-1411	2/C	JR	C 43		A	C	C	e	P	T	
E-1-236-1-SF-H-1154	O S/1	JR	D 54		A	C	C	e	P	T	
A-4-236-1-CT-H-509	4/E	JR	P 51		A	C	C	e	P	T	

Inspection
7/25/81

	Rev. No.	QA Inspector	Welder's Symbol	Weld Symbol Missing/Wrong	Weld Symbol Unclear	Weld Oversize (greater than 1/...	Weld Undersize	Weld Type Not as Drawing	Extra Weld(s)	Missing Weld	Remarks
236-1-CS-H-2815	1/B	P.T	SG 2		R	E	J	E	C	T	
231-1-CS-H-2798	C/A	D GC	SH 46		A	C	C	E	P	T	
236-1-CS-H-2025	9/A	D GC	SH 87		A	C	C	E	P	T	
236-1-PD-H-1780	9/A	P.T	SB 12		A	C	C	E	P	T	
236-1-PD-H-1653	9/A	D GC	SH 87		A	C	C	E	P	T	
236-1-CS-H-2799	9/A	P.T	SH 87		R	E	J	E	C	T	
236-1-SW-H-1237	2/C	P.T	C 81		A	C	C	E	P	T	
236-1-PD-H-1673	9/A	P.T	SH 71		A	C	C	E	P	T	
236-1-PD-H-1647	9/A	P.T	SH 95		R	E	J	E	C	T	
236-1-PD-H-1702	9/A	D GC	SH 5		R	E	J	E	C	T	

	Rev. No.	QA Inspector	Welder's Stamp	Weld Symbol Missing/Wrong	Weld Symbol Unclear	Weld Oversize (greater than 1	Weld Undersize	Weld Type Not as Drawing	Extra Weld	Missing Weld	Remarks
A-3-236-1-FP-H-603	3/D	[illegible]	51 3		A	C	C	E	P	T	
A-3-236-1-CH-H-395	1/B	[illegible]	C 95		A	C	C	E	P	T	
A-2-236-1-SW-H-1238	2/C	[illegible]	S 13		A	C	C	E	P	T	
A-2-236-1-CC-H-1325	0_{S_1}	[illegible]	C 13		A	C	C	E	P	T	
A-3-236-1-MSH-197	2/B	[illegible]	D 11		A	C	C	E	P	T	
A-1-216-1-PD-H-686	1_{S_2}	[illegible]	D 27		A	C	C	E	P	T	
A-1-216-1 PD-H-959	1_{S_2}	[illegible]	D 61		A	C	C	E	P	T	
A-7-236-1-BR-H-1251	3/D	JR	D 61		A	C	C	E	P	T	
A-5-236-1-CC-H-1056	1/B	JR	D 69		A	C	C	E	P	T	
A-2-261-1-CH-H-187	0_4	[illegible]	91 5		A	C	C	E	P	T	
A-2-261-1-CW-H-279	0_A	[illegible]	D 91		A	C	C	E	P	T	
A-5-236-1-CC-H-358	2/C	JR	D 69	-	A	C	C	E	P	T	
A-5-236-1-CC-H-353	3/D	JR	C 61		A	C	C	E	P	T	
A-4-236-1-CC-H-423	3/C	JR	D 51		A	C	C	E	P	T	
A-4-236-1-CC-H-426	3/C	JR	SH 71		A	C	C	E	P	T	
A-1-236-1-CH-H-1215	0_{S_1}	JR	D 78		A	C	C	E	P	T	
A-4-236-1-BR-H-1575	1_{S_1}	JR	C 13		A	C	C	E	P	T	
A-4-236-1-CS-H-2816	0_{S_1}	JR	SH 95		A	C	C	E	P	T	
A-4-236-1-CH-H-767	0_{S_1}	JR	D 78		A	C	C	E	P	T	
A-6-236-1-CS-H-3181	0/A	GA D	D 69		A	C	C	E	P	T	

4/3/82

	Rev. No.	QA Inspector	Welder's Symbol	Weld Symbol Missing/Wrong	Weld Symbol Unclear	Weld Overs[illegible] (greater than)	Weld Undersize	Weld Type [illegible] as Drawn	Extra Weld	Missing Weld	Remarks
2-2-261-1-PD-H-4201	0/A	JR	D 62		A	C	C	e	P	T	
2-2-261-1-PD-H-4221	0/A	JR	SH 71		A	C	C	e	P	T	
2-2-261-1-SW-H-2136	0/A	JR	SI 98		A	C	C	e	P	T	
2-2-261-1-CS-H-224	0/A	JR	SI 5		A	C	C	e	P	T	
2-7-236-1-BR-H-1252	2/C	JR	D 61		A	C	C	e	P	T	
2-7-236-1-BR-H-1174	CS1	JR	C 81		A	C	C	e	P	T	
2-5-236-1-FP-H-654	2/C	JR	C 13		A	C	C	e	P	T	
2-5-236-1-CS-H-2647	1S1	JR	SB 73		A	C	C	e	P	T	
2-5-236-1-CS-H-499	2/C	JR	C 81		A	C	C	e	P	T	
2-6-236-1-PD-H-1673	CS1	JR	SB 73		A	C	C	e	P	T	
2-5-236-1-CX-H-490	2/B	JR	D 69	✓							Reject
				-							

Hangers
3-30-82

	Rev. No.	QA Inspector	Welder's Symbol	Weld Symbol Missing/Incorrect	Weld Symbol Unclear	Weld Overrun (greater than ...)	Weld Undercut	Weld Thickness or Throat ...	Extra Weld(s)	Missing Weld(s)	Remarks
A-1-236-1-BD-H-126 ✓	2/C	JR	D 51		A	C	C	e	P	T	
A-7-236-1-BR-H-1213 ✓	MS 2	JR	D 27		A	C	C	e	P	T	
A-6 236-1-BR-H-1508 ✓	1/B	JR	C 84		A	C	C	e	P	T	
A-1-216-1-BR-H-10 ✓	RC1 244	JR	D 27		A	C	C	e	P	T	
A-3-236-1-CC-H-344 ✓	7S 1	GA D	SI 3		A	C	C	e	P	T	
A-1-236-1-CH-H-595 ✓	0/A	JR	C 43		A	C	C	e	P	T	
A-3-236-1-CS-H-1459 ✓	2/C	GA D	C 95		A	C	C	e	P	T	
A-4-236-1-CT-H-509 ✓	4/E	JR	D 51				✓				Reject
A-2-261-1-CW-H-194 ✓	0/A	JE 3	SI 5		A	C	C	e	P	T	
A-2-261-1-CW-H-195 ✓	0/A	JE 3	SI 5		A	C	C	e	P	T	
A-2-261-1-CW-H-183 ✓	0/A	JE 3	SI 66		A	C	C	C	P	T	
A-2-261-1-CW-H-187 ✓	0/A	JE 3	SI 5	-	R	e	j	e	C	T	Reject
A-2-261-1-CW-H-184 ✓	0/A	JE 3	SI 5		A	C	C	e	P	T	
A-1-236-1-FF-H-830 ✓	1/B	JR	C 43		A	C	C	e	P	T	
A-1-216-1-FD-H-989 ✓	1S 1	JR	D 61		A	C	C	e	P	T	
A-1-216-1-FD-H-2078 ✓	GS 1	JR	D 27		A	C	C	e	P	T	
A-1-216-1-RH-H-88 ✓	6/B	JR	D 27		A	C	C	e	P	T	
A-3-236-1-SW-H-1508 ✓	2/C	GA D	SI 59		A	C	C	e	P	T	
A-2-236-1-SW-H-1534 ✓	5/F	GA D	C 43		A	C	C	e	P	T	
A-3 236-1-SW-H-2649 ✓	0/A	GA D	D 62		A	C	C	e	P	T	

JUN 19 1980

In Reply Refer To:
CEA2516

TD

Dear

This refers to our conversation of April 14, 1980, during which you expressed concerns regarding the speed with which craft personnel are promoted from trainee to journeyman level at Carolina Power and Light's Shearon Harris construction site. Although you expressed this concern, you also indicated that you knew of no cases where welders were performing work they were not certified to do.

You also expressed concern about numerous defective welds in the main condenser supplied by Westinghouse. We concur with our technical staff's determination that this condenser is not a safety-related assembly and, therefore, is outside NRC's regulatory authority. CP&L is aware of the quality problems associated with this equipment and is pursuing the matter.

We appreciate you informing us of your concerns in that the Nuclear Regulatory Commission is committed to assure that safety-related work is properly performed in the construction of nuclear power plants. We feel our actions have been responsive to your concerns; however, please contact us if you have any further questions.

Sincerely,

C. E. Alderson
Senior Regional Investigator

bcc: W. Ward, IOOS

CERTIFIED MAIL NO.

103

OFFICE ►	RII:INV	RII:INV				
SURNAME ►	RJMarsh:hem	CEAlderson				
DATE ►	6/ /80	6/ /80				

Personal Tools

Hi - Low gauge - Hand 5.5
Hi - Low gauge - wire
Feler Gauge
Cambridge Gauge
Gap Gauge
Barrel Gauge
Pen lite
Mirror - Large - Small
Gap Pins
Flash light
Flash light holder
Ruler
Ruler Holder
Scale
Soap Stone & Holder
Walk in Glass

10M

OFFICIAL USE ON.

MEMORANDUM TO CASE FILE

TYPE ACTION
(✓) RECORD OF CONVERSATION
( ) CASE REVIEW / STATUS
( ) OTHER

PARTICIPANTS
Vorse.

CONFIDENTIALITY REQUESTED YES NO

FILE NO
2G010

DATE
01-28-82

TIME
8:20A

SUMMARY

called and told me that she could be reached at home after 5:15 PM. I told her I would call her tonite. She also told me that her office phone is

PAGE OF

PREPARED BY

DATE

ACTION REQUIRED

REVIEWED BY

DATE 29/89

OFFICIAL USE ONLY — DO NOT DISCLOSE

FORM RII-T19 Rev 2

Carolina Power & Light Company

Company Correspondence

December 9, 1981

MEMORANDUM TO: File

FROM: R. M. Parsons

SUBJECT: Allegation of Inadequate Hanger Inspection

On Tuesday, December 1, 1981, the writer became aware of an allegation related as coming from one or more welders in the field who were working on pipe hangers. The summary of the allegation was that some of the welders were saying one or more inspectors were not doing a thorough job in inspecting the hanger welds. It was alleged that if a hanger was located in an inconvenient location, hard to get to, then the inspectors did not go to the trouble of doing a thorough job of inspection. It was established that the inspector being challenged was

The writer walked through the field that afternoon and randomly examined a number of hangers but was unable to draw any conclusions. The writer then discussed the possibility of inadequate weld inspection with Ashleigh Lucas, Senior Resident Engineer. The only thing that had surfaced recently was a speed memo from John Brinchek to Ray Hanford calling his attention to an accepted weld on a 3/4" stainless steel line (. The weld was accepted on June 18, 1981 by with a small amount of undercut in violation of the acceptance standards. The line is a Category 7 line. The problem had subsequently been documented on a NCR and will be repaired.

Later on the same day after quitting time the writer further discussed the allegation with Ashleigh Lucas and Ray Hanford, Principal Welding Engineer. Ray related that on November 19 in a meeting with the welding superintendents some opinions were voiced about the QA welding inspectors. The complaints were general and ran along the vein that "they are not welders - they make mistakes". Ray Hanford asked for specifics not generalities. The request percipitated the speed memo from Brinchek. It is significant to note that work as long ago as June 18, 1981 had to be examined to come up with an example.

On Wednesday, December 2, 1981, Alex Fuller researched the records and found hanger inspection packages for 10 hangers that had been previously inspected and accepted by .

The writer also learned that the NRC Resident Inspector knew of example(s) which could be challenged as having being accepted but not fully meeting the acceptance criteria.

At 1100 p.m. [Jerry Wall] and the writer went into the reactor auxiliary building to inspect ten hangers that had previously been inspected and accepted. [Jerry Wall] is the CP&L supervisor of the quality assurance welding inspection subunit and is a qualified inspector. The writer watched the qualified inspector recheck six of the subject hangers, and in addition, examined the welds that [Jerry] had inspected. The remaining four hangers of the group were checked by [Jerry] but not by the writer. Including three other hangers inspected during the investigation, a total of 13 hangers had been reinspected with the results as follows:

	SW-H-1333	- Acceptable
	CC-H-503	- Acceptable
	FP-H-513	- Acceptable
	CC-H-332	- Acceptable
	SF-H-470	- Acceptable
	CC-H-945	- Acceptable
	PD-H-458	- Acceptable
	PD-H-1143	- Acceptable
	PD-H-463	- Acceptable
	CC-H-1040	- Acceptable
	CC-H-1514	- Acceptable
*	CC-H-342	- Allegation of porosity - too conical to be porosity - could be interpreted otherwise. Did find 1/4 inch of overlap - will repair - welded 12/22/80.
*	CC-H-469	- Allegation of arc strike - judged not to be an arc strike. Found small porosity that could be judged unacceptable - welded 4/8/81.

* Brought to our attention by NRC

If the above welds are considered, along with the one pipe weld originally inspected in June, 1981, the pattern suggests that an allegator has to go back almost one year to find three welds inspected by [redacted] that can be challenged as unacceptable AND only one of these has a small defect (1/4 inch of overlap) that requires repair. Based on the above, the writer feels comfortable with [redacted] work. It will be further confirmed when the supervisors monthly evaluation system, proposed below, is implemented.

On Wednesday after work, [George Forehand and Roland Parsons] discussed the potential of the welders trying to discredit [redacted]. We also discussed the risk involved if craftsmen are successful in opening an avenue for getting back at inspectors for being too tough by using the NRC. It was felt that we needed to be in a position to defend our inspectors from this brand of what might be called reverse intimidation.

We then called [N. J. Chiangi, Manager of Engineering & Construction QA.] The three of us discussed an approach for ensuring we are in a position to protect inspectors. Given the reality that in any visual inspection, no matter how carefully the English language is used to define acceptance criteria, some judgement exists; and therefore, an opportunity is provided to challenge inspectors.

A concept was generally discussed for enhancing the system for evaluating an inspector's work periodically. The evaluation would also protect the inspector by providing documented backup of his competence. The evaluation procedure was

discussed [illegible] and a method evolved (1) the welding supervisor shall [illegible] behind each welding inspector once a month and shall check a representative [illegible] inches per month; (2) if no pattern develops to accepted challengeable defects; (3) if no safety significance to any challenged interpretation of criteria exists; (4) and the ones found are repaired; (5) no more than 2 lineal inches could be challenged as inadvertently overlooked. If the above is satisfied then the inspector's performance is judged satisfactory. If the inspector's performance is not adequate based on the criteria above, he shall be retrained and all welds inspected by him during the past month will be reinspected.

On Thursday the writer engaged in discussions with a knowledgeable individual who is in a position to comment on the job pulse. Admittedly the information obtained was second hand and could not be substantiated, however, two significant items surfaced that are worthy of comment: (1) one of the welding superintendents had been complaining to the personnel department that he felt he should be working overtime to straighten out all the welding problems on the job. He suggested that he be transferred to another job where he would get 20 hours per week overtime; (2) some indication was picked up that one or more of the welders had a disagreement with a QA inspector about a week ago. The inspector had irritated the welders for being too tough. Again, the information was second hand and could not be substantiated, however, the writer could not overlook the possibility that certain individuals may be trying to get back at an inspector by making allegations of poor inspection.

Conclusions

1. With one exception, no challenged inspector work was such that it could not have been subjected to different interpretations.

2. No accepted work contained challengeable defects that would have been detrimental to a safety related installation.

3. It could not be definitely established that anyone was trying to use the NRC to discredit QA inspectors, although prudent management must be alert to the possibility.

4. An over reaction against an inspector could come across as lack of support and thereby inhibit his effectiveness.

5. A definite method of judging an inspectors work is needed in order to insulate them from being harassed by unwarranted allegations.

Proposed Corrective Action

1. Increase the frequency and formality of the method for checking an inspector's work by developing a criteria that provides for a reinspection of at least 100 lineal inches of his work each month.

2. Institute the evaluation check on each inspector once per month in a positive way that protects the inspector and helps in his professional development.

3. Continually follow-up on individual allegations to ensure our system is not allowing significant items to go undetected.

RMP/bc

cc: Mr. N. J. Chiangi
Mr. G. L. Forehand
Mr. A. M. Lucas

CAROLINA POWER & LIGHT COMPANY

CORPORATE QUALITY ASSURANCE DEPARTMENT

FOR INFORMATION ONLY

VISUAL EXAMINATION OF WELDS (SHNPP)

ASME
SECTION III

NUMBER:		INITIAL ISSUE DATE:
NDEP-601		APR 27 1981
RECOMMENDED FOR APPROVAL BY:	Nondestructive Examination Procedure	APPROVED BY:
NDE LEVEL III		MANAGER - E&C QA/QC

CAROLINA POWER & LIGHT COMPANY
CORPORATE QUALITY ASSURANCE DEPARTMENT

NUMBER	REVISION
NDEP-601	0

TITLE: VISUAL EXAMINATION OF WELDS (SHNPP)

FOR INFORMATION ONLY

1.0 PURPOSE

The purpose of this procedure is to delineate the visual welding examinations to be performed on fabrication welds and field welds.

2.0 SCOPE

This procedure applies to welds related to ASME Code Section III, Nuclear Safety Related and Seismic Category I Items. This procedure may be utilized, when deemed appropriate, for visual examination of welds related to other code, specification, safety or seismic category items.

3.0 REFERENCES

3.1 ASME B & PV Code, Section V, Article 9, 1974 Edition, with addenda through Winter, 1976.

3.2 CP&L Corporate QA Department Nondestructive Examination Procedures Manual.

3.3 SHNPP Site Specification 034.

3.4 SHNPP Site Specification 030.

3.5 SHNPP Site Specification 031.

3.6 SHNPP Site Specification 033.

3.7 SHNPP Site Specification 040.

3.8 SHNPP Site Specification 041.

3.9 SHNPP Site Specification 036.

3.10 SHNPP MP's 01, 02, 05, 06, 07, 08, 10.

3.11 SHNPP TP-04.

4.0 PROCEDURE QUALIFICATION

4.1 Procedure Qualification Record, No. PQR-601 describes the actual qualification activity for this procedure.

5.0 PERSONNEL QUALIFICATION

Personnel performing visual examinations in accordance with this procedure shall meet qualification requirements as specified in Carolina Power & Light Company Corporate QA procedure NDEP-10.

TITLE: VISUAL EXAMINATION OF WELDS (SHNPP)

FOR INFORMATION ONLY

6.0 EQUIPMENT

6.1 The following equipment may be used to aid the visual inspector in his evaluation of items being inspected:

6.1.1 Flashlight or other illuminating device that provides adequate lighting as described in 6.2.

6.1.2 Cambridge Weld Gauge

6.1.3 6" Ruled Scale

6.1.4 Magnifying Glass

6.1.5 Boroscope and Fiber Optics

6.1.6 Fillet Weld Gauges

6.1.7 Mirrors

6.1.8 Optical Comparators

6.1.9 Micrometers

6.1.10 Depth Gauges

6.1.11 Other equipment may be used as necessary, but will be required to meet the conditions of 6.2 and 6.3.

6.2 Illumination

Visual examination shall be performed in an area illuminated with flashlight or other auxiliary lighting to attain a minimum of 15 foot candles (160 Lux) for general examination and a minimum of 50 foot candles (540 Lux) for the detection or study of small anomalies, unless otherwise specified.

6.3 Optical Aids

6.3.1 When optical aids such as boroscope, magnifying glass, mirror, etc., are used for remote examination, the system shall have a resolution capability equivalent to or better than that obtained by direct observation.

6.3.2 When specified, optical aids shall have a minimum power of magnification called out in the specification or code.

6.4 Mechanical Aids and Instruments

6.4.1 Mechanical aids to inspection shall have scales in useable increments that are easily discernable.

6.4.2 Dial depth gauges, micrometers, optical comparators and other mechanical measuring devices used for final acceptance inspection shall be calibrated in accordance with Reference 3.11.

6.4.3 Rules, scales, and other measuring devices used to aid inspectors shall be reasonable accurate but do not require calibration such as 6" scale (metal), cambridge gauge and fillet weld gauge.

7.0 EXAMINATION

7.1 General

7.1.1 Visual examinations shall normally be performed without magnification. The examination shall be such that the surface to be examined is within 24" of the eye, and at an angle not less than 30° to the surface to be examined.

7.1.2 Visual examination performed using optical equipment shall be performed only when required by specification or code, using equipment that conforms to 6.3.

7.2 Time of Inspection

Visual Inspections shall be performed when required by codes, specifications, appropriate site procedures and when appropriate hold points are reached on Weld Data Reports (WDR's), Repair WDR's and prior to all NDE examinations of welds.

7.3 Inspection Points

Items to be inspected at a particular stage of manufacture are listed in Attachment "A".

FOR INFORMATION ONLY

8.0 EVALUATION

8.1 All welds prior to inspection at any hold point from initial cleanliness inspection to final NDE examinations shall be clean, dry, and free of deterious surface matter and surface indications such as:

a. Paint

b. Oil, Grease

c. Moisture

d. Scale

e. Oxide and Rust

f. Nicks, gouges, and irregularities including weld spatter

g. Zinc or Galvanizing

h. Slag

i. Other foreign material (dirt, sand, shavings, griding dust, etc.)

8.2 Joint Preparation

Piping butt joint and preparation dimensions shall be in accordance with approved drawings and specifications. The preparation of weld joints for matching ends of pipe and correction for out of roundness (counter bore) shall be in accordance with approved drawings, specifications and welding procedures.

8.3 Butt Joint Fitup

Butt Joint fitup shall be in accordance with approved drawings, specifications and welding procedures. Inspectors shall measure and record the amount of counter bore on ISI joints. Counter bore shall be at least 2T on SW Fabrication piping and 1-1/2T on Westinghouse supplied piping.

FOR INFORMATION ONLY

8.4 Socket Joint Fitup

Socket type joints shall have an end gap of 1/16" minimum between the bottom of the socket and the end of the pipe prior to welding. The minimum engagement length of the pipe into the socket is maintained in accordance with the following requirements:

Minimum Engagement of Socket Welds

Pipe Size	Minimum Engagement
1/8" to 1/2"	1/4"
3/4" to 1-1/2"	3/8"
2" to 3"	1/2"

This shall be accomplished by measuring, using an appropriate measuring device, to determine that the depth of the socket is of adequate depth for the minimum engagement, as listed above, plus the allowed 1/8" pull back requirement, as described below. If the fitting does not have enough socket depth to accomodate the minimum engagement + 1/8" shall be rejected.

The end gap shall be accomplished by scribing a line 1/2" back from the end of the socket fitting; inserting, and bottoming the pipe into the fitting, then scribing a line on the pipe 1" from the face of the fitting. Then pipe is withdrawn at least 1/16". The distance betweeen the two scribe lines shall be between 1-9/16" and 1-11/16".

8.5 Cold Spring

Cold Spring shall be no more than allowed by specification, drawings, and installation instructions. Inspectors shall check for cold spring by looking along the pipe for chains, come alongs, chain falls, hydraulic jacks or blocking devices used to force the pipe or appertenance horizontally or downward into place prior to fitup and welding. When these devices are present, they should be only for support. When the visual inspector has reason to believe that cold spring has been introduced into the pipe system, the visual inspector shall request Mechanical Engineering to measure the amount of cold spring. The measurements shall be recorded on the WDR. When cold spring is in excess of specified limits, the fit-up shall be rejected.

8.6 Appearance of Welds

8.6.1 Welds not requiring In-Service Inspection (ISI) shall be free of abrupt ridges, valleys, excessive under cut, cracks, fusion defects, slag or porosity, but need not be ground smooth. Welds requiring surface NDE shall have a surface finish that will not interfere with the interpretation of the NDE.

8.6.2 Butt welds requiring In-Service Inspection (ISI) shall have a surface finish that conforms to the ISI surface finish required in MP-06, Appendix "O". Reinforcement shall be 1/32" to 1/16" high, be flat topped and slope 10° to 14° to the base metal - no undercut is allowed.

8.6.3 Reinforcement of Welds

8.6.3.1 Thickness of weld reinforcement for vessels, pumps, and valves

The surface of the reinforcement of all butt welded joints in vessels, pumps, and valves may be flush with the base material or may have uniform crowns. The height of reinforcement on each face of the weld shall not exceed the value listed for the thickness in the following table:

Nominal Thickness in.	Maximum Reinforcement in.
Up to 1, inclusive	3/32
Over 1 to 2 inclusive	1/8
Over 2 to 3 inclusive	5/32
Over 3 to 4 inclusive	7/32
Over 4 to 5 inclusive	1/4
Over 5	5/16

8.6.3.2 Thickness of weld reinforcement for piping

For double welded butt joints, the limitation on the reinforcement given in Column 1 of the following tabulation shall apply separately to both inside and outside surfaces of the joint. For single welded butt joints, the reinforcement given in Column 2 shall apply to the inside surface and the reinforcement given in Column 1 shall apply to the outside surface. The reinforcement shall be determined from the higher of the abutting surfaces involved.

FOR INFORMATION ONLY

Material Nominal Thickness in.	Maximum Reinforcement Thickness, in. Column 1	Column 2
Up to 1/8 inclusive	3/32	3/32
Over 1/8 to 3/16 inclusive	1/8	3/32
Over 3/16 to 1/2 inclusive	5/32	1/8
Over 1/2 to 1 inclusive	3/16	5/32
Over 1 to 2 inclusive	1/4	5/32
Over 2	*	5/32

* Greater of 1/4" or 1/8 time the wide of the weld in inches.

8.6.4 Socket Weld Surface

The weld edges of fillets in socket welds shall have a pipe to weld reentrant angle of not more than 90° and shall be free from cracks, excessive porosity, fusion defects, slag, crater pits (as defined in 9.4), tungsten and undercut.

The leg length for socket welds shall be 1.09T (1.25T for ANSI B31.1 Welds) for pipe to fittings and 1.4T for pipe to flanges. In no case shall the leg length be less than 1/8".

8.7 Internal Diameter Surface of Fused Root Layer

8.7.1 When accessible the internal ID surface of the pipe or appertenance shall be checked to assure that the root on the ID surface is properly fused and is free of cracks, crater pits, excessive porosity, tungsten, oxidation (sugaring), excessive convexity or concavity.

9.0 INTERPRETATION OF DISCONTINUITIES

9.1 Porosity requirements will be found in the applicable code section.

9.2 The welded rounded depressions on the internal surface of piping butt welds made using consumable insert or open butt are acceptable provided the following conditions are met:

a. Depression shall not exceed 1/16" deep

b. Depressions shall have a width that is at least three times the depth

c. The resulting weld metal thickness under the depression is not less than the minimum pipe wall thickness of the thinnest member.

Note: Weld reinforcement up to maximum of 1/32" thickness may be considered as pipe wall thickness in such cases. The concavity may extend for the entire periphery of the weld.

9.3 Convexity shall be considered reinforcement and shall be judged using the requirements of 8.6.3.2 above.

9.4 Crater Pits

Internal crater pits shall be considered acceptable provided the area contains no cracks and the weld metal thickness under the pit is not less than the thinner adjacent base metal thickness.

9.5 Butt Joint Burn Through and Melt Through

Internal surfaces of butt joints (insert and open butt) shall be free of burn through. Melt through and repaird burn through areas are acceptable provided the areas do not contain cracks, crevices, globules, or unacceptable oxidation and provided the root reinforcement and root concavity limits are not exceeded.

9.6 Butt Weld Overlap

The weld edges of butt welds shall be free of overlap which forms a re-entrant angle of less than 90°.

FOR INFORMATION ONLY

9.7 Internal Oxidation

The internal surfaces of piping butt welds after completion of welding shall be free of rough oxide scale accompanied by wrinkling or crystalline surface appearance (sugaring). Thin, tightly adhering iridescent temper films shall be considered acceptable.

9.8 External of Internal Undercut

External or internal undercut which does not exceed 1/32" is acceptable provided the bottom of the undercut is clearly visible, does not provide a liquid penetrant or magnetic particle indication, and does not encroach on the required section thickness.

9.9 Cracks

All welds and adjacent base metal surfaces shall be free of cracks.

9.10 Incomplete Fusion

All welds shall be free of incomplete fusion.

9.11 Arc Strikes, Weld Spatter, and Mishandling Marks

Weld and adjacent base metal shall be free of visible arc strikes, weld spatter and mishandling marks. Arc strikes and mishandling marks, which penetrate the base metal surface outside the weld area shall be found to the bottom of the depression (with care not to violate minimum wall) and liquid penetrant or magnetic particle inspected. The depression made by grinding shall be rounded (not straight-cut).

9.12 Weld Undercut

Weld undercut which does not exceed 1/32" or 10% of the adjacent base metal thickness, whichever is less, is acceptable provided the bottom of the undercut is clearly visible or does not provide a liquid penetrant or magnetic particle indication as applicable.

10.0 MARKING OF INDICATIONS

All rejectable discontinuities shall be marked up on the weld using approved marking material.

11.0 DOCUMENTATION

11.1 Sketches

All excavations on Code Class 1, 2, and 3 shall be sketched on Form QA-3 showing location and depth. This is to include indications found by all NDE methods including visual.

11.2 Welds Requiring A Weld Data Report (WDR)

Document performance of visual examination on the WDR for the particular weld. Check off the appropriate status, date, and initial for the applicable inspection activity.

11.3 Welds Not Requiring a WDR

Document performance of visual examination using the Visual Examination Report for QA VT-1. A single visual examination report form may be used to document visual examination(s) of one or more welds (such as some or all welds in a particular piping line). However, each weld examined must be identified on the report form.

11.4 Welds Requiring Seismic I Weld Data Report (Form QA-34)

Document performance of visual examination on the Seismic I Weld Data Report (Form QA-34). Check off appropriate status, date, and initial.

CONTROLLED DOCUMENT

CAROLINA POWER & LIGHT COMPANY
CORPORATE QUALITY ASSURANCE DEPARTMENT

NUMBER NDEP-601 | REVISION 0

TITLE: VISUAL EXAMINATION OF WELDS (SHNPP)

FOR INFORMATION ONLY

ATTACHMENT A - INSPECTION POINTS

		BUTT WELDS	SOCKET WELDS	PIPING ATTACHMENTS	STRUCTURAL JOINTS		
1.0	Prior to Fit-up	X	X				
	Joint scarf/bevel cleanliness (oxides, rust, dirt, etc.)	X	X	X	X		
	Cleanliness of internal surfaces	X	X				
	Cleanliness of external surface(s) adjacent to weld	X	X	X	X		
	Cleanliness of consummable insert	X					
	Joint end prep dimensional configuration and finish	X	X				
	Freedom from joint surface defects	X	X	X			
	Cold spring for closure joints	X	X				
	Marking applied for control of socket engagement		X				
2.0	After fit-up and prior to welding	X	X	X	X		
	Joint cleanliness	X	X	X	X		
	Fit-up dimensions (i.e.,root opening, clearance,etc.)	X	X	X	X		
	Joint alignment and offset	X	X	X	X		
	Material identification	X	X	X	X		
	Purge Dam	X					
	O_2 analysis (if applicable)	X					
3.0	After completion of root layer - when required	X					
	Weld shall be hand wire brushed and inspected for freedom from cracks, crater pits, tungsten contamination, lack of fusion and porosity and slag in excess of specified limits.	X					

ATTACHMENT A - INSPECTION POINTS (Continued)

FOR INFORMATION ONLY

	BUTT WELDS	SOCKET WELDS	PIPING ATTACHMENTS	STRUCTURAL JOINTS		
4.0 External surface after completion of weld	X	X	X	X		
Reinforcement (crown) height in a W I SSI Requirements when applicable	X	X	X	X		
Undercut or overgrind	X	X	X	X		
Suitability of surface for required NDT (i.e., removal of weld spatter, arc strikes, etc.)	X	X	X	X		
Removal of temporary attachments	X	X	X	X		
Joint identification	X	X				
Fillet size		X	X	X		
Check socket engagement and pullback		X				
Blending with base metal	X	X	X	X		
Freedom from cracks, incomplete fusion, porosity and slag in excess of specified limits	X	X	X	X		
Welder Symbol	X	X	X	X		
5.0 Internal surface after completion of weld (when accessible)	X					
Cleanliness	X					
Reinforcement - Concavity and Convexity	X					
Incomplete fusion or incomplete melting of consummable insert	X					
Oxidation (sugaring)	X					
Crater Pits	X					
Blending with Base Metal	X					
Burn or melt through	X					

Para – P.

nical Engineering (

2. LINE NO.	3. ELEV.	4. LOCA.	5. COMPONENT/HANGER ID.	7. WELD PROC.	8. WELD PROC.
				GMAW	
9. PIPE	DATE	WELDING ENG./FOREMAN	DATE	9. WELD MAT'L	
	4/21		4/21		

1. SEE PIPELINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
2. SEE PIPELINE ENGINEER FOR ADDITIONAL INSTRUCTIONS OF JOINTS INVOLVING ENGINEERED PLATES
3. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS
4. CONTACT QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN: DATE:

5. TYPE A CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) AS-BUILT DATE

6. WELD QUALIFICATION A [X] R [ ] | 3. MAT'L STATUS A [X] R [ ] | NCR/DDR # | QA/QC INSPECTION | DATE

1. WELD OR DESCRIP. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP			ROOT NDE						FINAL NDE												VISUAL			INSP INITIALS	DATE	DESCRIPTION OF DEFICIENCY OR REWORK NCR/DDR, ETC
							VT			MT/PT			VT			MT/PT			RT			UT			VAC BOX						
		H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R			
1. 8" weld typ	C-81												✓	✓																		
2. Hot cut	C-81												✓																			

H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY DR (INITIALS) 5/15/81 (DATE)

QA/QC SPECIALIST / DESIGNEE DATE

REMARKS

* USE QA-34A TO LIST ADDITIONAL WELDS

(1 of 4)

QA/QC Copy (Field C.)

(PROCEDURE CQC-19)

BUILDING	3 ELEV	4 LOCA	5 COMPONENT/HANGER ID	6 DRAWING	7 WELD P...	WELD ...
	236'	...3	CD-H-...	...-PC-...	...	
DATE	WELDING ENG/FOREMAN		DATE		8 WELD ME...	
			5/4/81			

... ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION ...

... ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ... PLATES

... JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS

... HOLD POINTS (H) & FINAL ... INSPECTION

FOREMAN: ... DATE ...

... CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG ( ) A [ ] R [ ] DATE

... IFICATION A [ ] R [ ] | 3. MAT'L STATUS A [ ] R [ ]

...P	WELDER SYMBOL(S)	PREHEAT	FITUP	VT	MT/PT	NDE	...	DATE	DESCRIPTION ... OR REWORK REQUIRED
weld	C-81			✓	✓			...	...
...	C81				✓			.../23/81	

H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY ... 5/5/81

INITIALS DATE

REMARKS

QA/QC SPECIALIST / DESIGNEE DATE

* USE QA-34A TO LIST ADDITIONAL WELDS

WELDER:	SYMBOL				
INSPECTION REQUIREMENTS	CLEAN ☐ FIT UP ☐ FINAL ☐				
	VISUAL ☑ LP ☐ MP ☐				
REWORK ☐ NEW ☑					

COMMENTS: PC _____ TO PC _____

OVERLAP:

All on Rev 0A

INSPECTOR [illegible] ACCEPT ☐ REJECT ☐ HOLD ☐ DATE 5/6/81

*This form for Information Only-NOT A QA RECORD.

NONDESTRUCTIVE TEST INSPECTION REQUEST *	FOREMAN	LOCATION	ELEV	TIME	DATE
WELDER:	SYMBOL	DWG/ISO *	SHEET		
INSPECTION REQUIREMENTS	CLEAN ☐ FIT UP ☐ FINAL ☑				
	VISUAL ☑ LP ☐ MP ☐			DETAIL	
REWORK ☑ NEW ☐					

COMMENTS: PC _____ TO PC _____

All on Rev 0A

Pipe Weld

INSPECTOR [illegible] ACCEPT ☑ REJECT ☐ HOLD ☐ DATE 4/28/81

*This form for Information Only-NOT A QA RECORD.

[illegible]

4/28/81

Office File

NONDESTRUCTIVE TEST INSPECTION REQUEST *	FOREMAN	LOCATION	ELEV	TIME DATE

WELDER# SYMBOL		DWG./ISO.#	SHEET	JOINT NUMBER
INSPECTION REQUIREMENTS	CLEAN ☐ FIT UP ☐ FINAL ☐			DETAIL
	VISUAL ☐ LP ☐ MP ☐			
REWORK ☐ NEW ☐				

COMMENTS: PC _____ TO PC _____

1 Fillet wld.

INSPECTOR [signature] ACCEPT ☑ REJECT ☐ HOLD ☐ DATE [illegible]

This form for Information Only-NOT A QA RECORD.

[illegible]

NONDESTRUCTIVE TEST INSPECTION REQUEST *	FOREMAN	LOCATION	ELEV	TIME DATE

WELDER# SYMBOL		DWG./ISO.#	SHEET	JOINT NUMBER
INSPECTION REQUIREMENTS	CLEAN ☐ FIT UP ☐ FINAL ☐			DETAIL
	VISUAL ☐ LP ☐ MP ☐			
REWORK ☐ NEW ☐				

COMMENTS: PC _____ TO PC _____

Overlap

INSPECTOR [signature] ACCEPT ☐ REJECT ☑ HOLD ☐ DATE [illegible]

This form for Information Only-NOT A QA RECORD.

File

[illegible]

CAROLINA POWER & LIGHT COMPANY

HARRIS NUCLEAR POWER PLANT

PIPING HANGER INSTALLATION & INSPECTION

HANGER NUMBER SI-1-1431 REV NO

ISO NO

LOCATION OF SPECIAL REQUIREMENTS: 2-3256-1

ACTIVITY	RESPONSIBILITY	SIGN-OFF PHASE I INITIAL	DATE	PHASE II INITIAL
RELEASE HANGER W/ PACKAGE	MECH ENGR.	JD	5-4-92	
SET HANGER MARKERS	HANGER SUPT.			
INSTALL HANGER				
VERIFICATION PER PACKAGE	QI		5-4-92	
ATTACHMENT ORIENTATION, CLEARANCE & CLOSURE	QI		5-4-92	
ATTACHMENT FITUP & WELDING	QA			
VERIFY WELDER STENCIL ISO	QI			
GEOMETRY PER SKETCH	QI			
WELDING MEMBERS ALIGNMENT	HANGER SUPT.	QA	5-23-92	
WELD SECONDARY	HANGER SUPT.			
INSPECT COMPLETED WELDS	QA		5/22/92	
SIGN COPY OF TRAVELER	QA	QA	5-22-92	
RETURN PACKAGE TO MECH ENGR.	HANGER SUPT.			
SUBMIT PACKAGE TO QI	MECH ENGR.			
REVIEW PACKAGE W/ QA	QI			

EMBED THICKNESS @ 1½" 4" W 29.15 /

EMBED THICKNESS @ ___ ___ / /

CONCRETE VERIFIED BY QA ___ / /

COMMENTS

QA/QC COMMENTS: [illegible]

...ER

...COSMIC ... INSTALLATION & INSPECTION

...NUMBER PD-H-1444 REV ...

...NO ____ MPD 3/4-1-1

...OR S... COMMENTS: A-3-2361

SIGN-OFF

ACTIVITY	RESPONSIBILITY	INITIAL	DATE	FORCE INITIAL
...HANGER ...	...AGE MECH ENGR	SD	6/2/81	
...HANGER MFR	HANGER SUPT			
...HANGER				
...INTERFACE ...	...DE QA	[illegible]	6-2-81	
...DIMENSIONAL ...		[illegible]	6-2-81	
...PIPE ...	...LAYER			
...PIPE ...	...ER SUPT			
...ASSEMBLY PER ...	QA	QA	6-2-81	
...WELDING	HANGER SUPT			
...PAINT	PAINT SUPT			
...INSPECT COMPLETE	QA	PTS	6/2/81	
...RELEASE ...	QA			
...PIECE ...PACKAGE TO	FUNCTION	HANGER SUPT	6-7-81	
...MENT PACKAGE TO		MECH ENGR		
...SUBMIT PACKAGE TO		QA		

EMBED THICKNESS ... " QA 5-14-81

EMBED THICKNESS ... / /

PRE-INST VERIFIED ... DA / /

COMMENTS

[illegible] [illegible]

NONDESTRUCTIVE TEST INSPECTION REQUEST *

FOREMAN [illegible]

LOCATION [illegible]

ELEV [illegible]

TIME [illegible]

DATE [illegible]

WELDER [illegible] SYMBOL [illegible]

DWG /ISO. [illegible]

SHEET [illegible]

INSPECTION REQUIREMENTS: CLEAN ☐ FIT UP ☐ FINAL ☑

VISUAL ☑ LP ☐ MP ☐

REWORK ☐ NEW ☑

COMMENTS: PC _____ TO PC _____

QA on Rev 0/A

INSPECTOR [illegible] ACCEPT ☐ REJECT ☐ HOLD ☐ DATE [illegible]

*This form for Information Only-NOT A QA RECORD.

[illegible] is my handwriting 7T 6/13/82

NONDESTRUCTIVE TEST INSPECTION REQUEST *

FOREMAN [illegible]

LOCATION [illegible]

ELEV [illegible]

TIME [illegible]

DATE [illegible]

WELDER [illegible] SYMBOL [illegible]

DWG /ISO. [illegible]

SHEET [illegible]

INSPECTION REQUIREMENTS: CLEAN ☐ FIT UP ☐ FINAL ☑

VISUAL ☐ LP ☐ MP ☐

REWORK ☐ NEW ☑

COMMENTS: PC _____ TO PC _____

QA on Rev 0/A

INSPECTOR [illegible] ACCEPT ☑ REJECT ☐ HOLD ☐ DATE [illegible]

This form for Information Only-NOT A QA RECORD.

[illegible] is my handwriting 7T 6/13/82

(FIELD COPY)

(PROCEDURE CCC-19)

3 ELEV	4 LOCA.	5 COMPONENT/HANGER ID	6 DRAWINGS, REV & SHT #	7 WELD PROC	8 WELD MAT'L

ENG	DATE	WELDING ENG./FOREMAN	DATE		

REFINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION

REFINE ENGINEER FOR ADDITIONAL INSPECTIONS OF JOINTS INVOLVING ST. OF DEFINED PLATES

EXCEPT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS

HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN | DATE

CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) AS-BUILT | BY

QUALIFICATION A [ ] R [ ] | MAT'L STATUS A [ ] R [ ] | NCR/EDR # | QA/QC INSPECTION | DATE

ID OR DESCRIP OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP	ROOT NDE						FINAL NDE												VISUAL		INSP INITIALS	DATE	DESCRIPTION OF REPAIR/REWORK OR NDE, ETC
					VT			MT/PT			VT			MT/PT			RT			UT								
		H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A			
1	C13										M																		

H = HOLDPOINT
A = ACCEPT
R = REJECT
* = OR GREATER
UNLESS LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSURED AND/OR VERIFIED BY _____ INITIALS 5/17/81 DATE

REMARKS

_____ QA/QC SPECIALIST / DESIGNEE _____ DATE

* USE QA-14A TO TEST ADDITIONAL WELDS

SEISMIC & WELD DATA RECORD (CONT.)

(PROCEDURE QC-19)

BUILDING	3. ELEV.	4 LOCA.	5 COMPONENT/HANGER ID.	6. DRAWINGS, REV. & SH. #	7. WELD PROC. 1A4 Rev 1	9. WELD INSPECTION
PIPING ENG.	DATE 5/18/81	WELDING ENG./FOREMAN	DATE 5/18/81	PD II 1444 A 3 sh 1	8. WELD ML. T.C. F-P1B	

NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION

NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES

COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS

INFORM QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN: CAPE DATE 5/21/81

WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A [X] R [ ] DATE 5/21/81

WELDER(S) QUALIFICATION A [X] R [ ] 3. MAT'L STATUS A [X] R [ ] NCR/DER # QA/QC INSPECTOR PT DATE 5/21/81

PRINT I.D. OR DESCRIP. QTY OF WELDS	WELDER SYMBOL(S)	PREHEAT H	PREHEAT TEMP	FITUP H	FITUP A	FITUP R	ROOT PASS VT H	ROOT PASS VT A	ROOT PASS VT R	ROOT PASS MT/PT H	ROOT PASS MT/PT A	ROOT PASS MT/PT R	FINAL NDE VT H	FINAL NDE VT A	FINAL NDE VT R	FINAL NDE MT/PT H	FINAL NDE MT/PT A	FINAL NDE MT/PT R	FINAL NDE RT H	FINAL NDE RT A	FINAL NDE RT R	FINAL NDE UT H	FINAL NDE UT A	FINAL NDE UT R	FINAL NDE VAC BOX A	FINAL NDE VAC BOX R	PWHT H	PWHT A	PWHT R	INSP INITIALS	DATE	DESCRIPTION OF NONCONFORMANCE, REJECTION OR REWORK SCRAP, ETC.
1 1/2" C/A	C13													A															PT	5/21/81	

H = HOLDPOINT
A = ACCEPT
R = REJECT
I = INSP CREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY [signature] 5/21/81 DATE

QA/QC SPECIALIST DESIGNEE DATE

REMARKS

SEISM[illegible]R INSTALLATION & INSPECTION

HANGER NO. [illegible]

LINE NO. [illegible]

LOCATION OF [illegible] REQUIREMENTS: [illegible]

ACTIVITY	RESPONSIBILITY	SIGN OFF PHASE I INITIAL	DATE	INITIAL
1 PROVIDE HANGER [illegible] PACKAGE	MECH ENGR	[illegible]		
2 FIT UP HANGER [illegible] PKG	HANGER SUPT			
3 INSPECT HANGER				
A IDENTIFICATION PER [illegible] PACKAGE	QI	[illegible]	6-2-81	
B LOCATION & ORIENTATION PER PACKAGE & [illegible] DRAWING	QI	[illegible]	6-2-81	
C WELDMENT FIT UP [illegible] PER WPS	QI			
D [illegible] PER [illegible]	QI			
E GEOMETRY PER [illegible]	QI			
4 WELD CUT MEMO & REMARK	HANGER SUPT	[illegible]	6-2-81	
5 SECONDARY	HANGER SUPT	PT N/A	6/2/81	
6 INSPECT COMPLETED WELDS	QA			
7 FILL COPY OF TRAVELER	QC	[illegible]	6-2-81	
8 RETURN PACKAGE TO MECH ENGR	HANGER SUPT			
9 SUBMIT PACKAGE TO QA	MECH ENGR			
10 SUBMIT PACKAGE TO QA	QI			

EMBED THICKNESS = 1½" [illegible] 5/14/81

EMBED THICKNESS = ___ / /

PREHEAT VERIFIED BY QA ___ / /

COMMENTS

NONDESTRUCTIVE TEST INSPECTION REQUEST *	FOREMAN	LOCATION	ELEV.	TIME	DATE
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] SYMBOL [illegible]		DWG./ISO.*	SHEET	JOINT NUMBER*	
		[illegible]		[illegible]	
CLEAN ☐ FIT UP ☐ FINAL ☑				DETAIL	
VISUAL ☑ LP ☐ MP ☐					
REWORK ☐ NEW ☑					

[illegible] PC _____ TO PC _____

[illegible] Rev 2

[illegible] ACCEPT ☑ REJECT ☐ HOLD ☐ DATE [illegible]

This form for Information Only-NOT A QA RECORD.

[illegible] [illegible] 1/6/82

NONDESTRUCTIVE TEST INSPECTION REQUEST *	FOREMAN	LOCATION	ELEV.	TIME	DATE
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] SYMBOL [illegible]		DWG./ISO.*	SHEET	JOINT NUMBER*	
		[illegible]	[illegible]	[illegible]	
CLEAN ☐ FIT UP ☐ FINAL ☑				DETAIL	
VISUAL ☑ LP ☐ MP ☐					
REWORK ☐ NEW ☑					

[illegible] PC _____ TO PC _____

[illegible]

[illegible] PT ACCEPT ☑ REJECT ☐ HOLD ☐ DATE 6/6/81

This form for Information Only-NOT A QA RECORD.

[illegible] [illegible] 1/6/82

(PROCEDURE CQC-19)

2. ELEV.	4. LOCA.	5. COMPONENT/HANGER ID.	6. DRAWING, REV & SH. #	7. WELD DIAG. 184 Rev 1
				8. WELD LIST

DATE	WELDING ENG./PROJ. MGR.	DATE
5/14/81	Dal Hill	5-19-81

DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION

DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES

WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS

QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN: CARR DATE: 6/4/81

TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) AS REQ'D

WELDER(S) QUALIFICATION: A [X] R [ ] | 3. MAT'L STATUS A [X] R [ ] | NCR/DDR # | QA/QC INSPECTION BY | DATE 6/4/81

JOINT ID OR DESCRIP. QTY OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP			ROOT NDE						FINAL NDE										PWHT	INSP. INITIALS	DATE	DISPOSITION OF REJECT, REPAIR OR REWORK NCR/DDR, ETC
							VT			MT/PT			VT			MT/PT			RT			UT					
		H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R				
1 Fillet C/A	C-13												M												PT 3	6/4/81	

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP. GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY _____ INITIALS _____ DATE 6/4/81

REMARKS:

Contact my handling QT 6/4/81

_____ QA/QC SPECIALIST / DESIGNEE _____ DATE

USE QA-34A TO LIST ADDITIONAL WELDS

QA/QC file (Field copy)

(PROCEDURE QAP 10.19)

1 PIPING	2 ELEV	4 LOCA	5 COMPONENT/HANGER ID	6 DRAWING, REV & SHT #	7 WELD PROC	8 WELD
	DATE	WELDING ENG./FOREMAN	DATE		9 WELD MET.	

1 LINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION

2 PIPING ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES

3 WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS

4 QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN: [illegible] DATE [illegible]

1 PIPING CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) ABOVE

2 WELDER QUALIFICATION A [X] R [ ] | 3 MAT'L STATUS A [X] R [ ] | NDE/DWG # N/A | QA/QC INSPECTION [X] | DATE [illegible]

10 DESCRIP / ISO'S	WELDER SYMBOL(S)	PREHEAT		FITUP				ROOT NDE										FINAL NDE										VISUAL			WHT	INSP STAMPS	MET	DISPOSITION OF DISCREPANCY OR REWORK NCR/DOR, ETC
								VT			MT/PT			VT			MT/PT			RT			UT											
		H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R				H	A	R	H	A			
[illegible]	03													✓																					

H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY [illegible] INITIALS 5/19/81 DATE

REMARKS

QA/QC SPECIALIST / DESIGNEE DATE

* USE QA-34A TO LIST ADDITIONAL WELDS

SEISMIC HANGER INSTALLATION & INSPECTION

HANGER NUMBER PD 11451 REV NO

LINE NO 3PD3/4-1-1

LOCATION OF SPECIAL REQUIREMENTS: A-3-23

ACTIVITY	RESPONSIBILITY	SIGN OFF PHASE I INITIAL	DATE	PHASE II INITIAL	DATE
1 PROVIDE HANGER WORK PACKAGE	MECH ENGR	J.D. Cut	6-1-81		
2 FAB OF HANGER MEMBERS	HANGER SUPT				
3 INSPECT HANGER					
A IDENTIFICATION PER PACKAGE	QC	[illegible] QA	6-2-81		
B LOCATION & ORIENTATION PER PACKAGE & PROCEDURE	QC	[illegible] QA	6-2-81		
C WELDMENT FIT UP (FULL PEN WELD)	QA				
D LOCATION PER STRESS ISO	QC				
E GEOMETRY PER SKETCH	QC				
4 WELD OUT MEMBERS A PRIMARY	HANGER SUPT.	DCSA QA	6-2-81		
B SECONDARY	HANGER SUPT	PT QA	6/6/81		
5 INSPECT COMPLETED WELDS	QA				
6 SIGN COPY OF TRAVELER	QA				
7 RETURN PACKAGE TO MECH ENGR	HANGER SUPT	DCSA QA	6-6-81		
8 SUBMIT PACKAGE TO QC	MECH ENGR				
9 SUBMIT PACKAGE TO QA	QC				

EMBED THICKNESS $\geq 1\frac{1}{2}$" SJC 5114101

EMBED THICKNESS = ____ ____ / /

PRE-HEAT VERIFIED BY QA ____ / /

COMMENTS

QC /

NONDESTRUCTIVE TEST INSPECTION REQUEST	[illegible]	LOCATION	ELEV.	TIME	DATE
WELDER	SYMBOL	DWG./ISO. #	SHEET	JOB PACKAGE #	
INSPECTION REQUIREMENTS	CLEAN ☐ UP ☐ FINAL ☐			DETAIL	
	VISUAL ☑ LP ☐ MP ☐				
	REWORK ☐ NEW ☐				

COMMENTS: PC _____ TO PC _____

[illegible]

INSPECTOR PT ACCEPT ☒ REJECT ☐ HOLD ☐ DATE 6/6/84

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[illegible]

[illegible]

NON-DESTRUCTIVE TEST REQUEST	FOREMAN	LOCA	
		DWG./ISO #	
WELDER	STENCIL		
INSPECTION REQUIREMENTS	CLEAN ☐ PT ☐ FINAL ☐		
	VISUAL ☑ LP ☐ MP ☐		
	REWORK ☐ NEW ☑		

COMMENTS: PC _____ TO PC _____

OK on Rev 0/A

INSPECTOR [illegible] ACCEPT ☑ REJECT ☐ HOLD ☐ DATE 5-1-91

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Oxford Pendaflex

STOCK No. 7521/3

MADE IN U.S.A.

PROCEDURE CQC-19

(Record Copy)

1. UNIT	2. BUILDING	3. ELEV.	4. LOCA.	5. COMPONENT/HANGER ID.	6. DRAWINGS, REV. & SHT. #	7. WELD PROC.	9. WELD INST. ID.
						134	
PROJ. ENG.	DATE	WELDING ENG./FOREMAN	DATE			8. WELD MTL.	
[illegible]	5-14-81	[illegible]	5-15-81	PSI 145 A3-334		E7018	

1. SPECIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
2. SPECIFY 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

FOREMAN: CARK DATE 5/15/81

10. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) APPROVED

12. WELDER(S) QUALIFICATION A [✓] R [ ] | 13. MAT'L STATUS A [✓] R [ ] | NDE/DSR # | QA/QC INSPECTION [illegible] | DATE [illegible]

WELD ID OR DESCRIP. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP	ROOT NDE						FINAL NDE									VAC BOX	WELD	INSP. INITIALS	DATE	DESCRIPTION OF CHANGE OR REWORK REQUIRED
					VT			MT/PT			VT			MT/PT			RT			UT					
		H	TEMP	H	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R					
Fillet	N/A	C-13									✓	✓														

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY _____ INITIALS 5/19/81 DATE

QA/QC SPECIALIST / DESIGNEE _____ DATE _____

REMARKS:

* USE QA-34A TO LIST ADDITIONAL WELDS

Gauge File (Field Copy)

(PROCEDURE QQC-19)

2. BUILDING	3. ELEV.	4 LOCA.	5 COMPONENT/HANGER ID.	6 DRAWINGS, REV & SHT #	7 WELD PROC.	8 WELD MET.
5203	336	Zone 3	PD-H-1451	PD-H-1451 A-3 Sh1	GTAW	6 POS

ENG.	DATE	WELDING ENG./FOREMAN	DATE
[illegible]	5-19-81	[illegible]	5-19-81

1. DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
2. DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES
3. SITE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS
4. QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN: N/A DATE: 5-20

5. TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) & ITEM # DATE

6. WELDER(S) QUALIFICATION A ☐ R ☐ 3. MAT'L STATUS A ☐ R ☐ NCR # N/A QA/QC INSPECTION DATE

WELD OR DESCRIP. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP			ROOT NDE						FCPT NDE									VAC TEST	PWHT		INSP INITIALS	DATE	DESCRIPTION OF REWORK REQUIRED
		H	TEMP	H	A	R	VT		MT/PT				VT			MT/PT			RT			UT						
[illegible]	5/13												✓												[illegible]	5/19	

H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY _____ INITIALS 5/19/81 DATE

REMARKS:

This is my handwriting
5/19/82

_____ QA/QC SPECIALIST / DESIGNEE _____ DATE

* USE QA-34A TO [illegible] ADDITIONAL WELDS

ORIGINAL HANGER INSTALLATION & INSPECTION

HANGER NUMBER P1-1-H-46 REV.

DRAWING OR SPECIAL REQUIREMENTS: N/A

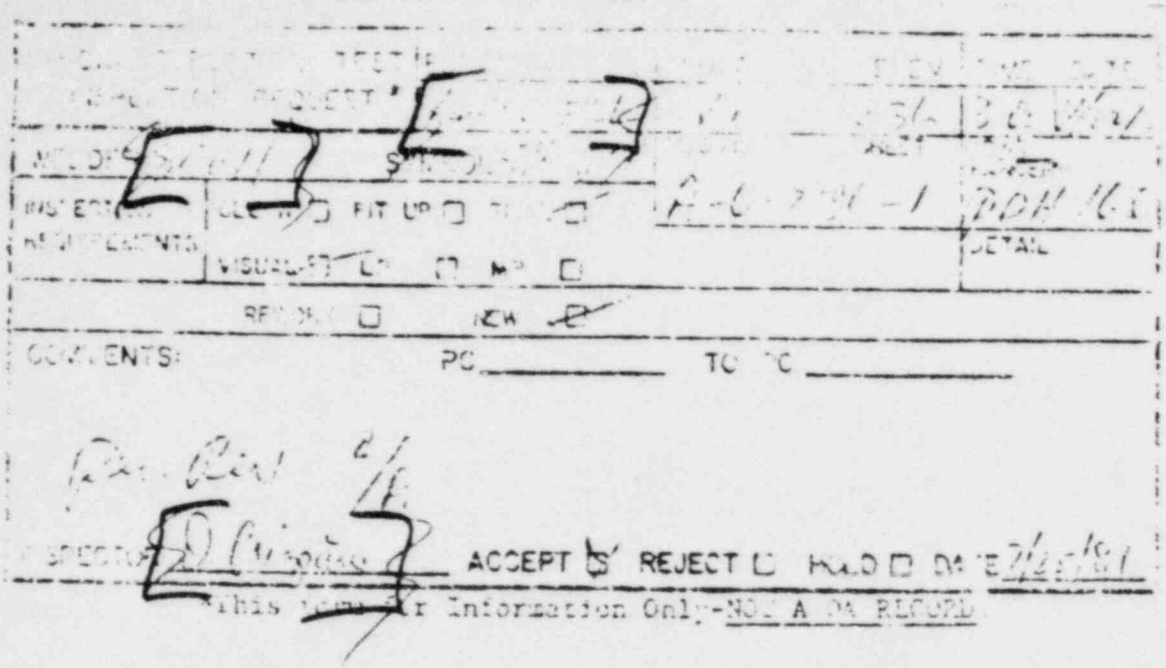
ACTIVITY	RESPONSIBILITY	SIGN-OFF PHASE I INITIAL	SIGN-OFF PHASE I DATE	SIGN-OFF PHASE II INITIAL
1 INSTALL HANGER WORK PACKAGE	MECH ENGR	JD [illegible]	7/26/81	
2 SETUP HANGER IN FIELD	HANGER SUPT			
3 INSPECT HANGER	QC	T.L. [illegible]		
4 VERIFICATION DIMENSIONAL	QC	T.L. [illegible]		
5 [illegible]	QA			
6 [illegible]	QC			
7 [illegible]	QC	QA [illegible]		
8 [illegible]	HANGER SUPT			
9 [illegible]	HANGER SUPT			
10 SIGN OFF COMPLETED PACKAGES	QA	[illegible]		
11 [illegible]	QC			
12 RETURN PACKAGE TO [illegible] ENGR	HANGER SUPT	[illegible]		
13 SUBMIT PACKAGE TO QC	MECH ENGR			
14 SUBMIT PACKAGE TO QA	QC			

EMBED THICKNESS = 1½" CWP 6/12/81

EMBED THICKNESS = / /

[illegible] VERIFIED BY QA / /

COMMENTS



Optional Form 161

STOCK No. 7521/5

MADE IN U.S.A.

(PROCEDURE CQC-19)

1. UNIT	2. BUILDING	3. ELEV.	4. LOCA.	5. COMPONENT/HANGER ID.	6. DRAWINGS, REV & SHT. #	7. WELD SPEC.	8. WELD INSP.
1	RAB	236	Zone 6	PD-H-1653			

9. DISCIPLINE ENG.	DATE	WELDING ENG. FOR MAN.	DATE

10. SECTION DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
11. DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES
12. TE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS
QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

13. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A B C D E

14. WELDER(S) QUALIFICATION A ☐ R ☐ | 15. MAT'L STATUS A ☐ R ☐ | NCR/DR # N/A | QA/QC INSPECTION [illegible] | DATE 2/25/81

16. JOINT I.D. OR DESCRIP. & QTY OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP			ROOT NDE								FINAL NDE												PWHT			WELD INSP. INITIALS	DATE	DESCRIPTION OF DEFICIENCY, NCR OR REWORK NUMBER, ETC
							VT			MT/PT					VT			MT/PT			RT			UT			VAC BOX							
		H	TEMP	H	A	R	H	A	R	H	A	R	T		H	A	R	H	A	R	H	A	R	H	A	R	H	A	R				
1 Fillet 5/16	0/A	SH 87													✓	✓																1/25/81	

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY [illegible] INITIALS 2/25/81 DATE

REMARKS

QA/QC SPECIALIST / DESIGNEE DATE

* USE QA-34A TO LIST ADDITIONAL WELDS

NONDESTRUCTIVE TEST INSPECTION REQUEST	FOREMAN	LOCATION	ELEV.	TIME	DATE
WELDER	SYMBOL	DWG /ISO #	SHEET	DWG NUMBER	
INSPECTION REQUIREMENTS	CLEAN ☐ FIT UP ☐ FINAL ☐				
	VISUAL ☐ LP ☐ MP ☐			DETAIL	
	REWORK ☐ NEW ☐				
COMMENTS:	PC _____ TO PC _____				

INSPECTOR [signature] ACCEPT ☑ REJECT ☐ HOLD ☐ DATE 7/25/91

THIS FORM FOR Information Only - NOT A QA RECORD.

[illegible]

[illegible]

MECHANICAL ENG (Record Copy)

(PROCEDURE CQC-19)

1. UNIT	2. BUILDING	3. ELEV.	4. LOCA	5. COMPONENT/HANGER ID.	6. DRAWINGS, REV. & SHT. #	7. WELD PROC.	9. WELD [illegible]
[illegible]		DATE	WELDING ENG / FOREMAN	DATE		8. WELD MAT'L	

1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
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

FOREMAN: GAZZELL DATE

5. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) ACCEPT

6. WELDER(S) QUALIFICATION A [X] R [ ] | 7. MAT'L STATUS A [X] R [ ] | 8. P.W.I. [illegible] | 9. QA/QC INSPECTOR [illegible] | DATE 7/25/87

* JOINT ID OR DESCRIP & QTY OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP			ROOT NDE						FINAL NDE												VAC BOX			WELD			INSP INITIALS	DATE	DESCRIPTION OF DEFECT OR REWORK NCR #
							VT			MT/PT			VT			MT/PT			RT			UT												
		H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R			
Hdr 2 SH87	SH87												/																		OK	7/25/87	

CODE: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY _____ INITIALS _____ DATE

REMARKS

Reviewing handwriting 6/5/2012

_____ QA/QC SPECIALIST / DESIGNEL _____ DATE

* USE QA-35A TO LIST ADDITIONAL WELDS

[illegible] POWER & LIGHT COMPANY

SHEARON HARRIS NUCLEAR POWER PLANT

SEISMIC HANGER INSTALLATION & INSPECTION TRAVELER

HANGER NUMBER P1-H-1628 REV NO. 1

LINE NO. 8"-CC-2501-Q1

LOCATION OR SPECIAL REQUIREMENTS: FB-2226-1

ACTIVITY	RESPONSIBILITY	SIGN OFF PHASE I INITIAL	PHASE I DATE	PHASE II INITIAL	PHASE II DATE
1 PROVIDE HANGER WORK PACKAGE	MECH ENGR	~~J.D.~~	~~7-13-81~~		
2 FIT UP HANGER MEMBERS	HANGER SUPT.				
3 INSPECT HANGER					
A IDENTIFICATION PER PACKAGE	CI	F.E. N/A			
B LOCATION & ORIENTATION PER PACKAGE & PROCEDURE	CI	F.E. N/A	7-16-81		
C WELDMENT FIT-UP (FULL PEN WELD)	QA				
D LOCATION PER STRESS ISO	CI				
E GEOMETRY PER SKETCH	CI				
4 WELD OUT MEMBERS A PRIMARY	HANGER SUPT.	QCSR OTA	7/16/81		
B SECONDARY	HANGER SUPT.				
5 INSPECT COMPLETED WELDS	QA		7/25/81		
6 PULL COPY OF TRAVELER	QA	QCSR OTA	7/25/81		
7 RETURN PACKAGE TO MECH ENGR.	HANGER SUPT.				
8 SUBMIT PACKAGE TO CI	MECH ENGR				
9 SUBMIT PACKAGE TO QA	CI				

EMBED THICKNESS ≤ 1½" WPC 6/11/81

EMBED THICKNESS - ___ / /

PREHEAT VERIFIED BY QA / /

COMMENTS

CI / F.E. - PLUG NOT INSTALLED

QA

NONDESTRUCTIVE TEST INSPECTION REQUEST *	FOREMAN	LOCATION	ELEV	TIME	DATE

WELDER:	SYMBOL	DWG / ISO. #	SHEET	JOINT #

INSPECTION REQUIREMENTS	CLEAN ☐ FIT UP ☐ FINAL ☐	DETAIL
	VISUAL ☐ LP ☐ MP ☐	

REWORK ☐ NEW ☐

COMMENTS: PC _____ TO PC _____

INSPECTOR [signature] ACCEPT ☑ REJECT ☐ HOLD ☐ DATE 7/25/87

This form for Information Only-NOT A QA RECORD.

From Mark FL
PD 4678

NONDESTRUCTIVE TEST INSPECTION REQUEST #	FOREMAN	LOCATION	ELEV.	TIME	DATE
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
WELDER [illegible]	BCL [illegible]	DWG./ISO. # 1-236-1	SHEET	JOINT NUMBER # CC-H-167	
INSPECTION REQUIREMENTS	CLEAN ☐ FIT UP ☐ FINAL ☒			DETAIL	
	VISUAL ☒ ☐ MP ☐				
	REWORK ☐ NEW ☒				

COMMENTS PC _____ TO PC _____

[illegible]

INSPECTOR [signature] ACCEPT ☒ REJECT ☐ HOLD ☐ DATE 7/27/81

This form for Information Only-NOT A QA RECORD.

[illegible] 1678

QA/QC file

MECHANICAL ENG (Rev 04/97)

PROCEDURE QUC 19

J.

1. UNIT	2. BUILDING	3. ELEV	4. LOCA	5. COMPONENT/HANGER ID.	6. DRAWINGS, REV & SHT #	7. WELD PROC.	8. WELD MAT. TY.	9. WELD INSP. TECH.

DISCIPLINE ENG.	DATE	WELDING ENG./FOREMAN	DATE

II.

1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
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

FOREMAN: Roy McDaniel DATE

III.

1. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) AT FIT-UP
2. WELDER(S) QUALIFICATION A [✓] R [ ]
3. MAT'L STATUS A [✓] R [ ]
NCR/DDR #
QA/QC INSPECTION
DATE

IV.

* JOINT I.D. OR DESCRIP. & QTY OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP			ROOT NDE						FINAL NDE												PWHT			INSP. INITIALS	DATE	DESCRIPTION OF REPAIR OR REWORK
							VT			MT/PT			VT			MT/PT			RT			UT			VAC BOX						
		H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R			
Hatch	SN71												✓															[illegible]			

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP. GREATER THAN LISTED

This is my handwriting [illegible]

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY _____ INITIALS _____ DATE

QA/QC SPECIALIST / DESIGNEE _____ DATE

* USE QA - 34A TO LIST ADDITIONAL WELDS

REMARKS

QA/QC File Copy (Field Copy)

(PROCEDURE CQC-19)

1. UNIT	2. BUILDING	3. ELEV	4. LOCA	5. COMPONENT/HANGER ID.	6. DRAWINGS, REV. & SHT #	7. WELD PROC.	9. WELD INSP.
					1-2536-P-1	1010	

DISCIPLINE ENG.	DATE	WELDING ENG./FOREMAN	DATE	8. WELD ML. TY.
[illegible]	6-11-81	[illegible]	6-10-81	E7018

1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
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

FOREMAN: DATE

5. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) AS-BUILT

6. WELDER(S) QUALIFICATION A [illegible] R [ ] | 7. MAT'L STATUS A [illegible] R [ ] | NCR/DDR # | QA/QC WITNESS/OBSERVATION

* JOINT I.D. OR DESCRIP. QTY OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP			ROOT NDE						FINAL NDE												PWHT			INSP. INITIALS	DATE	DESCRIPTION OF REWORK
							VT			MT/PT			VT			MT/PT			RT			UT			VAC BOX							
		H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R			
1-FBE	O/A	SH-71											√																			

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY _____ (INITIALS) _____ (DATE)

REMARKS

_____ QA/QC SPECIALIST / DESIGNEE _____ DATE

* USE QA-34A TO LIST ADDITIONAL WELDS

INA POWER & LIGHT COMPANY

SHEARON HARRIS NUCLEAR POWER PLA...

SEISMIC ... ER INSTALLATION & INSPECTION TP.

HANGER NUMBER FD-H-1.-2 REV NO 1

LINE NO [illegible]

LOCATION OR SPECIAL REQUIREMENTS: AUX-1

ACTIVITY	RESPONSIBILITY	SIGN-OFF PHASE I INITIAL	PHASE I DATE	SIGN-OFF PHASE II INITIAL
1 PROVIDE HANGER WORK PACKAGE	MECH ENGR	[illegible]	7-15-81	
2 [illegible] HANGER	HANGER SUPT			
3 INSPECT HANGER				
A IDENTIFICATION PER PACKAGE	QI	F.E. 0/S RDS	7-16-81	
B LOCATION & ORIENTATION PER DRAWING & PROCEDURE	QI	F.E. 0/S RDS	7-16-81	
C WELDMENT FIT UP (ALL PEN WELDS)	QA			
D LOCATION PER STEEL ISO	QI			
E [illegible] PER DRAWING	QI			
4 WELD OF WELDERS: A PRIMARY	HANGER SUPT.	QC & QA	7/16/81	
B SECONDARY	HANGER SUPT			
5 INSPECT COMPLETED WELDS	QA	[illegible]	7/29/81	
6 FULL COPY OF TRAVELER	QA	Rejection		
7 RETURN PACKAGE TO MECH ENGR.	HANGER SUPT			
8 SUBMIT PACKAGE TO [illegible]	MECH ENGR			
9 SUBMIT PACKAGE TO [illegible]	QI			

EMBED THICKNESS ≥ [illegible]" WPC 6/12/81

EMBED THICKNESS = ____ / /

PREHEAT VERIFIED BY QA ____ / /

COMMENTS

C.I. / F.E. - PIPE NOT INSTALLED

NONDESTRUCTIVE TEST INSPECTION REQUEST *	FOREMAN	LOCATION	ELEV	TIME	DATE
	McLeod	040-1	736 FEET	3AM	7/4/81
WELDER Franks	SYMBOL SH-11	DRAWING * P-1-206		PACKAGE * PC-11-1682	
INSPECTION REQUIREMENTS	CLEAN ☐ FIT UP ☐ FINAL ☒			DETAIL	
	VISUAL ☒ LP ☐ MP ☐				
	REWORK ☐ NEW ☒				

COMMENTS: Rev. 0/1 PC _____ TO PC _____

INSPECTOR D. Curtis ACCEPT ☒ REJECT ☐ HOLD ☐ DATE 7/5/81

*This form for Information Only-NOT A QA RECORD.

CDH 1682

Proj QC/QA File

[This is my hand writing]
[signature] 5/15/92

From Mech File

PDH 1682

NONDESTRUCTIVE TEST INSPECTION REQUEST *	FOREMAN	LOCATION	ELEV.	TIME	DATE
WELDER:	SYMBOL	DWG./ISO.*	SHEET	JOINT NUMBER	
INSPECTION REQUIREMENTS	CLEAN ☐ FIT UP ☐ FINAL ☐				
	VISUAL ☐ LP ☐ MP ☐			DETAIL	
	REWORK ☐ NEW ☐				

COMMENTS: PC _____ TO PC _____

INSPECTOR [signature] ACCEPT ☑ REJECT ☐ HOLD ☐ DATE: 5/5/92

*This form for Information Only-NOT A QA RECORD.

MECHANICAL ENG (Record Copy)

(PROCEDURE CQC-19)

1. UNIT	2. BUILDING	3. ELEV.	4. LOCA	5. COMPONENT/HANGER ID.	6. DRAWINGS, REV & SHT. #	7. WELD PROC.	9. WELD INSTR
						8. WELD MT. T.	
DISCIPLINE ENG.		DATE	WELDING ENG./FOREMAN		DATE		

I. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
II. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES
III. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS
IV. INFORM QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN: [illegible] DATE

V. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A[illegible]

VI. 2. WELDER(S) QUALIFICATION A ☒ R ☐ | 3. MAT'L STATUS A ☒ R ☐ | NCR/DDR # | QA/QC INSPECTION [illegible] | DATE

* JOINT I.D. OR DESCRIP. & QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP			ROOT NDE						FINAL NDE														PWHT			INSP INITIALS	DATE	DESCRIPTION OF DI OR REWORK NCR/DDR #
							VT			MT/PT			VT			MT/PT			RT			UT			VAC BOX								
		H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R			
Light	SH71												.	/																	[illegible]	[illegible]	

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY _____ INITIALS _____ DATE

_____ QA/QC SPECIALIST / DESIGNEE _____ DATE

* USE QA-34A TO LIST ADDITIONAL WELDS

REMARKS

[illegible]

QA/QC File (Field Copy)

(PROCEDURE CQC-19)

1. UNIT	2. BUILDING	3. ELEV	4. LOCA.	5. COMPONENT/HANGER ID.	6. DRAWINGS, REV & SHT. #	7. WELD PROC.	9. WELD INSTRUC.
					1H2-56-W-2E E-2	1A4 R0	

DISCIPLINE ENG.	DATE	WELDING ENG./FOREMAN	DATE	8. WELD MAT'L. TY.
	6-19-81		6-19-81	E7018

1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
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

FOREMAN: | DATE

1. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A-SHT 1

2. WELDER(S) QUALIFICATION A [✓] R [ ] | 3. MAT'L STATUS A [✓] R [ ] | NCR/DDR # | QA/QC INSPECTION D.B. Clem | DATE 6/25/81

* JOINT I.D. OR DESCRIP. QTY OF WELDS	WELDER SYMBOL(S)	PREHEAT H	PREHEAT TEMP	FITUP H	FITUP A	FITUP R	ROOT NDE VT H	ROOT NDE VT A	ROOT NDE VT R	ROOT NDE MT/PT H	ROOT NDE MT/PT A	ROOT NDE MT/PT R	FINAL NDE VT H	FINAL NDE VT A	FINAL NDE VT R	FINAL NDE MT/PT H	FINAL NDE MT/PT A	FINAL NDE MT/PT R	FINAL NDE RT H	FINAL NDE RT A	FINAL NDE RT R	FINAL NDE UT H	FINAL NDE UT A	FINAL NDE UT R	FINAL NDE VAC BOX H	FINAL NDE VAC BOX A	FINAL NDE VAC BOX R	PWHT H	PWHT A	PWHT R	INSP INITIALS	DATE	DESCRIPTION OF DEFECT OR REWORK NCR/DDR #
1 G1	9/A	SH-71											✓	✓																	D.B.C.	6/25/81	

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

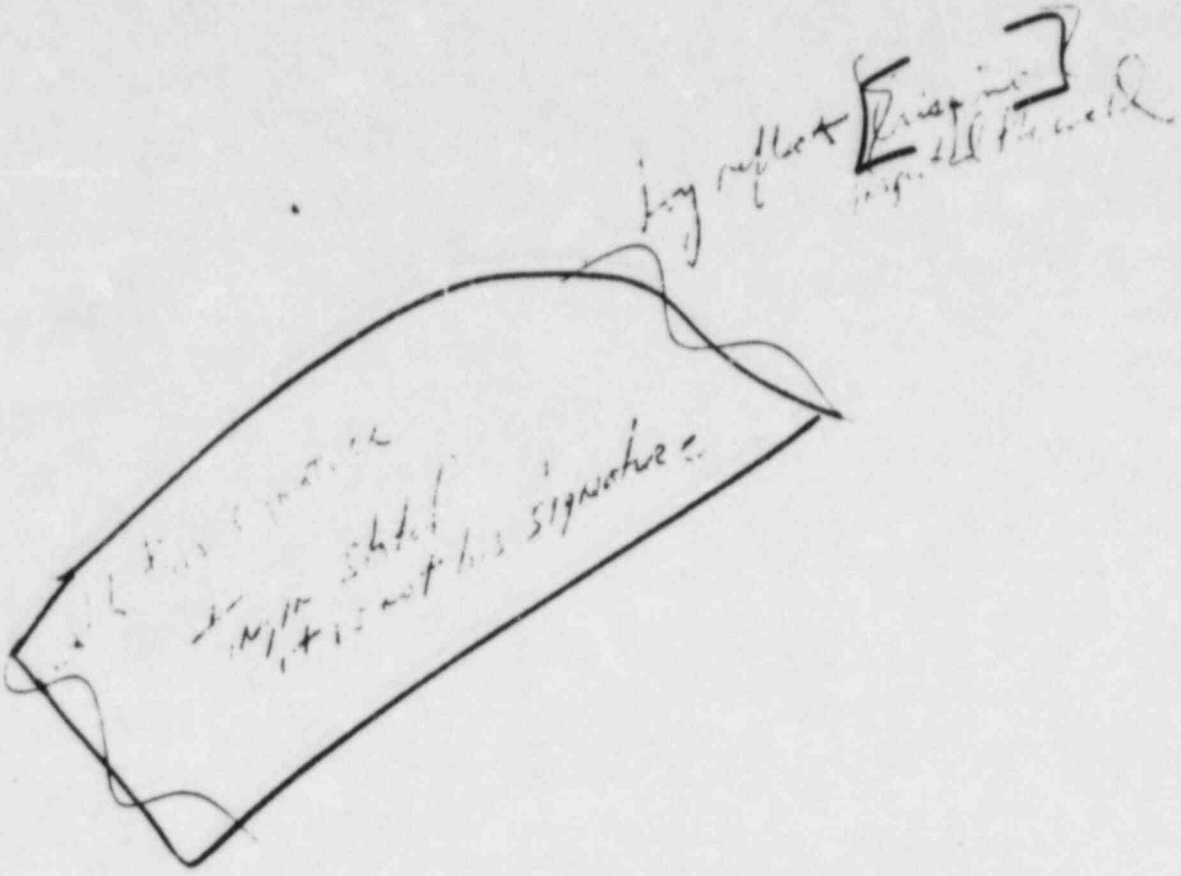
QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY _____ INITIALS _____ DATE

REMARKS

_____
QA/QC SPECIALIST / DESIGNEE

_____
DATE

* USE QA-34A TO LIST ADDITIONAL WELDS



NONDESTRUCTIVE TEST INSPECTION REQUEST *	FOREMAN	LOCATION	ELEV	TIME	DATE
WELDER: SYMBOL		DWG / ISO *	SHEET		
INSPECTION REQUIREMENTS	CLEAN ☐ FIT UP ☐ FINAL ☐				
	VISUAL ☐ [illegible] ☐ MP ☐				DETAIL
	REMARK ☐ [illegible] ☐				

COMMENTS:

[illegible] TO PC _____

INSPECTOR [signature] ACCEPT ☐ REJECT ☐ [illegible] ☐ DATE [illegible]

Rev. 12/QC File

NONDESTRUCTIVE TEST INSPECTION REQUEST *	FOREMAN	LOCATION	ELEV.	TIME	DATE
	[redacted]	RAB	236	3pm	7/24/81
WELDER [redacted]	SYMBOL S-5	DWG./ISO.* RC-236-1	SHEET	JOINT HOUSEKEEPING PO #1695	
INSPECTION REQUIREMENTS	CLEAN ☐ PIT UP ☐ FINAL ☑			DETAIL	
	VISUAL ☑ PT ☐ MP ☐				
	REWORK ☐ NEW ☑				

COMMENTS: Rev. 5/2 PC _____ TO PC _____

INSPECTOR [redacted] ACCEPT ☒ REJECT ☐ HOLD ☐ DATE 7/25/81

*This form for Information Only-NOT A QA RECORD.

(PROCEDURE QQC-19)

2. BUILDING	3. ELEV	4. LOCA	5. COMPONENT/HANGER ID	6. DRAWINGS, REV. & SHT. #	7. WELD PROC.	8. WELD IN [illegible]
				1-6-6356-1		

DISCIPLINE ENG.	DATE	WELDING ENG./FOREMAN	DATE	9. WELD RQ. #
[illegible]	6-18-91	[illegible]	6-18-91	F1015

1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
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

FOREMAN: DATE

5. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) & SKETCH(S) 6/25/91

6. WELDER(S) QUALIFICATION A [X] R [ ] 7. MATL STATUS A [X] R [ ] WELDER [illegible] QA/QC INSPECTION [illegible] DATE 6/25/91

* JOINT I.D. OR DESCRIP. # OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP			ROOT NDE						FINAL NDE																								INSP. INITIALS	DATE	DISPOSITION OF NCR #
							VT			MT/PT			VT			MT/PT			RT			UT			VAC BOX			DWG.#											
		H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R			
[illegible]	9/A	SI-5											√																											
		C																																					

LEGEND H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY [illegible] INITIALS 6/25/91 DATE

QA/QC SPECIALIST / DESIGNEE DATE

REMARKS

* USE QA-34A TO LIST ADDITIONAL WELDS

Marc Davis

John Harrell

Reginald Faulkner ← another name under white-out, but illegible)

Gil DeBarros

Alan Kinsey

Mark Tallon

James Hampton

Eugene Martin

Rose Briere

John Swindell

Alan Lowe

Dwight Estes

Ian Simpson

David Jarvis

Robert Steele

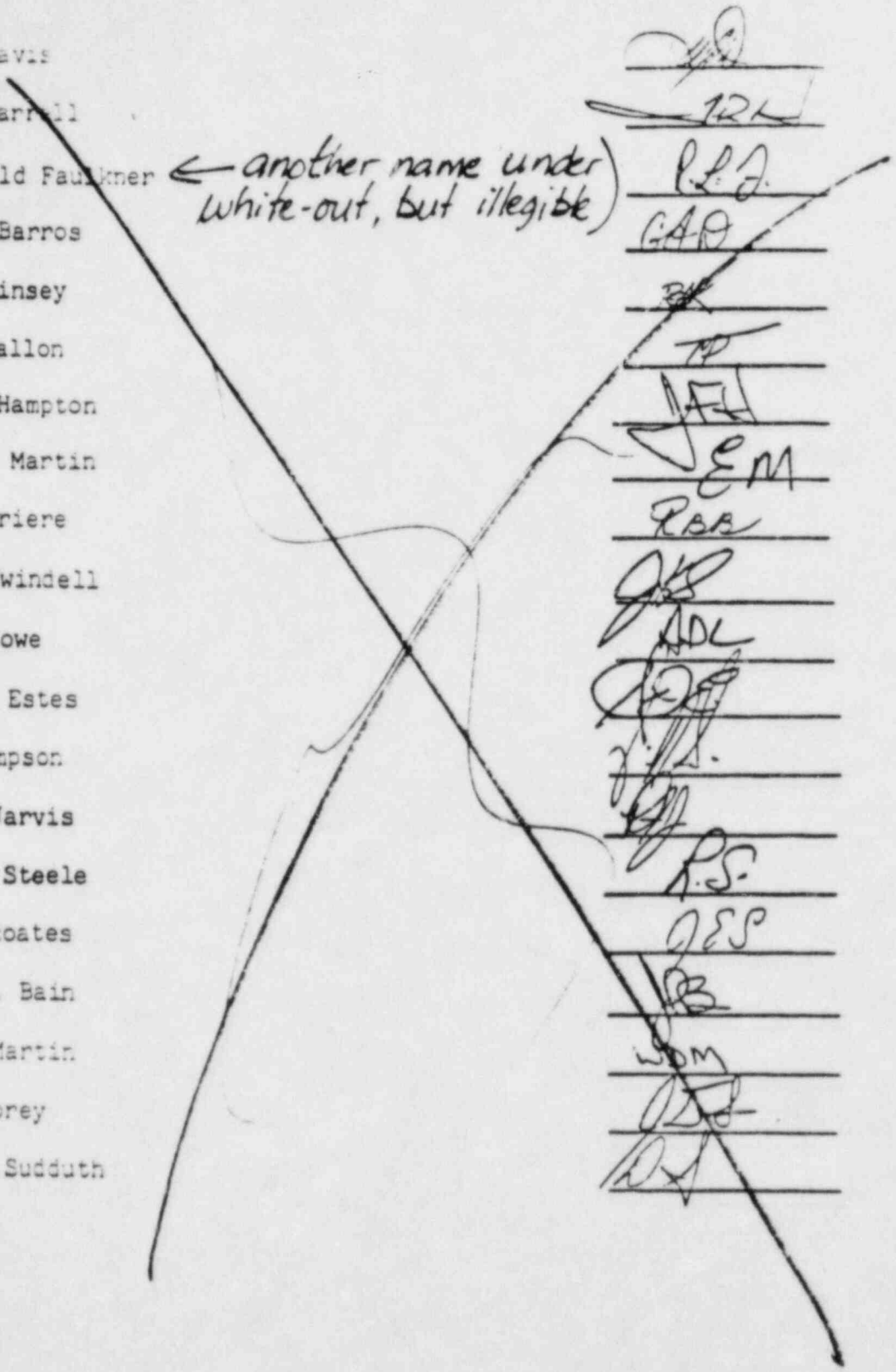
John Scoates

John R. Bain

Wayne Martin

Jim Storey

Douglas Sudduth



James Bott

- Robert St. Pierre (printed)

Judy Sauerbier

David Shockley

- Bobby Smith (printed)

Ricky Strickland

Don Sugg

Cyndi Talbott

Frank Taylor

Pete Tingen

Cynthia Turner

- Vernon Veglia (typed)
- Terry Wait (typed)

Richard Warren

Paul West

- Tom West (printed)

David Whitehead

- Additions: ← name under white out, but illegible)

Robert L. St. Pierre

John Barber

Sheila Freeman

Mark Hale

Margaret Hundley

Rich Moore

Clay Rhodes

Don Sands

Bobby Smith

Don Smith

- Ken Stanley (typed)

Janie Weeder

Tony West

Raymond Williams

Barbara Howe

Don Hudson

Phett Hunt

• Margaret Hundley (printed)

• Eric Hunter (typed)

• Dudley Jacobs (typed)

Sandy Jenkins

Gene Kelly

Kendel Kirks

Jay Kremer

John Langdon

Tom Lee

Walt Leggett

• Pam McCurdy (typed)

Judi McDonnell

Ward Mercer

Lil Meyer

• Cheryl Miller (typed)

Glenn Milner

Dale Mize

• Rich Moore (printed)

Steve Mountcastle

• David Myers (typed)

Carl Osman

Jean Parker

Bill Pere

Nguyen Van Phung

Don Prince

Al Pullian

• Cathy Rohrbough (typed)

• Clay Rhodes (printed)

Carolina Power & Light Company

INITIALS OF SITE QA/QC INSPECTION PERSONNEL

Name	Initials
Andy Bertrom	AB.
Ed Betz	
James Brown	
Emma Jean Burton	EB
Richard Bussey	RB.
James Cagle	JWC
Herb Casanova	HJC
Jerry Cates	JC
Robert Cates	
Pete Cook	
• Don Crispino (typed)	
Gina Cullins	GC
George Daniel	GD
Rick Demling	RWD
Ken Douglas	KAD
• Bud Driggers (typed)	
Tommy Gilbert	TG
• Bruce Giles (typed)	
• Bill Godbold (typed)	
Glenda Goodman	GG
Robin Groves	RG
• Mike Hale (printed, w/no initials)	
Dyanne Hardy	DH.
John Holland	JH
• David Holler (typed)	
Jenny Holter	JH

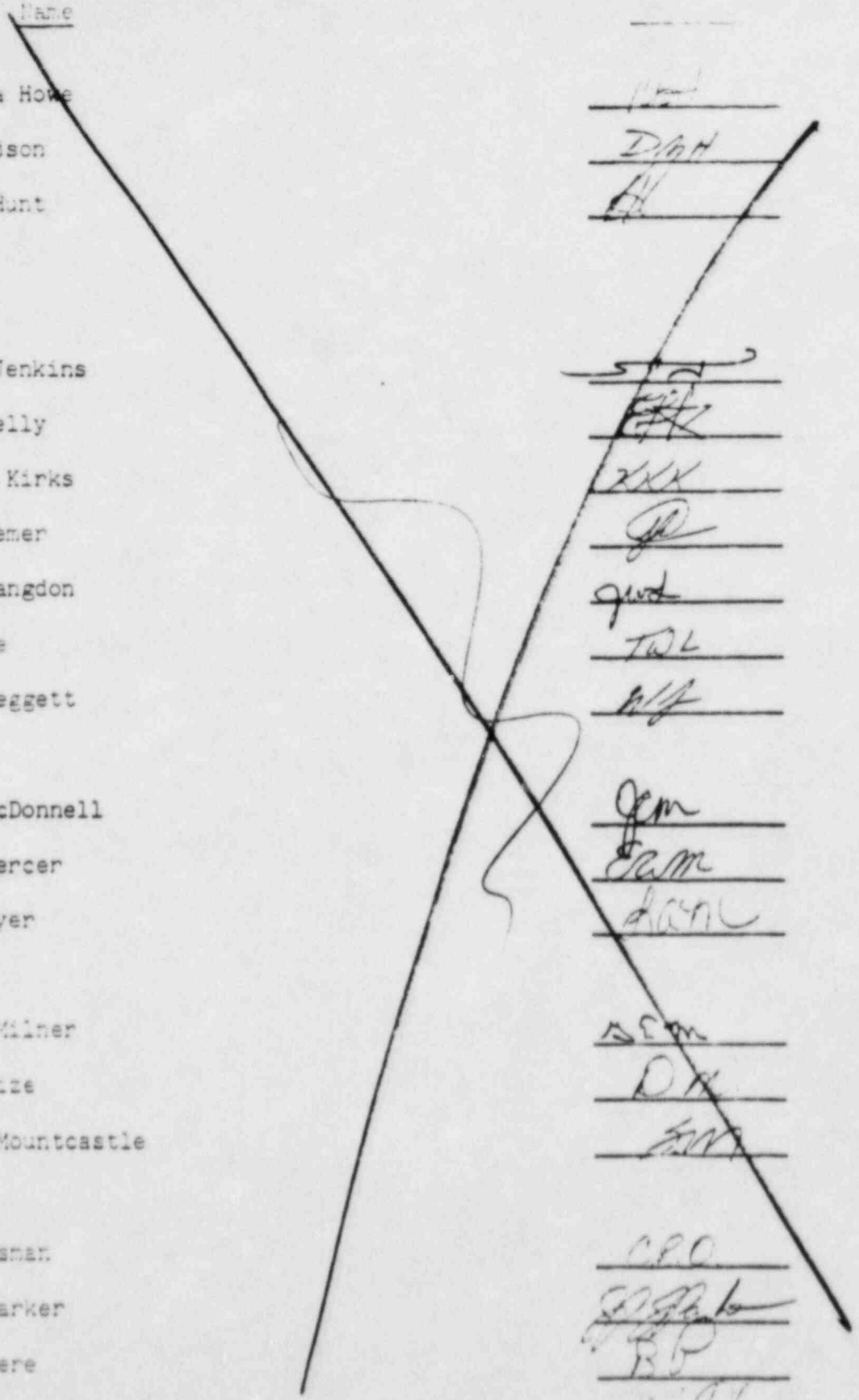
	Initials
Marc Davis	
John Harrell	
Reginald Faulkner	
Gil DeBarros	
Alan Kinsey	
Mark Tallon	
James Hampton	
Eugene Martin	
Rose Briere	
John Swindell	
Alan Lowe	
Dwight Estes	
Ian Simpson	
David Jarvis	
Robert Steele	
John Scoates	
John R. Bain	
Wayne Martin	
Jim Storey	
Douglas Sudduth	

Janet Root	
Judy Sauerbier	
David Shockley	
Ricky Strickland	
Don Sugg	
Cyndi Talbott	
Frank Taylor	
Pete Tingen	
Cynthia Turner	
Richard Warren	
Paul West	
David Whitehead	

Additions:

Robert L. St. Pierre	
John Barber	
Sheila Freeman	
Mark Hale	
Margaret Hundley	
Rich Moore	
Clay Rhodes	
Don Sands	
Betty Smith	
Don Smith	
Janie Reese	
Tony West	

Name	
Barbara Howe	
Don Hudson	
Rhett Hunt	
Sandy Jenkins	
Gene Kelly	
Kendel Kirks	
Jay Kremer	
John Langdon	
Tom Lee	
Walt Leggett	
Judi McDonnell	
Ward Mercer	
Lil Meyer	
Glenn Milner	
Dale Mize	
Steve Mountcastle	
Carl Osman	
Jean Parker	
Bill Pere	
Nguyen Van Phung	
Don Prince	
Al Pullian	



[redacted]

INITIALS OF SITE QA/QC INSPECTION PERSONNEL

Name	Initials
Andy Bartrom	AB.
Ed Betz	
James Brown	
Emma Jean Burton	EB
Richard Bussey	RB.
James Cagle	JWC
Herb Casanova	HJC
Jerry Cates	JC
Robert Cates	
Pete Cook	
Gina Cullins	
George Daniel	
Rick Depling	
Ken Douglas	
Tommy Gilbert	
Glenda Goodman	
Robin Groves	
Dyanne Hardy	
John Holland	
Becky Holter	

[illegible] WELD DATA REPORT

(PROCEDURE CQC-19)

[illegible]	2. BUILDING	3. ELEV	4. LOCA.	5. COMPONENT/HANGER ID.	6. DRAWINGS, REV. & SHT. #	7. WELD PROC.	9. WELD INSTRUCTIONS
[illegible] PLINE ENG.		DATE	WELDING ENG./FOREMAN	DATE		8. WELD MTL. TY.	

1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
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

FOREMAN: [signature] DATE 3/28/91

1. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) ALIGN [illegible] 3/28/91

[illegible]DER(S) QUALIFICATION A ☑ R ☐ | 3. MAT'L STATUS A ☑ R ☐ | NCR/DDR # | QA/QC INSPECTION [illegible] | DATE 3/28/91

1. JOINT I.D. OR DESCRIP. & QTY OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP	ROOT NDE						FINAL NDE										VAC BOX	PWHT		INSP INITIALS	DATE	DESCRIPTION OF DEFECT, ITEM OR REWORK NCR/DDR, ETC.
					VT			MT/PT			VT			MT/PT			RT			UT							
		H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R			
Inlet welds	S1.5										✓																	
Outlet welds	S1.5										✓																	

[illegible] PWHT: [illegible] 3/28/91 [illegible] 3/28/91 Extra welds

LEGEND H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY [signature] (INITIALS) [illegible] (DATE)

QA/QC SPECIALIST / DESIGNEE — DATE

REMARKS:

* USE QA-34A TO LIST ADDITIONAL WELDS

and periodic evaluations, and certification of the qualifications of each person.

6. REVISION OF ANSI STANDARDS REFERRED TO IN THIS DOCUMENT

When the following standards referred to in this document are superseded by a revision approved by the American National Standards Institute, the revision shall apply.

N45.2, Quality Assurance Program Requirements for Nuclear Power Plants

N45.2.10,[3] Quality Assurance Terms and Definitions.

[3] This Standard is being approved by the American National Standards Institute and it should be available early in 1973.

Table 1
Minimum Levels of Capability for Project Functions

Project Function	Level I	Level II	Level III
Approve inspection and test procedures			X
Implement inspection and test procedures	X		
Evaluate inspection and test results		X	
Reporting of inspection and test results		X	

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NRC Form 337 (11-82)

ALLEGATION DATA FORM

Instructions on reverse side

U.S. NUCLEAR REGULATORY COMMISSION

RECEIVING OFFICE

1. **Facility(ies) Involved:** (If more than 3, or if generic, write GENERIC)
   (Name) SHEARON HARRIS — Docket Number (if applicable): 050 00400

2. **Functional Area(s) Involved:** (Check appropriate box(es))
   - [ ] operations
   - [x] construction
   - [ ] safeguards
   - [ ] other (Specify)
   - [ ] onsite health and safety
   - [ ] offsite health and safety
   - [ ] emergency preparedness

3. **Description:** (Limit to 100 characters)
   ALLEGED FAILURE TO REPAIR DEFECTIVE HANGER WELDS

4. **Source of Allegation:** (Check appropriate box)
   - [ ] contractor employee
   - [ ] licensee employee
   - [ ] NRC employee
   - [ ] organization (Specify)
   - [ ] other (Specify)
   - [ ] security guard
   - [ ] news media
   - [x] private citizen

5. **Date Allegation Received:** MM DD YY: 08 03 83

6. **Name of Individual Receiving Allegation:** (First two initials and last name) B. JONES

7. **Office:** RII

ACTION OFFICE

8. **Action Office Contact:** (First two initials and last name) GA TODD

9. **FTS Telephone Number:** 242-4193

10. **Status:** (Check one)
    - [x] Open, if followup actions are pending or in progress
    - [ ] Closed, if followup actions are completed

11. **Date Closed:** MM DD YY

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~~3032~~

12. **Remarks:** (Limit to 50 characters)
    FOLLOWUP AS REACTIVE VWSP ACTION

13. **Allegation Number:** Office - Year - A - Number: RII - 83 - A - 0066

INSTRUCTIONS

The following are specific instructions for completing each of the required items on the Allegation Data Form.

The first part of the form (items 1 - 7) should be completed by the Office receiving the allegation. The remainder of the form (items 8 - 13) should be completed by the Office responsible for reviewing and taking action on the allegation.

1. Facility(ies) Involved: Give the name of the facility(ies) or company(ies) about whom the allegation is made. Write the docket number, if appropriate, in the boxes to the right.
If the allegation is made about a specific individual or if the information in this item is otherwise sensitive, write SENSITIVE.
If more than three facilities or companies are involved write GENERIC.

2. Functional Area(s) Involved: Check all applicable boxes.

3. Description: Briefly describe the allegation (1 or 2 sentences). Be concise. If an allegation includes several instances of wrong doing list the assertions separately or group them by type.
NOTE: if the description of the allegation is sensitive, write only SENSITIVE.

4. Source of Allegation: Check the box that most clearly describes the affiliation or occupation of the person making the allegation. DO NOT include the name of the individual making the allegation.

5. Date Allegation Received: Show the month, day, and year on which the allegation was reported to NRC.

6. Name of Individual Receiving Allegation: Give the NRC staff member's first and middle initials and last name.

7. Office: Use official NRC abbreviations to indicate the NRC Office receiving the allegation.

8. Action Office Contact: Write the first and middle initials and last name of the NRC staff member responsible for follow-up action on the allegation.

9. FTS Telephone Number: Write the seven-digit FTS telephone number at which the Action Office Contact (see item 8) can be reached.

10. Status: Check the appropriate box.

11. Date Closed: Show the month, day, and year on which the follow-up action was completed.

12. Remarks: Include additional information as appropriate.
EXAMPLES: list other allegations related to this allegation; list other NRC offices responsible for follow-up activities on this allegation.

13. Allegation Number: Fill in the boxes to uniquely identify this allegation:
OFFICE -- official NRC office abbreviation for the Office responsible for follow-up activities.

YEAR -- last two digits of the calendar year in which the allegation was reported to NRC.

A -- identifies this number as an allegation number.

NUMBER -- sequential number assigned by the Office responsible for the follow-up activities.

EXAMPLE: The 24th allegation received by IE in 1982 would be shown as IE-82-A-0024