U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-358/82-01(DPRP)

Docket No. 50-358 License No. CPPR-88

Licensee: Cincinnati Gas and Electric Company
139 East 4th Street
Cincinnati, OH 45201

Facility Name: Wm. H. Zimmer Nuclear Power Station

Inspection At: Wm. H. Zimmer, Moscow, OH

Inspection Conducted: November 2-5, 1981; January 18-22, 25-28, February 10-12 and 16-18, 1982

Inspectors: P. A. Barrett	5/17/82
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Approved By: D. R. Hunter, Chief Reactor Projects Section 2B	5/28/82

Inspection Summary

Inspection on November 2-5, 1981, January 18-22, 25-28, February 10-12 and 16-18, 1982 (Report No. 50-358/82-01(DPRP))
Areas Inspected: Special, announced inspection followup of the Immediate Action Letter (IAL) dated April 8, 1981, and the Quality Confirmation Program (QCP). This inspection involved a total of 307 inspector-hours onsite by eight NRC inspectors.
Results: Within the two areas inspected, three items of noncompliance were identified with examples affecting both areas. (Failure to clearly establish and document the authorities and duties of all QA Department personnel - Section I, Paragraphs 1 and 2e; failure to provide adequate certification of qualifications for all QA Department personnel - Section I, Paragraphs 2b, 2c, 2d, and 2f, Section II, Paragraphs 2b and 2c, Section V, Paragraph 1, and Section VIII, Paragraph 1; failure of procedures to adequately address the quality requirements concerning activities which had been performed - Section I, Paragraphs 3a and 3b.)

DETAILS

1. Persons Contacted

Cincinnati Gas and Electric Company

*B. R. Sylvia, Vice President, Nuclear Operations
*H. R. Sager, QA Manager
*B. A. Gott, Structural Field Engineer
*M. F. Rulli, Coordinator, Quality Confirmation Program
*R. C. Arthurs, Task Coordinator - Mechanical
C. Blenstram, Task Coordinator, Nonconformances
L. Albers, Task Coordinator - Electrical
*T. O'Farrel, Coordinator - NR Dispositions
M. L. Carpenter, Task Coordinator - Design Document Changes
*D. J. Schulte, Director, QA Engineering
*S. P. DePillo, Task Coordinator - Structural
J. Valentik, QA Engineer
*J. F. Shaffer, Director - QA Records
R. Sargent, Lead Structural Inspector
D. Kramer, Acting Director, QC Division
*N. Banarjee, QC Engineer
*G. Orlov, QA Engineer
*S. E. Martin, Procedures - Training Coordinator
R. Vanier, QA, NDT Level III
S. Osborne, Training Coordinator
J. Alter, Lead QA Engineer
J. Yates, Lead Structural Inspector
J. Colwell, QCP Inspector

Henry J. Kaiser Company

*D. Howard, Acting QA Manager
*J. Watkins, Deputy Site QA Manager
*N. Vitale, QE Manager
M. Goedecke, Welding Manager
R. Baker, Level III Examiner
B. Varchol, QA Administration Manager

Sargent and Lundy

*H. Singh, Lead Structural Coordinator
*T. Bertolini, Structural Engineer
R. Pruski, Zimmer Project Manager
T. McKenna, Structural Project Engineer
H. Roman, Structural Engineer

Hartford Steam Boiler

L. Burton, Authorized Nuclear Inspector

Other members of management, technical, and administrative staffs were contacted during the inspection.

*Denotes those attending exit interviews.

2. Unresolved Items

Unresolved items are matters requiring more information in order to ascertain whether they are acceptable items, items of noncompliance or deviations. Unresolved items disclosed in the inspection are discussed in Section I, Paragraphs 2a, 4a, and 4b; Section II, Paragraph 2d; Section V, Paragraph 2; Section VI, Paragraphs 1a through 1i, and 2; and Section VIII, Paragraphs 3 and 4.

3. Exit Interviews

The inspectors met with licensee representatives at the conclusion of the inspection of the specific areas and summarized the scope and findings of the individual inspection activities. The findings, including those concerning personnel duties and responsibilities, certification of qualifications and procedure inadequacies, were discussed with the licensee. The licensee acknowledged the findings.

Exit meetings were conducted on November 5, 1981, and January 28, February 12 and 18, 1982. Additional meetings were held on February 9, 12 and 19, 1982, to discuss concerns regarding personnel qualifications and procedure inadequacies. (See Inspection Report No. 50-358/82-03(DPRP)).

Section I

Prepared By: P. A. Barrett
Reviewed By: D. R. Hunter, Chief
Reactor Projects Section 2B

1. Review of The Quality Assurance Organization

The inspector reviewed the current organization charts for the Zimmer Quality Assurance Department (QAD) which included the Quality Confirmation Program (QCP) group. The charts identified the QAD supervisory and QCP coordinator positions by title. The QCP organization chart also identified the specific individuals assigned as Task Coordinators and the general task responsibility area (e.g., structural steel, cable separation).

The inspector requested the licensee to provide written job descriptions which define the authorities and duties of the persons in the QAD performing activities affecting safety-related functions. On January 27, 1982, the CG&E Quality Assurance Manager implied that the job descriptions were not required. The licensee was not able to provide written job descriptions for the QAD supervisors and QCP coordinators. Procedure reviews revealed that some personnel responsibilities (duties) for individual tasks in the QCP were written in the respective task procedures; the procedures did not define the full scope of their responsibilities such as evaluating inspection findings. Additionally, the authorities (e.g., stop work authority) of the QCP personnel were not delineated in writing.

On February 11, 1982, the licensee provided the inspector with written job descriptions (authorities and duties) for various positions within the QAD (e.g., Quality Engineer, Quality Control Technician III). The CG&E QA Manager stated that these job descriptions could not be directly linked to the organization charts or the QAD personnel qualification files. Out of two QAD personnel questioned, one stated he thought that he knew which description applied to himself and the other person stated he did not know.

On February 12, 1982, the licensee stated that direct correlations between job descriptions, QAD organization charts, and all QAD personnel (who affect quality) will be delineated in writing. These correlations will ensure that all QAD personnel have a written job description and know their respective duties and authorities. The licensee stated these correlations will be established by February 23, 1982.

The failure to clearly establish and document the authorities and duties of QAD personnel is contrary to Criterion I of Appendix B of 10 CFR 50, NA 4210 of Section III of the ASME Boiler and Pressure Vessel Code, ANSI N45.2-1971, ANSI N45.2.6-1978 (Regulatory Guide 1.58) and the CG&E QA Manual, Section i.3. This matter was discussed with the licensee on February 12 and 19, 1982, to ensure timely corrective action. (358/82-01-01a)

2. Review of Personnel Qualification Records

On January 26-27, 1982, the inspector reviewed qualification records for the individuals assigned to the following positions:

a. CG&E QA Manager

The certification of qualification of the QA Manager was signed by the QA Manager, indicating that he was certified by himself and not by his management. The licensee had not provided any other evidence to indicate that an independent evaluation was made of the QA Manager's qualifications. An independent evaluation was required to assure that the qualification requirements were adequate and to identify and resolve any quality problems that might exist with the QA Manager's qualifications.

The resume in the QA Manager's qualification file revealed that he had received two college degrees but the specific degrees (i.e., electrical engineering, and accounting) were not identified.

On February 11, 1982, additional reviews were made of the QA Manager's qualification records. These additional reviews are addressed in Sections V and VI of this report. This matter was discussed further with the licensee on February 12 and 19, 1982, to ensure timely corrective action.

This matter is considered unresolved pending review of the complete documented certification of the QA Manager during a subsequent inspection. (358/82-01-02)

b. Acting QA Manager and Supervisor of Quality Engineering

The inspector reviewed CG&E Inter-Department Correspondence letter No. HRS-82-13, dated January 15, 1982, which designated the Supervisor of Quality Engineering as Acting QA Manager when the QA Manager was absent. The Supervisor of Quality Engineering was acting in the capacity of QA Manager during parts of this inspection period. Also, he had signed the approval of Quality Assurance Procedures 19-QA-04, "Quality Confirmation of AWS Steel," Revision 0, dated September 16, 1981; 19-QA-07, "Safety Class I Structural Steel Re-Entrant Corners," Revision 0, dated September 16, 1981; and 19-QA-01, "Review and Re-Radiography of Pullman Power Products Pipe Welds," Revision 2, (including TCN No. 81-4 dated September 17, 1981). These procedure approvals require qualifications equivalent to those required of the QA Manager position.

On January 27, 1982, the Region III inspector reviewed the qualification file of the Supervisor of Quality Engineering. Other than some older (1977) Ohio Edison reading lists and some current training session attendance lists, no qualification records were available to indicate that the individual was qualified for the positions of Acting QA Manager and Supervisor of Quality Engineering or that his qualifications had been evaluated by management.

On February 11, 1982, the inspector reviewed and compared additional qualification records for this individual against the job description provided on February 11, 1982, for the Director Quality Assurance, Engineering Division. The CG&E QA Manager stated that this was the applicable job description for the Supervisor of Quality Engineering. Based on the duties defined in the job description (e.g., reviewing and approving procedures to assure quality), the Supervisor of Quality Engineering required the qualifications of Level III as defined in Regulatory Guide 1.58, Revision 1, and ANSI N45.2.6-1978. The position of Acting QA Manager would also require Level III qualifications. The applicable qualification requirements for this individual to function as the Supervisor of Quality Engineering and/or Acting QA Manager are:

> Four year college graduation plus five years of related experience in equivalent inspection, examination, or testing activities, with at least two years of this experience associated with nuclear facilities - or if not, at least sufficient training to be acquainted with the relevant quality assurance aspects of a nuclear facility.

The review of the qualification records indicated that the individual had received bachelor degrees in mechanical engineering and physics in 1977 and had worked five years, predominately in engineering duties related to fossil power plants, with only five or six months of work related to a nuclear facility. The nuclear related work was limited to the development and implementation of a design change request (Engineering Change Request) program.

Based on the available qualification records, the individual did not have the required five years of related experience in equivalent inspection, examination, or testing activities... Therefore, the individual did not have sufficient qualifications required for the position of Acting QA Manager or Supervisor of Quality Engineering. Furthermore, there was no written certification of qualification for the above individual. The certification is required by ANSI N45.2.6-1978, Section 2.4, to signify that CG&E management had performed a review of the above individual to assure adequate qualifications. Failure by CG&E management to certify and assure that the above individual had adequate qualifications prior to performing his assigned duties is contrary to Criterion II of Appendix B to 10 CFR 50, NA 4220 of Section III of the ASME Boiling and Pressure Vessel Code, ANSI N45.2-1971, ANSI N45.2.6-1978 (Regulatory Guide 1.58), and the CG&E QA Manual, Section 1.3. This matter was discussed with the licensee on February 12 and 19, 1982, to ensure timely corrective action. (358/82-01-03a)

c. Quality Confirmation Program Cable Separation Task Coordinator

On January 26 and February 11, 1982, the inspector reviewed the certification for the Separation Task Coordinator dated December 21, 1981, which indicated that the subject individual was qualified

in accordance with ANSI N45.2.6-1978 as a Level II electrical inspector. The supporting documentation included a resume and training log which indicated that the individual had received a bachelors degree in electrical engineering and relevant site training. The work experience described on the certification was vague (e.g., "about one year related equivalent inspection" experience) in that it did not define the specific nature of the experience (e.g., served one year as a Level I inspector of the installation of electrical relays). The certification indicated that the individual had passed Level II electrical and visual examinations. The resume also indicated that the individual had functioned as the Task Coordinator from September 1981 to present.

The job description (duties and authorities) of a Task Coordinator was not provided to the inspector until February 11, 1982. The CG&E QA Manager stated the job description for a Quality Engineer was the applicable description for a Task Coordinator. Based on the duties defined in the job description (e.g., supervising inspection personnel), a Quality Engineer would require the qualifications of a Level II as defined by Regulatory Guide 1.58, Revision 1, and ANSI Standard N45.2.6-1978. The applicable qualification requirements for this individual to function as a Task Coordinator (Quality Engineer) are:

> Four year college graduation plus six months of related experience in equivalent inspection, examination, or testing activities or to establish that an individual has the required qualifications in lieu of required education and experience requires documented objective evidence (i.e., procedures and record of written test) demonstrating that the individual indeed does have "comparable" or "equivalent" competence to that which would be gained from having the required education and experience.

The individual's resume only indicated two months of related inspection experience (i.e., participation in an audit of cable separation) prior to September 1981.

The Region III inspector reviewed the Level II electrical examination taken by the individual on December 15, 1981. The examination consisted of 50 questions of which only about 20 were significant or relevant to electrical inspection, examination, and test activities. Other than 7 questions related to cable termination activities, an evaluation of demonstrated competence could not be made for any other area of electrical inspection activities.

Based on the available qualification records, the individual did not have the required six months of related experience in equivalent inspection of activities prior to September 1981.

Additionally, the Technical Review Checklist for inspection instruction QACMI No. E-7, Revision 14B, was signed by the individual on July 30, 1981. The signature indicated that the

individual had reviewed, evaluated, and approved the technical adequacy of the Revision. Regulatory Guide 1.58, Revision 1, Regulatory Position C.4, requires that an individual responsible for reviewing, evaluating, and approving inspection instructions, have Level III qualifications. Level III qualification requirements are more stringent than Level II (i.e., five years experience versus six months). The technical review performed by the subject individual contained inadequacies as described in Paragraph 3.a of this Section.

CG&E management did not ensure that the subject individual had adequate qualifications prior to assigning him the duties and authorities of QCP Task Coordinator for cable separation including review, evaluation, and approval of inspection (QACMI) instructions.

Failure by CG&E management to ensure that the subject individual had adequate qualifications prior to performing his assigned duties is contrary to Criterion II of Appendix B to 10 CFR 50, ANSI N45.2-1971, ANSI N45.2.6-1978 (Regulatory Guide 1.58), and the CG&E QA Manual, Section i.3. This matter was discussed with the licensee on February 12 and 19, 1982, to ensure timely corrective actions. (358/82-01-03b)

d. Quality Reviewer for QACMI E-7, Revision 15, "Cable Pulling," and E-8, Revision 14, "Cables and Wire Termination Inspection"

On February 11, 1982, the subject individual's qualification records did not include written certification of qualification. The CG&E QA Manager indicated that the applicable job description was that of Quality Engineer, which requires Level II qualifications.

The available qualification records included a resume. The resume indicated the individual received a bachelor's degree in electrical engineering in 1979. The resume indicated approximately three years of work experience. The resume was vague relative to work experience and dates; therefore, the inspector could not complete an evaluation of the individual's qualifications.

The individual appeared to have worked outside his qualifications when reviewing, evaluating, and approving the quality aspects of QACMI E-7, Revision 15, and E-8, Revision 14. Reviews, evaluation, and approval of inspection instructions are required to be performed by persons with Level III qualifications. The quality review performed by the subject individual contained inadequacies as described in Paragraphs 3a and 3b of this Section.

Failure by CG&E management to certify and ensure that the subject individual had adequate qualifications prior to performing duties and authorities is contrary to Criterion II of Appendix B to 10 CFR 50, NNSI N45.2-1971, ANSI N45.2.6-1978 (Regulatory Guide 1.58) and the CG&E QA Manual Section i.3. This matter was discussed with the licensee on February 12 and 19, 1982 to ensure timely corrective action. (358/82-01-03c)

e. Procedures and Training Supervisor

On February 11, 1982, the inspector reviewed the certification of qualification dated February 10, 1982, for the above individual. The certification indicated that the individual was qualified as Level III for Procedure 02-QA-04, Revision 0, (i.e., evaluation and qualification of QAD personnel). The certification indicated that the individual had five years of QA experience. In response to the inspector's question, the individual indicated that he had written his own certification and the certification was signed by the CG&E QA Manager. The individual was not aware of an assigned job description for his position.

The individual's resume indicated that he had a bachelor degree in general engineering. The resume indicated approximately 20 years of experience, primarily related to preoperations and operations activities. The resume indicated no specific quality assurance experience (e.g., performance of QA audits, quality control inspections, or quality engineering).

The subject individual had signed the Technical Review Checklist for QACMI E-8, Revision 14. The signature dated September 2, 1981, indicated that the original instruction reviewer's comments had been resolved. The inspector was concerned that the individual may have approved resolutions to instructional deficiencies which he was not qualified to evaluate; however,a review of the review sheet revealed that the comments appeared to be concerned with typographical and administrative errors. Also, the individual stated that he had received, by telephone, the original reviewer's approval of the comment resolutions. Since a job description was not available the inspector could not complete an evaluation of the individual's qualifications.

The licensees failure to clearly establish the duties and authorities of the above individual is contrary to Criterion I of Appendix B to 10 CFR 50, NA 4220 of Section III of the ASME Boiler and Pressure Vessel Code, ANSI N45.2.6-1978 (Regulatory Guide 1.58), and the CG&E QA Manual Section i.3. This matter was discussed with the licensee on February 12 and 19, 1982, to ensure timely corrective action. (358/82-01-01b)

f. Technical Reviewer for QACMI E-8, Revision 14, "Cable and Wire Termination Inspection"

On February 11, 1982, there were no available qualifications records for the procedure technical reviewer. The licensee stated that the individual worked for a separate CG&E group (not Zimmer), located offsite and was not a member of QAD.

Based on discussions with the licensee, CG&E management had not performed an evaluation of the subject individual's qualifications, relative to his technical review, evaluation and approval of QACMI E-8, Revision 14. The technical review performed was inadequate as described in Paragraph 3.b of this report.

The licensee's failure to certify and ensure that the subject individual had adequate qualifications prior to performing his assigned Zimmer duties and authorities is contrary to Criterion II of Appendix B to 10 CFR 50, ANSI N45.2-1971, ANSI N45.2.6-1978 (Regulatory Guide 1.58), and the CG&E QA Manual, Section i.3. This matter was discussed with the licensee on February 12 and 19, 1982, to ensure timely corrective action. (358/82-01-03d)

3. Review of Electrical Installation Inspection Instructions

During and after the week of November 2-5, 1981, the inspector reviewed the following Quality Assurance Construction Methods Instructions (QACMIs):

a. QACMI E-7, Revision 15, dated September 3, 1981, "Cable Pulling"

(1) QACMI E-7, Revision 15, appeared to adequately require the verification of the following cable installation inspection criteria: Bend radius; routing; protection from sharp edges; pulling compounds; cable identification control; raceway system cleanliness, completion, and identification; use of proper cable type; cable damage; and pulling technique.

(2) The instruction addressed the control of cable temperatures prior to installation necessary to prevent damage to cables stored at cold temperatures. However, the specified temperature requirements appeared to be less stringent than those specified by many cable manufacturers. The inspector requested the licensee to provide justification for the specified temperatures. On February 10, 1982, the licensee provided the inspector with the cable manufacturer's requirements for minimum pulling temperatures. In a letter dated June 24, 1980, from the Rockbestos Company, the manufacturer specified the minimum installation temperature of 14°F for Rockbestos control cable. QACMI E-7, Revision 15, incorrectly specified -10°F. The FSAR states the plant complies with Regulatory Guide 1.30 and IEEE 336-1971. IEEE 336-1971, Paragraph 5.1.1, states, in part, "Inspection shall be made to verify that equipment is...installed...to comply with... manufacturers' instructions..."

(3) The instruction addressed the control of cable pull tensions by using tension meters. However, the instruction appeared to exclude control of tensions for cables which had specified pull tensions "not in excess of 100 pounds." The licensee stated that the intent of the procedure was to use tension meters only on cables with maximum tensions in excess of 100 pounds. Regardless, to exclude any cables from controls (use of tension measuring devices) which assure that maximum installation tensions are not exceeded, is contrary to ANSI N45.2-1971, Section 11. Section 11 states, in part "...Examinations, measurements, or tests of items processed

shall be performed for each work operation where necessary to assure quality... If inspection of processed items is impossible...indirect control by monitoring of processing methods, equipment, and personnel shall be provided."

(4) The instruction established that the Foothill Electric Company the electrical subcontractor, superintendent was responsible for assembling the design document packages, including changes, by which the cable pulling activities were to be accomplished. This statement appeared to be in conflict with the site QA and document control programs in that there appeared to be no requirement for Quality Assurance Department personnel to verify that the proper and latest design documents were being used prior to commencing work.

(5) The instruction addressed the control of cable separation and cable (grip) support requirements. However, the Construction Inspection Plan (CIP) which is used by QC inspectors to document the cable installation inspections did not include verification of cable separation and support requirements. On February 11, 1982, the inspector reviewed the completed CIPs for cables RH417/D dated October 27, 1981, and RH419/F dated November 3, 1981. Neither record indicated evaluation or verification of cable separation or support requirements.

The inspector reviewed the Technical Review Checklist dated July 30, 1981, for Revisions 14B and 15; and the Quality Review Checklist dated August 26, 1981, for Revision 15 of QACMI E-7. The reviews were required by the April 8, 1981, Immediate Action Letter. Both reviews were inadequate, which resulted in E-7, Revision 15, being inadequate. The individual who performed the technical review incorrectly designated the inspection requirements specified in the FSAR the regulatory guides and the codes and standards as not applicable. A second individual, who performed the quality review, inadequately evaluated the quantative and qualitative acceptance criteria and the status of inspection indicated on inspection records.

A number of these inadequacies were discussed with the licensee on November 4-5, 1981. On February 11, 1982, the licensee provided the inspector with Procedure No. EIP-4, Revision 0, which was to go into effect immediately. EIP-4, Revision 0, superseded QACMI E-7, Revision 15. The inspector made a preliminary review of EIP-4, Revision 0; and the aforementioned inadequacies appeared to have been adequately corrected with the exception of the control of cable pull tensions.

The inadequacies identified above in instruction QACMI E-7, Revision 15, are contrary to Criterion V of Appendix B to 10 CFR 50 and the CG&E QA Manual, Sections i.3 and 5.3. This

matter was discussed with the licensee on February 12 and 19, 1982, to ensure timely corrective action. (358/82-01-04a)

b. QACMI E-8, Revision 14, dated September 3, 1981, "Cable Wire Termination Inspection"

(1) QACMI E-8, Revision 14, appeared to adequately require the verification of the use of correct termination lugs, identification of the design drawing used for the terminations, and initial installation of required jumpers.

(2) Paragraph 4.1 of the instruction stated the Foothill Electric Company (FEC) Superintendent was responsible for assembling the design document packages, including changes, by which the cable termination activities were to be accomplished. This statement appears to conflict with the site QA and document control programs in that there appeared to be no requirement for quality assurance personnel to verify that the proper and latest design documents would be used prior to commencing work.

(3) Paragraph 5.2.3 of the instruction states, "If, during periodic calibration checks, a tool is found to be out of tolerance, the FEC Superintendent shall cause a Nonconformance Report (NR) to be generated for all work accomplished with the tool since the previous calibration check." However, no inprocess inspections were being provided to identify nonquality activities by QA personnel. Criterion X of Appendix B to 10 CFR 50 requires inspections to be performed by individuals other than those who performed the activity being inspected. Criterion I of Appendix B to 10 CFR 50 requires programs to have sufficient organizational freedom to identify quality problems.

(4) Paragraph 5.2.4 of the instruction states, "Records of tool calibration checks shall be maintained and made available to HJK inspectors upon request." The instruction included no requirements to assure that the calibration of the tools were actually verified (including in-process verifications and required record reviews) by quality control inspectors. The CIP, used to document QC inspections of termination activities, does not address verification of tool calibration. This is contrary to Criterion X of Appendix B to 10 CFR 50 and ANSI N45.2-1971, Section 11, which require inspections to be performed to verify conformance with the requirements.

(5) Paragraph 5.3.5 of the instruction states, "The FEC Superintendent shall notify HJK Lead Electrical Inspector when terminations are complete, indicating cable end terminated, badge number of craftsman performing work and identification number of calibrated tools used." No requirements were defined for QC inspectors to perform in-process inspections. This is contrary to Criterion X of Appendix B to 10 CFR 50 and

ANSI N45.2-1971, Section 11, which requires inspections to be performed to verify conformance within the quality requirements.

(6) Paragraph 5.5.E and the CIP address the use of a torque wrench relative to cable terminations. However, the instruction does not specify which cable terminations are required to be torqued or the specific torque values that must be applied. 10 CFR 50, Appendix B, Criterion III, requires delineation of acceptance criteria for activities to be established. Paragraph 5.5.E states that torquing is a mandatory hold point, but the CIP only requires the torque wrench to be verified (after-the-fact) and recorded. Criterion X of Appendix B to 10 CFR 50 requires inspections and ANSI N45.2-1971, Section 11, requires in-process inspection.

(7) Paragraph 5.4 addresses determination and re-termination of cables.

The instruction does not address or reference how the status of de-terminations and re-terminations are controlled. During a phone conversation on February 17, 1982, the inspector discussed the concern with the Foothill Electric Company (FEC) quality engineer. The quality engineer had prepared the instruction and indicated that the construction personnel had a de-termination log; but there were no measures established in the QA Program to control de-termination and re-termination of cables after the cables had been initially terminated. This is contrary to Criterion XIV of Appendix B to 10 CFR 50 and ANSI N45.2-1971, Section 15, which requires measures to be established for indicating the operating status of structures, systems and components.

(8) Paragraphs 5.5.1.B and 5.7 addressed the verification of cable separation requirements. However, the instruction does not specify the separation criteria for associated (Non-Class 1E) or Reactor Protection System cables (redundant channels) in panels. The instruction states that nonsafety-related and safety-related (Engineered Safety Features) cables may be bundled together in panels which appears to conflict with the FSAR Section 8.3.1. The FSAR is vague with regard to separation of nonsafety associated and safety-related cables within panels. The FSAR appears to indicate that nonsafety-related (nonassociated) cables will be separated from safety-related (Class 1E) cables by six inches in panels or otherwise become associated.

(9) Paragraph 1.0, "Purpose," states this procedure is to delineate the in-process and post inspection requirements for essential cable terminations. However, the inspection checklist and record (CIP) does require any in-process inspections. On February 11, 1982, the inspector reviewed completed CIPs to determine what inspections were made of the termination activities related to cables HP029 dated

November 12, 1981, and HP030 dated November 12, 1981. Based on the CIPs, no in-process inspections had been performed. Criterion X of Appendix B to 10 CFR 50 requires inspection and ANSI N45.2-1971, Section 11, requires in-process inspection.

The inspector reviewed the Technical Review Checklist dated August 27, 1981, for Revision 14 and the Quality Review Checklist dated August 26, 1982, for Revision 14 of QACMI E-8. The reviews were required by the April 8, 1981, Immediate Action Letter. Both reviews were inadequate, which resulted in E-8, Revision 14, being inadequate. The individual who performed the technical review, incorrectly designated the inspection requirements specified in the FSAR; the regulatory guides; the codes and standards; and the design criteria as not applicable. A second individual, who performed the quality review, inadequately evaluated the quantative and qualitative acceptance criteria and the controls used to identify nonconforming items.

A number of these inadequacies had been discussed with the licensee during the inspection on November 4-5, 1981. On February 11, 1982, the licensee provided the inspector with Procedure No. EIP-5, Revision 0, which was to go in effect almost immediately. EIP-5, Revision 0 supersedes QACMI E-8, Revision 14. The inspector did not review EIP-5, Revision 0, to determine if the above inadequacies have been adequately corrected.

The inadequacies identified above in instruction QACMI E-8, Revision 14, are contrary to Criterion V of Appendix B to 10 CFR 50 and the CG&E QA Manual, Sections i.3 and 5.3. This matter was discussed with the licensee on February 12 and 19, 1982, to ensure timely corrective action. (358/81-01-04b)

4. Review of QCP Procedures and Implementation Activities

a. Procedure No. 15-QA-04, Revision 0, dated July 2, 1981, "Review and Processing of Voided Nonconformance Reports"

The procedure defined how voided nonconformance reports (NRs) were to be reviewed and controlled to assure proper disposition and close out. The inspection revealed that the licensee is not distinguishing between safety-related and nonsafety-related voided NRs. All of the voided NRs are treated as safety-related which appears conservative and is acceptable.

Discussions on January 27, 1982, with the personnel responsible for implementing the procedure and a review of the records generated, concerning the procedure, revealed that the procedure did not reflect the actual control and review process for voided NRs. The procedure specifically addressed the review for adequacy of the dispositions (accept-as-is, rework, repair, or reject) of the voided NRs and the actions to be taken if the dispositions are inadequate. The personnel involved in the implementation of

the procedure stated that the purpose of the procedure was only the "Phase 1" review of the voided NRs. "Phase 1" was to assure that all of the noted nonconforming conditions were either transferred to subsequent NRs or otherwise controlled. The "Phase 1" review did not include an evaluation of the dispositions and respective corrective actions. The personnel stated that the dispositions and corrective actions would be reviewed during "Phase 2" which would be described in a procedure that was yet to be written and approved.

The inspector's review of the records generated for "Phase 1" revealed the "Phase 1" review was being summarized on logs from the different parties ("Review Committee") participating in the "Phase 1" review. The logs indicated either accept, reject, or remarks. The logs did not indicate whether only the nonconforming condition was controlled (accepted or rejected) or also the dispositions and corrective actions. The inspector performed a "Phase 1" review on NRs E-39, E-690, E-1077, E-1456, and E-1982 and agreed with the acceptance (nonconforming condition control only) indicated on the logs. This matter is unresolved pending further review of the implementation of the "Phase 2" procedures, the clarification of what the "Phase 1" procedures cover, and the verification that QCP Task VII is adequately controlled. (358/82-01-05)

b. Procedure No. 19-QA-09, Revision 0, dated September 14, 1981, "Review and Processing of Closed Surveillance Reports"

The procedure defined how surveillance reports (SRs) written prior to April 8, 1981, would be reviewed to identify all nonconforming conditions which should have been identified on nonconformance reports (NRs). The procedure also requires verification of the corrective actions, when applicable. Discussions on January 27, 1982, with the personnel responsible for implementing the procedure and a review of the status of SRs No. 608Q, 621, 635, 646, 647, 652Q, 662, 831, and 668 indicated only preliminary reviews have been made to date. The personnel revealed that the preliminary reviews would not be the final evaluations. Additionally, the preliminary review of SR No. 608Q appeared to be inadequate, in that the reviewer indicated that the SR was "acceptable-as-is" even though the SR identified a nonconforming condition. This matter is unresolved pending further review of the final reviews by the licensee of the surveillance reports. (358/82-01-06)

No items of noncompliance or deviations were identified.

5. Review of Immediate Action Letter Required Training

On November 2-3, 1981, the inspector reviewed the licensee's personnel training records to verify that the QA/QC personnel were receiving training relevant to the following inspection procedures:

a. KEI SSPM Procedure 4.2, Revision 3, "Liquid Penetrant Examination"

The review of the training records indicated that at least 46 CG&E QA personnel had received some training concerning Procedure No. 4.2. Appropriately, the personnel trained included 9 of the 17 hanger inspectors, 10 of the 11 piping/NDE inspectors, and 4 of the 8 civil/structural inspectors identified on the November 2, 1981, CG&E organization chart.

The review of the training records indicated that at least 18 KEI QA personnel had received some training concerning Procedure No. 4.2. Appropriately, the personnel trained included 6 of the 13 pipe inspectors, 1 of the 18 hanger inspectors, and 8 of the 20 mechanical/civil inspectors.

b. KEI SSPM Procedure 4.6, Revision 9, "Visual Examination"

The review of the training records indicated that at least 51 CG&E QA personnel had received some training concerning Procedure No. 4.6. Appropriately, the personnel trained included 9 of the 17 hanger inspectors, 8 of the 11 piping/NDE inspectors, 4 of the 5 electrical inspectors, and 6 of 8 civil/structural inspectors.

The review of the training records indicated that at least 54 KEI QA personnel had received some training concerning Procedure No. 4.6. Appropriately, the personnel trained included 4 of the 11 electrical inspectors, 8 of the 13 pipe inspectors, 6 of the 18 hanger inspectors, and 11 of the 20 mechanical/civil inspectors. Training concerning weld undercut was also documented.

c. KEI QACMI E-7, Revision 15, "Cable Pulling"

The review of the training records indicated that at least 6 CG&E QA personnel had received some training concerning instruction (QACMI) No. E-7. Appropriately, the personnel trained included 3 of the 5 IAL electrical inspectors.

The review of the training records indicated that at least 8 KEI QA personnel had received some training concerning QACMI E-7. Appropriately, the personnel trained included 4 of 10 electrical inspectors.

d. KEI QACMI E-8, Revision 14, "Cable Wire and Termination"

The review of the training records indicated that at least 5 CG&E QA personnel had received some training concerning QACMI E-8. Appropriately, the personnel trained included 3 of the 5 IAL electrical inspectors.

The review of the training records indicated that at least 5 KEI QA personnel had received some training concerning QACMI E-8. Appropriately, the personnel trained included 5 of 10 electrical inspectors.

e. KEI QACMI E-17, Revision 4, "Electrical Cable Tray, Cable Bus and Hanger Inspection"

The review of the training records indicated that at least 2 CG&E QA personnel had received some training concerning QACMI E-17. Of the 5 IAL electrical inspectors, only the lead inspector had received training.

The review of the training records indicated that at least 11 KEI QA personnel had received some training concerning QACMI E-17. Only 2 of the 10 electrical inspectors had received training.

It was not determined at the time of this inspection if any of the CG&E or KEI inspectors, who did not receive training concerning the above procedures, were performing inspections relevant to the procedures.

No items of noncompliance were identified.

6. Raceway Hangers Fabricated after the April 8, 1981 IAL

During the week of November 2-5, 1981, the inspector observed the completed welds and reviewed the weld inspection records for the following cable raceway hangers. The hangers were located in the fabrication shop.

a. Hanger No. FCH 162

The CG&E and KEI inspection records indicated that completed welds No. 1, 2, 3, 4, 9 and 10 (connecting a 1/4 inch plate to unistrut) were accepted on August 31, 1981.

b. Hanger No. FCH 174

The CG&E and KEI inspection records indicated that completed welds No. 1, 2, 3, 4, 7 and 8 (connecting a 1/4 inch plate to unistrut) were accepted on September 29, 1981.

c. Hanger No. FCH 44

(1) The CG&E and KEI inspection records indicated that completed welds No. 1, 2, 3, and 4 (connecting unistrut to sideplate) were accepted on August 20, 19[illegible].

(2) The CG&E and KEI inspection records indicated that completed welds No. 5 and 6 (connecting sideplate to baseplate) were accepted on August 26, 1981.

(3) The CG&E and KEI inspection records indicated that completed welds No. 9, 10, 11, and 12 (connecting unistrut to baseplate) were accepted on August 26, 1981.

The inspector observed all of the above welds. The completed welds appeared to comply with the visual inspection requirements of AWS D1.1-1972; however, the welds were painted with galvanox at the time of this inspection.

The inspection records for the above welds appeared to indicate that the licensee was complying with Item 3 of April 8, 1981, Immediate Action Letter. Because of the identical inspection dates by both the CG&E and KEI inspectors, the inspector could not determine whether or not the CG&E inspection was a reinspection or a consulting inspection.

No items of noncompliance were identified.

Section II

Prepared By: T. P. Gwynn
Reviewed By: D. R. Hunter, Chief
Reactor Projects Section 2B

On February 11 and 12, 1982, the inspector performed a continuing review of records pertinent to the qualifications of CG&E Quality Assurance Department personnel to determine that QA personnel possessed the minimum established education and experience levels commensurate with the complexity or special nature of the activities to be performed. In addition the inspector performed a review of records pertinent to the certification of CG&E Quality Control inspectors and Quality Assurance personnel to determine that the minimum requirements of ANSI N45.2.6-1978 and ANSI N45.2.23-1978 were met.

1. Documentation Reviewed

   a. CG&E Quality Assurance Department job descriptions (preliminary) for the following positions:

      (1) Senior Quality Engineer
      (2) Quality Specialist II

   b. Qualification records for the following personnel:

      (1) Quality Confirmation Program (QCP) Task I Coordinator
      (2) Quality Confirmation Program (QCP) Task II Coordinator
      (3) Program Development and Administration Division Procedures and Training Supervisor
      (4) Certification records to ANSI N45.2.6-1978 for two CG&E Quality Control lead inspectors

2. Findings

   a. The inspector was unable to adequately evaluate the qualifications of personnel not specifically certified to ANSI N45.2.6-1978 due to the preliminary status of the job descriptions supplied, incomplete records, and the preliminary nature of the qualification files.

   b. The inspector noted that the individual initially assigned as QCP Task I Coordinator had been certified by his employer (Sargent and Lundy) as Level III for AWS welding per ANSI N45.2.6. The qualification records for the present Task Coordinator for QCP Task I did not reflect previous experience in the area of AWS welding. The available records reflected an engineering degree and experience related to soils, concrete and rebar placement, and cadwelding. The failure by CG&E management to provide certification of qualification prior to performing quality activities is contrary to Criterion II of Appendix B to 10 CFR 50, ANSI N45.2-1971, ANSI N45.2.6-1978 (Regulatory Guide 1.58), and the CG&E QA Manual, Section i.3. This matter was discussed with the licensee on February 12 and 19, 1982, to ensure timely corrective action. (358/82-01-03e)

c. The preliminary job descriptions for both the Quality Specialist II (QSII) and the Senior Quality Engineer (SQE) prescribe duties and responsibilities which come under the certification requirements of ANSI N45.2.6-1978, and/or ANSI N45.2.23-1978 as follows:

(1) The duties of the QSII include: performing as a lead auditor, preparing audit plans, findings, and reports; auditing vendor programs and facilities off-site; and preparing quality procedures.

(2) The duties of the SQE include: supervising and coordinating audit and inspection of nuclear safety-related systems, components, and activities; reporting the results of audit findings, evaluating proposed corrective action and performing followup verification and closeout; supervising audit, surveillance, inspection and documentation activities performed by personnel assigned; preparing quality control inspection checklists and inspection plans; planning and scheduling audits of suppliers, contractors, consultants; and developing audit checklists and audit planning guides.

The inspector did not find certification to either ANSI N45.2.6 or ANSI N45.2.23 in the records for personnel performing as QSII and SQE. The failure of CG&E management to provide personnel certification of qualifications prior to performing quality activities is contrary to Criterion II of Appendix B to 10 CFR 50, ANSI N45.2-1971, ANSI N45.2.6-1978 (Regulatory Guide 1.58), and the CG&E QA Manual, Section i.3. This matter was discussed with the licensee on February 12 and 19, 1982, to ensure timely corrective action. (358/82-01-03f)

d. Review of inspector certification files revealed that the written certification of qualification did not reflect the specific activities individuals were certified to perform. The written certification was found to relate to several broad, general areas (such as civil, mechanical, electrical, etc.). The inspector noted that the CG&E Civil/Structural/Mechanical Lead Inspector was certified to ANSI N45.2.6-1978 as a Level II Mechanical Inspector. The certification of personnel into general disciplines rather than for specific activities does not appear to meet the intent of ANSI. This matter is unresolved pending clarification by the licensee and further inspection of the item. (358/82-01-07)

Section III

Prepared By: W. J. Key
Reviewed By: D. H. Danielson, Chief
Material and Processes Section

1. During the week of November 2-5, 1981, the inspector reviewed the following CG&E Quality Assurance and H. J. Kaiser Company Special Process Procedures.

   a. 10-QA-03, Revision 3, dated September 30, 1981, "Certification of Inspection Personnel"

   b. 10-QA-04, Revision 5, dated August 27, 1981, "Quality Control Inspections"

   c. 10-QA-04, Revision 3, dated July 2, 1981, "Certification of NDT Personnel"

   d. 05-QA-05, Revision 2, dated October 20, 1981, "Technical and Quality Review of Inspection Procedures"

   e. SPPM 3.2, Revision 4, dated August 28, 1981, "Welder Performance Qualification Testing"

   f. SPPM 3.3, Revision 9, dated September 2, 1981, "Welding Filler Materials Control Procedures"

   g. SPPM 3.4, Revision 3, "Ferrite Control of Austenitic Materials"

   h. SPPM 4.0, Revision 1, dated May 5, 1981, "Nondestructive Examination - General"

   i. SPPM 4.1, Revision 4, dated May 5, 1981, "Radiograph Examinations"

   j. SPPM 4.2, Revision 3, dated May 29, 1981, "Liquid Penetrant Examination"

   k. SPPM 4.3, Revision 2, dated May 21, 1981, "Ultrasonic Examination"

   l. SPPM 4.4, Revision 2, dated May 5, 1981, "Magnetic Particle Examination"

   m. SPPM 4.5, Revision 4, dated May 21, 1981, "NDE Personnel Qualifications"

   n. SPPM 4.6, Revision 9, dated April 14, 1981, "Visual Examination"

   No items of noncompliance or deviations were identified.

2. During the week of January 18-22, 1982, the inspector also reviewed the following areas:

a. Procedure Review

Kaiser was in the process of reviewing and revising the entire welding program and procedures, training, retraining, and qualification of welders. Starting January 25, 1982, welder qualification was placed on two ten-hour shifts.

The inspector reviewed the following revised welding procedures for conformance to the ASME Code, Section IX, requirements.

(1) WPS-3.1, Revision 4, "General Procedure"

(2) WPS-3.1.1, Revision 3, December 16, 1981, "Welding of Austenitic Stainless Steel Piping"

(3) WPS-3.1.6, Revision 4, December 16, 1981, "Welding of Austenitic Stainless Steel to Carbon Steel Piping"

(4) WPS-3.1.8, Revision 4, December 16, 1981, "Welding of Carbon Steel Piping"

(5) WPS-3.1.11, Revision 2, May 12, 1975, "Welding of Carbon Steel to Carbon Steel Structural Steel Shapes"

(6) WPS-3.1.19, Revision 2, December 15, 1981, "GTAW Welding of Carbon Steel Piping"

(7) WPS-3.1.21, Revision 2, November 30, 1981, "GTAW/SMAW Welding of Carbon Steel Piping"

(8) WPS-3.1.28, Revision 1, December 19, 1981, "SMAW Welding of Carbon Steel Piping"

(9) WPS-3.1.41, Revision 1, December 14, 1981, "Welding of Carbon Steel Piping"

(10) WPS-3.1.56, Revision 1, December 14, 1981, "Welding of Austenitic Stainless Steel Piping"

(11) WPS-3.1.62, Revision 1, December 28, 1981, "Welding of Small Diameter Piping"

(12) WPS-3.1.80, Revision 1, January 5, 1982, "Welding of A-588 Gr. A to Stainless Steel"

(13) SPPM-3.3, Revision 9, September 2, 1981, "Weld Filler Material Control"

No items of noncompliance or deviations were identified.

b. Inspector Certification/Qualification Record Review

Following NRC investigations the licensee and constructor have expanded their QA/QC inspection departments. Training and certification of all inspectors to meet the requirements of ANSI N45.2.6-1978and ASNT-TC-1A is in progress and the following personnel qualification records were reviewed:

(1) Cincinnati Gas and Electric Company

(a) G. Alter - Mechanical II, certified 9/24/81
(b) T. Branstetter - Mechanical II, certified 11/25/81
(c) W. Burton - Mechanical II, certified 8/19/81
(d) L. Caison - Mechanical II, certified 5/7/81
(e) G. Creager - PT II, certified 6/17/81
(f) J. Durham - Electrical II, cerfifeid 8/26/81
Mechanical II, certified 8/3/81
(g) J. Obermeyer - Mechanical II, certified 10/15/81
(h) M. Knowles - Electrical II, certified 10/9/81

(2) Kaiser Engineers, Inc.

(a) D. Rhoades - Anchor Bolt Inspector, certified 12/22/81
Visual Inspector II, certified 3/17/81
(b) M. Thompson - Mechanical II, Visual I
(c) R. Orlando - Visual II, certified 7/20/81
(d) R. Lafontoine - Visual II
(e) J. K. Booth - Visual II, certified 81/21/80
Weld II, certified 12/10/81
(f) M. Dipuccio - Visual Weld II, certified 3/5/81
(g) J. R. Wermelinger - Visual Weld II
(h) J. Craig - Visual II, certified 6/17/81
(i) D. Hang - Film Interpreter II, certified 9/11/81
(j) B. Ashenfelder - Visual II, certified 7/14/81
PT II, certified 7/16/81

No items of noncompliance or deviations were identified.

3. Observation of Activities

a. The inspector observed welder training and qualifications at KEI welder training school, examined fit-up, fusion of inserts and completed welds.

b. The inspector reviewed radiographs of weld CY-606 in line No. CY01B16PSK1CY37. This weld was originally radiographed and accepted following three repair cycles in 1976 and 1977. During a review of film the Level III questioned an area of this weld. The weld was re-radiographed on November 10, 1981, confirming concavity between location markers 13-26. The licensee is to determine a method of repairing this area.

No items of noncompliance or deviations were identified.

Section IV

Prepared By: K. D. Ward
Reviewed By: D. H. Danielson, Chief
Material and Processes Section

During the week of November 2-5, 1981, the inspector reviewed the following for compliance to the April 8, 1981, Immediate Action Letter:

1. Radiographs and reader sheets interpreted by the ANI, NES, and HJK representatives as appropriate were reviewed of the following field welds in accordance with ASME Section III, 1971 Edition, Summer 1973 Addenda.

			Interpreters		
Line No.	Weld	Date RT	ANI	NES	HJK
1SC01BB3	K-48	7/17/81	L. Burton	H. Reinhold	R. Baker
1HG47A21/2	K-285	6/22/81	L. Burton	H. Reinhold	R. Baker
1HG47A21/2	K-279	6/22/81	L. Burton	H. Reinhold	R. Baker
1MS07AC10	K-650	8/20/81	L. Burton	H. Reinhold	R. Baker
1WX82A4	K-323	6/01/81		H. Reinhold	R. Baker
1WX95A4	K-307	5/15/81	L. Burton	H. Reinhold	R. Baker
1FW01AB	K-55	5/12/81	L. Burton	H. Reinhold	R. Baker
1FW01AA	K-54	5/22/81	L. Burton	H. Reinhold	R. Baker
1WX82A4	K-348	9/14/81	L. Burton	H. Reinhold	R. Baker
1WX82A4	K-339	9/01/81	L. Burton	H. Reinhold	R. Baker
1RRB2AA3/4	A-3	9/17/81	L. Burton	H. Reinhold	R. Baker
1SC06B3	K-23	8/03/81	L. Burton	H. Reinhold	R. Baker
1SC01BB3	K-46	7/17/81	L. Burton	H. Reinhold	R. Baker
1MS08DA10	K-817	8/12/81	L. Burton	H. Reinhold	R. Baker
1MS08DD10	K-716	7/23/81		H. Reinhold	R. Baker
1MS10DA10	K-812	7/22/81	L. Burton	H. Reinhold	R. Baker
1HGH7A21/2	K-270	6/22/81	L. Burton	H. Reinhold	R. Baker
1SC06B3	K-37	8/03/81	L. Burton	H. Reinhold	R. Baker
1WX82A4	K-354	10/1/81		J. Nolting	R. Baker
1WX82A4	K-343	9/14/81	L. Burton	H. Reinhold	R. Baker
1WX82A4	K-326	6/01/81	L. Burton	H. Reinhold	R. Baker
1WX95A4	K-314	5/15/81	L. Burton	L. Remsnyder	R. Baker
1WX95A4	K-310	5/15/81	L. Burton	H. Reinhold	R. Baker
1HG47A21/2	K-267	6/22/81	L. Burton	H. Reinhold	R. Baker
1SC01BB3	K-49	7/17/81	L. Burton	H. Reinhold	R. Baker
1SC01BB3	K-47	7/17/81	L. Burton	H. Reinhold	R. Baker
1SC01BB3	K-45	7/17/81	L. Burton	H. Reinhold	R. Baker
1WX95A4	K-313	5/15/81		L. Remsnyder	R. Baker
1WX95A4	K-312	5/15/81	L. Burton	L. Reinhold	R. Baker

2. Radiographs and reader sheets were reviewed of the following shop welds in accordance with ASME Section III, 1971 Edition, Summer 1973 Addenda:

Piece No.	Seams
1-RF-20D3-1267	A, B
1-RF-20D3-1269	A, B, C, D
1-RF-20A21/2-1270	A, B, C, D
1-RF-20A21/2-1273	A, B, C
1-RE-40D3-1274	A, B,.D
1-RE-40D3-1276	A, B, C, D
1-RE-40A21/2-1277	A, B, C
1-RE-40A21/2-1278	A, B, C, D
1-RE-40A21/2-1280	A, B, C

3. NDE personnel certifications were reviewed in accordance with SNT-TC-1A, 1975 Edition, and KEI NDE Procedures 4.1, 4.2, 4.3, and 4.4 were found to be acceptable.

NES

Name	PT	MT	RT
H. Reinhold		I	
H. Holting	III	III	III
L. Remsnyder	II	I	II
D. Campbell	III	III	III

CG&E

Name	PT	MT	RT
R. Murphy	II	II	II

S&L (CG&E Level III Representative)

Name	UT	MT	RT	VT
R. Vannier	III	III	III	III

KEI

Name	PT	MT	RT	UT
R. Baker	III	III	III	III

No items of noncompliance or deviations were identified.

Section V

Prepared By: E. R. Schweibinz
Reviewed By: D. R. Hunter, Chief
Reactor Projects Section 2B

1. Certification of Qualification Records

On February 9 and 10, 1982, additional certification of qualification records were reviewed for the individuals in the following positions based on ANSI N45.2.6-1978 and Regulatory Guide 1.58, September 1980, Revision 1:

Manager, Quality Assurance Division
Director, Quality Confirmation Division
Engineer, Design Document Changes, Quality Confirmation Division
Acting Director, Quality Control Division
Engineer, Design and Engineering Documentation, Quality Documentation Division

The following discrepancies were noted:

a. Manager, Quality Assurance Division (See Section I)

(1) No date of certification expiration

(2) Inadequate basis for certification (no detailed records of education, experience and training)

b. Director, Quality Confirmation Program (See Section I)

(1) No certification of qualification

c. Engineer, Design Document Changes, Quality Confirmation Program

(1) No certification of qualification

d. Acting Director, Quality Control Division

(1) No date of certification expiration on certificates issued on July 23, 1980 and December 1, 1980

(2) Certification as a Level III for Civil/Structural and Hanger by R. P. Ehas on April 15, 1981, but no record was available to indicate that Mr. Ehas had been assigned the authority to make the certification

e. R. P. Ehas - Engineer, Design and Engineering Documentation, Quality Documentation Division

(1) Certified as Level III Electrical on July 23, 1980, but no date of certification expiration provided

Failure of CG&E to provide certification of qualification with expiration dates and adequate records of the qualifications prior to performance of duties is contrary to Criterion II of Appendix B to 10 CFR 50, ANSI N45.2-1971, ANSI N45.2.6-1978 (Regulatory Guide 1.58), and the CG&E QA Manual, Section i.3. These matters were discussed with the licensee on February 12 and 19, 1982, to ensure timely corrective actions. (358/82-01-3g)

2. The Evaluation and Qualification of QAD Personnel, Procedure No. 02-QA-04, Revision 0, approved on February 8, 1982, was reviewed for adequacy and conformance with the standards referenced in Paragraph 1 above. The following discrepancies were noted:

a. Paragraph 4.0 did not reference Regulatory Guide 1.58;

b. Paragraph 6.3.3.2 stated in part, "Decide upon the job functions to be accomplished along with the appropriate level and authority. Enter this information on the form" and no defined section of the form is provided to enter the job funtions or activities certified to perform;

c. Paragraph 6.5.5.1 needs to be re-written, deleting the words "Fifty percent of" to clarify how college level work in a related discipline may be used to satisfy part of the minimum work experience requirement, and also to define "minimum work experience;"

d. Paragraph 6.5.5.2 states in part, "Six years of related work experience is considered equivalent to a high school diploma." This sentence needs to be re-written to clarify that six years of related work experience may be considered equivalent to a high school diploma with an appropriate written evaluation; and

e. Attachment 7.3, Job Classification Matrix, the column heading "ANSI Certification" for the first seven positions, QA Manager through Jr. Q.E., the words "Not Req." does not appear appropriate.

These matters were discussed with the licensee on February 12, 1982, and are considered unresolved pending further inspection. (358/82-01-08)

Section VI

Prepared By: J. J. Harrison
Reviewed By: D. R. Hunter, Chief
Reactor Projects Section 2B

During this inspection on January 25-28, 1982, the inspector reviewed the training and qualification of certain licensee Quality Assurance personnel, the Quality Confirmation Program Procedures and other related procedures, and the implementation of the Quality Assurance Program. This also included reviewing selected socket weld radiographs.

1. Training, Training Records and Personnel Certifications

The inspector reviewed the documentation for training and certification of selected licensee Quality Assurance Department personnel. The records for twelve individuals were requested and reviewed with numerous deficiencies noted as follows:

a. The training and certification records were stored in numerous locations including the QA office. Record retrieval was very difficult as evidenced by the fact that a complete file could be located for only one individual in four days. ANSI N45.2.9, Section 5, requires records storage and retrieval. It was also noted, that file folders were being withdrawn for processing and use and were not being controlled (checked out). This complicated the locating these records.

b. Records not being readily available was also due to confusion as to what records were required in each personnel file folder. A listing of required records for each file to meet ANSI N.45.2.9, Section 4, could have assisted in preventing this problem. Some file folders contained a single record or a combination of records such as a resume, reading records, physical/eye exams, and record of certification. Only one folder of the twelve selected contained the necessary documents.

c. The review of the Master Training Record Books, to determine training status, did not show status or training for Confirmation Program Procedures 19-QA-02 or 19-QA-14.

d. Training records were reviewed for contents and found to be inadequate. Some records were not dated and some did not contain procedure revisions, title or procedure number. One record only listed date and signature and did not list what training was actually received.

e. Personnel in positions between the Quality Assurance Manager and actual inspector level (Level I) were not formally certified. The positions of Quality Engineering Manager, Lead Quality Engineer, and Task Coordinators, for example, were not certified as required by ANSI N45.2.6. This appeared to be a misunderstanding of the requirements of the ANSI Standard. ANSI N45.2.6 requires functions

to be performed by certified personnel including planning, evaluating, supervising, qualifying and reviewing program adequacy; and these are in addition and support of direct inspection activities (See Sections I and V of this report)

f. CG&E failed to follow the recommendations of IE Circular No. 80-22, "Confirmation of Employee Qualifications." The QA Department issued a letter to each firm supplying consultants, but did not address this issue in an Administrative Procedure and did not actually verify the resume. This does not meet the intent of IE Circular No. 80-22.

g. CG&E Procedure 02-QA-1, Revision 4, states "Supervisors are responsible for assuring personnel are properly qualified, indoctrinated, trained, and certified when required..." This requirement was not being complied with as was evidenced by the fact records were not retrievable and available to the supervisors.

h. The CG&E Quality Assurance Manager certified himself Level III. This is contrary to good quality practices and does meet the intent of ANSI N45.2.6-1978 (See Section I of this Report)

i. In addition to the CG&E QA personnel, the inspectors briefly reviewed selected qualification and training records for H. J. Kaiser Company. The records review also revealed some minor deficiencies: (1) files were not up-to-date (2) qualifications were based on resume review, but was not documented. HJK, however, had verified the backgrounds of employees as requested by IE Circular No. 80-22. ANSI N45.2.9 and Criterion XVII of Appendix B to 10 CFR 50 address record storage and retrieval.

These matters are considered unresolved pending further review at a subsequent inspection. (358/82-01-09)

2. Procedure Review

During this inspection the procedures relating to the Quality Confirmation Program were reviewed and found to be deficient as follows:

a. 10-QA-03, Revision 3, "Certification of Inspection Personnel"

(1) Section 6.3.5 states "...reduces experience levels requirement by fifty percent (50%)...and...that six years work experience is equal to a High School Diploma." These requirements are considered to be too lax and has considerably reduced the ANSI N45.2.6-1978 and Regulatory Guide 1.58 requirements. If the number (factors) were acceptable without some restrictions or additional controls the potential for misuse of this exception is great. Also the statement "College level work may be used to satisfy the experience requirements...on a one for one basis" is another example of the misuse of the requirements and the bypassing of ANSI N45.2.6-1978. This statement appears

to be unacceptable. The combination of 50% reduction of required experience and the use of college level work for experience has potential to place an individual with little experience in a key position without properly meeting actual requirements. These exceptions were reviewed with the NRR QA Branch and appeared to be outside the scope and intent of R.G. 1.58 and ANSI N45.2.6-1978.

(2) Section 5.2.E states "Supervisor QC Inspectors shall maintain certification records and support documentation." This responsibility should be placed with the "Training Coordinator" to eliminate the confusion concerning records maintenance and storage.

b. 19-QA-02, Revision 2, "Quality Confirmation of Small Bore Piping Socket Weld Engagement"

(1) The procedure does not address the 100 percent review of small bore sockets per the Quality Confirmation Program. Item IV, 2.; although the CG&E intent is to review 100 percent of the sockets.

(2) The procedure references nor steps include 15-QA-01, Control of NR's.

(3) Section 6.1.3 references Attachment 7.3 as being "...correctly completed..." when in fact this attachment is not "correct" in that dates for each inspection attribute were not included.

(4) Section 6.1.8 is vague as to how the radiographer will know what to radiograph. CG&E agreed that a reference to the "attached ISK" was needed.

(5) Section 6.1.6.1 does not provide for adequate control to assure that all existing welds are included. With the ISK not being controlled, assurance that field modifications (DDCs), cutouts, deletions, and additions are included is not provided. Also assurance was not provided to ensure that the latest/correct revision of the ISK was being utilized.

(6) Section 6.3.1, "Radiographic Acceptance Criteria," does include criteria for engagement and other possible weld or base material defects. Also the criteria for disengagement only addresses the minimum, "no metal to metal" and no maximum limit. The criteria for engagement should encompass this requirement also.

c. 19-QA-14, Revision 0, "Quality Confirmation of Weld Rod Heat Numbers on ASME Code Welds"

(1) The procedure addresses only deletions or omitted data and does not provide for verifying the validity of data or errors. This should be defined in the "Purpose" or "Scope"

Sections 1.0 or 2.0. This is confused further in Section 6.3 since errors are addressed, but omitted data is not denoted as a criteria.

(2) Section 6.5.1 references use of a "...work package..." consisting of "...Drawings, ISK, DDC...." The current practice does not provide for controlled documents or assurance that the latest/correct revisions or all DDC's are being utilized. Also, the procedure steps do not assure the "Work Package" contains all the required documents to perform the required inspections.

(3) The procedure or checklist did not include a provision for verifying the inspection date sequence to assure an activity was inspected in the same sequence in which it was performed. Also the checklist does not include provisions for verifying drawing revisions, base material grade, hold points missed, initials/signature, and/or dates.

(4) Sections 4.0, 6.5.3, and 6.5.4 do not reference what procedure will control NR preparation and issuance (Procedure 15-QA-01, "Control of NRs").

d. 19-QA-03, Revision 0, "Quality Confirmation of Large Bore Piping Traceability"

(1) Section 1 does not address 100 percent or all field modifications per QCP Item III.4 although 100 percent piping traceability is the intent.

(2) Section 3.4/3.5 does not adequately define "easy access."

(3) Section 5.0(e) does not adequately define "Vault Documentation," to include the "latest/correct controlled revision."

(4) Section 6.2.1 references list "A" and list "B" as Attachments 7.1 and 7.2; and, these attachments are missing from this procedure.

(5) Sections 6.2.1.1, 6.2.2, 6.2.3, and 6.3.1 do not provide controls to assure controlled documents (correct/latest revisions) of PSK, KE-1, KE-1A, DDC are being utilized. The controls do not identify what constitutes a complete package content.

(6) Section 6.4 does not provide a requirement to verify the validity of heat numbers to assure the number is an actual heat number traceable to the Certified Material Test Report.

e. 19-QA-12, Revision 0, "Heat Number Traceability for Small Bore Piping"

(1) Sections 3.5 and 3.6 do not adequately define "easy to get at."

(2) Section 6.1.3 stated "QAE/Inspectors shall be qualified to this procedure." The actual practice being utilized was to train to this procedure, not to "qualify" to the procedure.

(3) Section 6.2 states "picking out" which appears to be for sampling and is not the practice. This statement needs to be clarified.

(4) Section 2.0 addresses "small bore piping..." and as defined to the inspector, this means "pipe" only. The intent of the Quality Confirmation Program was to use the definition of a "Piping System" and a "Component" as stated in the ASME Code. This procedure scope requires modification to include pipe, fittings, valves, pumps, pressure vessels, tanks, attachments, etc.

(5) Section 6.2.2 stated a lot size of 35,000 which may have been a conservative estimate; but the scope increase related to the previous comment (4) would require revision to this number. The use of a sampling plan will require prior NRC approval for the 95/95 basis and the actual plan. This section does not complete the sampling cycle should the reject number be exceeded and the next step is not addressed. Additionally, the rejects less than the minimum number (less than 14) are not included as a procedural requirement for identification and disposition (NR).

(6) Sections 6.2.4 and 6.3 do not include assurance that the ISKs, drawings, and DDCs are the correct/latest revision or provide provisions as to what constitutes a complete package.

(7) Section 6.2.2(E) references Attachment 7.1. This attachment was not included in the procedure.

(8) Section 6.4 does not include a requirement to assure that heat numbers are valid and traceable to a Certified Material Test Report.

These items are considered open and will be reviewed further at a future inspection. (358/82-01-10)

f. General Comments

(1) Inspections were being conducted by CG&E to procedures involving ASME Code activities. The procedures failed to address or include interfaces with the "N" stamp holder (H.J. Kaiser) and ANI (Authorized Nuclear Inspector). The scope of these activities, for an example, include verifying socket weld fit-ups, heat number traceability and welding and nondestructive examination processes. The acceptance or rejection of an attribute which directly affects the "N" stamp holder's program and procedural interface needs to be provided. The "N" Stamp holder needs review/approval of CG&E procedures and may have to

revise the HJK QA program (ASME) to include the Quality Confirmation Program (QCP) activities. Also the ANI needs to be included in the review and Hold Point Section.

(2) QCP procedure interfaces were not well defined. An improvement in the interface points, both within the task and outside the task, would provide enhanced implementation of the QCP.

(3) Procedure 10-QA-03 stated that only qualified personnel were to be utilized; but it was not clearly evident this requirement was being complied with in the QCP.

(4) The following QCP elements were not included in QCP procedures:

(a) Task II, Items 4 and 5, appear to only address AWS welding and not ASME welding. The intent of this task is to include all the activities for ASME and AWS welding. This requirement should be addressed clearly in Procedure 19-QA-14.

(b) Task VII, Items 2, 3 and 6, were not addressed in current available procedures. Also Item 6, per CG&E existing procedure, needs to address the proper disposition for ongoing activities, including identification of the problem, correction of the problem, determination of the cause, and preventing a recurrence.

These items are considered open and will be reviewed further at a subsequent inspection CG&E stated that some procedures were still in the preparation and approval stages. (358/82-01-11)

g. Quality Program Implementation

The implementation of the program was verified through observation of activities and record reviews. Some problems were denoted as follows:

(1) The records being prepared as a result of inspection activities to Procedure 19-QA-02, "Quality Confirmation of Small Bore Piping Socket Weld Engagement," were noted to contain the inspector's printed name in lieu of applying his signature as evidence of acceptance/rejection. An example of this discrepancy was on records for ISK CM5. The inspector reviewed approximately twenty other records with this same problem.

(2) Radiographic film being generated as required by Procedure 19-QA-02 was being stored in desk drawers and filing cabinets in field office trailers. This is a poor storage practice and the environment, even though temporary, contributes to the deterioration of the film. Also, numerous pieces were noted to have been improperly handled as evidenced by finger prints

and this condition also contributes to deterioration and a shortened film storage life. This is another example of poor record storage practices (See Item 1i).

(3) Nonconformance Reports were not being properly dispositioned in accordance with Procedure 15-QA-01, "Control of NRs Corrective Action." The action to prevent recurrence was addressed as follows:

NR Number	Corrective Action Statement
CG&E Q-QAP-81-328E	"None-Welder no longer employed here"
CG&E Q-QAP-81-329E	"None-Welder no longer employed here"
HJK E-3884	"N/A"
HJK E-3821	"N/A"
HJK E-3867	"Craftsmen have been instructed as to the requirements of the FCP-2-128"

The use of "N/A" or "None" is questionable and does not appear to meet requirements of Criterion XVI of Appendix B to 10 CFR 50. Action to prevent recurrence appears necessary. Additionally, the "cause" stated on HJK NR No. E-3884 is listed as "S&L supplied the wrong valve" and is considered questionable.

(4) The following radiographs of socket weld engagement were randomly selected and reviewed as follows (the licensee had previously reviewed these radiographs):

Weld No.	Radiographic No.	*Status/Comment
A-1	0147	Reject-3/8" Gap
A-1	0057	Reject-1/4" Gap
C-11	0029	Reject-Metal to Metal
B-2	0003	Reject-Metal to Metal
A-3	0084	Reject-Metal to Metal
E-1	0060	Reject-Metal to Metal
C-9	0027	Reject-Metal to Metal
C-10	0028	Reject-Metal to Metal
B-7	0073	Accept
B-2	0086	Accept
A-1	0108	Accept
A-4	0080	Accept
A-9	0079	Accept
B-4	0097	Accept
A-8	0100	Accept
A-10	0076	Accept

No apparent problem with the licensee acceptance/rejection of radiographs reviewed to present acceptance criteria was noted. After the acceptance criteria in Procedure 19-QA-02 is revised

(see previous comment b.(2).(f)) radiographs should be re-reviewed to assure the status and revised acceptance criteria are consonant.

These items were discussed with the licensee and are considered unresolved pending further review at a future inspection. (358/82-01-12)

Section VII

Prepared By: J. F. Schapker
Reviewed By: D. H. Danielson, Chief
Material and Special Processes Section

1. During the week of November 2-5, 1981, the inspector reviewed the CG&E overview program for welding of ASME piping to determine adequacy of coverage and implementation of procedural requirements. To ascertain the coverage was 100% complete, the inspector selected a random sample of weld records (KE1 forms) from the CG&E and Kaiser record files. The weld records were reviewed for identification of CG&E, Kaiser, or NES inspectors; recording of required data, such as weld procedure, drawings, heat numbers or mark numbers, and weld rod identification; and completion of required inspections and nondestructive examinations. The Kaiser duplicate weld record form was compared for completion of the appropriate data. No deficiencies were observed in the sample taken.

   In addition, the inspector selected a random sample of KE1 forms to verify documented visual examination, final accepted welds acceptable to the applicable Code requirements, and heat numbers or mark numbers recorded on the KE1 forms as identified on the material. From the sample listed below the inspector found no rejectable indications on visual examinations which had been verified by CG&E inspectors, or erroneous heat or mark numbers recorded on the KE1 forms.

   1. KE1s Reviewed for Overview by CG&E Inspectors

System	PSK No.	Weld No.	K Inspector	CG&E Inspector	Class
RCIC	1RI-8	RIK-51	106	R. Wilson	B
RCIC (lug)	RI-8	K-127-A	106	R. Wilson	B
RCIC	RI-8	K-127-B	106	R. Wilson	B
RCIC	RI-8	K-127-C	106	R. Wilson	B
RCIC	RI-8	K-127-D	106	R. Wilson	B
RCIC	RI-8	K-128-A-B-C-D	106	R. Wilson	B
MS	MS-33	K-64?	62-75	F. Rivera	C
CCW	IWR-83	K-2027	85	W. Burton	C
MS	24A	K1081A	106	R. Wilson	C
MS	24A	K1153A	106	R. Wilson	
				F. Rivera	C
SLCS	1SC-1	K-38	62	R. Powers	
				R. Powers	B
SLCS	LSC-1	K-39	8-75	P. Moore	B
CCW	1WR-32	K-2009	106	L. Remsnyder	C
CCW	WR-33	K-2010	85	W. Burton	
				L. Victory	C
CCW	WR-33	REW-WR-005	70-85	W. Burton	
				K. Moore (PT)	C
SLCS	SC-1	SC-K-55	62-75	C. Rivera	
				P. Blackburn	B
RHR	11R-16	K175A-B-C-D	106	R. Wilson	B

System	PSK No.	Weld No.	K Inspector	CG&E Inspector	Class
RHR	RA-4	K-339	137	P. Moore	
				L. Victory(PT)	B
MS	MS22A	K-818	106-94	L. Remsnyder	C
MS	26A	K-672	94-50	G. Creager	
				M. Indino	C
MS	MS-34	K-616	50	A. Indino	
				F. Rush	C
RCIC	1R1-9	K-53	85-62-75	P. Blackburn	
				R. Page	A
MS	MS-26A	K-6-76	73-94-75	W. Burton	C
SLCS	1SC-1	K-34	6275	P. Moore	
				L. Remsnyder	B
SLCS	1SC-1	K-33	62-137-75	R. Murphy	
				J. Obermeyer	B
SLCS	1SC-1	35	62-137-75	R. Murphy	
				J. Obermeyer	B
RCIC	RI-9	K-202	70-75	F. Rush	A

2. KEIs from Kaisers Files Reviewed for Overview Coverage by CG&E

KEI Form No.	Weld No.	PSK Drawing No.
8504	K241	DG-24
8503	K240	DG-24
13254	805	1MS-37
30T9	TWE-WR-101	WR-64
3978	487	WS-43
3767	K-12	SC-1
7358	K2023	WR64
1A-3060	TWE-WR-176	WR31
3004	TWE-WR-048	WR33
17888	K2025	WR79
1A-3027	TWE-WR-078	WR79
17889	K-965	WR-52

Welds observed for compliance to visual examination requirements, and verification of heat/mark numbers:

Weld No.	Iso. Drawing	ASME Code Class	System
K-113A	PSK-1LP-2	II	L. P. Core Spray
K-113B	PSK-1LP-2	II	L. P. Core Spray
K-113C	PSK-1LP-2	II	L. P. Core Spray
K-113D	PSK-1LP-2	II	L. P. Core Spray
RI-K-51	PSK-1RI-8	II	RCIC
K-33	PSK-1SC-1	II	SLCS
K-34	PSK-1SC-1	II	SLCS
RIK-53	PSK-1RI-9	I	RCIC
K 672	MS-26A	III	MSR
K 202	PSK-1RI-9	I	RCIC
K-1081A	PSK-1M8-24A	III	MSR
TEW-WR-005	PSK-WR-33	III	CCW

Section VIII

Prepared By: D. E. Keating
Reviewed By: D. H. Danielson, Chief
Material and Special Processes Section

1. Review of Personnel Qualification Records

On January 25-28, 1982, the inspector reviewed the qualification records for the individuals assigned to the following positions (See Sections I and II of this Report):

a. Task Coordinators

The records of two QCP Task Coordinators were reviewed. The file of one Task Coordinator left a question as to certification as a Level II inspector. There was a lack of sufficient evidence by the licensee regarding training and appropriate certification to the general requirements of ANSI 45.2.6-1978, QCP Procedures 19-QA-04, Revision 0; 19-QA-06, Revision 1; 19-QA-07, Revision 1; 19-QA-08, Revision 1; and applicable sections of AWS D1.1-1972.

Interviews were conducted with both Coordinators. Based upon these interviews, both Task Coordinators appeared to possess the needed qualifications and experience to be certified as Level II in inspection and examination. However, because of lack of adequate records to support this, a final determination could not be made.

b. Task I Quality Assurance Engineer

The records of one Quality Assurance Engineer in the Task I Structural area were not readily available. When eventually presented, no evidence of training and appropriate certification to the specific procedures and applicable codes mentioned in Part 1.a. was available. An interview was conducted with the Quality Assurance Engineer.

Based upon this interview, the QAE appeared to possess the qualification to be certified as Level II in inspection and examination. However, because of lack of adequate documentation to support this, a final determination could not be made.

c. Task I Inspectors

A review of personnel qualification records for the Structural Task I Inspectors indicated the experience of two inspectors did not appear to be sufficient for Level II requirements for inspection and examination. Also, there was no clear documentation regarding training to the developed QCP procedures and applicable codes enumerated in Part 1.a.

An interview was conducted with the two inspectors. Based upon this interview, the inspectors appeared to possess the knowledge level necessary to be certified as Level II in inspection and examination. However, because of the lack of objective evidence to support this, a final determination could not be made.

Interviews with the licensee indicated that training records and complete personnel qualification did exist, although they were not, at this time, readily available.

The failure of CG&E to provide personnel certification of qualifications prior to performance of quality activities is contrary to Criterion II of Appendix B to 10 CFR 50, ANSI N45.2-1971, ANSI N45.2.6-1978 (Regulatory Guide 1.58), and the CG&E QA Manual, Section i.3. These items were discussed with the licensee on February 12 and 19, 1982, to ensure timely corrective actions. (358/82-01-03h)

2. Review of In-Process and Dispositioned Nonconformance Reports

a. In-Process Nonconformance Reports

A review of in-process nonconformance reports (NRs) was conducted. The following reports from the Drywell area were selected at random for field review of identified nonconforming conditions:

(1) Q-QAD-81-220E: EL. 535' - 11 1/2", Az 0° - 40°
Dwg. S-636B/398B. Beam 60 to 50 and 60 to 63
Detail 19C, 38B2 (W8x17)

Nonconforming Conditions: Undersize weld, excessive undercut, improper weld profile, excessive spatter, and improper re-entrant corners.

(2) Q-QAD-81-17E: EL 535' - 0", Az 285° (8' - 0" West)
Dwg. S-636/398B. Beam 2E to 14 and 15. Typical framing detail. Dwg. S-446.

Nonconforming conditions: Excessive undercut, overlap, arc strikes, and undersize welds.

(3) Q-QAD-81-19E: EL 535' - 11 1/2"
Dwg. S-636B/398B. Beam 101 to 106 and 99.
Typical framing detail S-446.

Nonconforming conditions: Excessive undercut, lack of fusion, and slag inclusion.

(4) Q-QAD-82-253E: EL 551' - 0"
Dwg. S-636D/S-403. Beam 50 to 49 and 51.

Nonconforming condition: Improper re-entrant corners.

A field examination of these NR's by the inspector revealed that the identified conditions did fail to meet the acceptance criteria of AWS D1.1-1972 and were correctly identified as nonconforming.

b. Dispositioned Nonconformance Reports

Several dispositioned NRs were reviewed and the work performed appeared to be within AWS requirements.

3. On February 11 and 12, 1982, the inspector reviewed the qualification records of two Task Coordinators, one Task I Structural Quality Assurance Engineer, and two Task I Structural Inspectors. During the inspection period of January 25-28, 1982, questions had been raised concerning the certification of these individuals as Level II inspectors in inspection and examinations (See Sections I and II of this Report).

During this review these records appeared to be adequate. All individual files were available and complete with resumes, training records, and certification to Level II inspection. Copies of typical tests were reviewed for content and level of difficulty. The tests reviewed appeared to be adequate for the Level II certifications. This matter will remain unresolved pending final assembly of the Task Coordinator's records for qualification and inspection of this item. (358/82-01-13)

4. Acceptance Criteria for Dispositioned QCP NRs

Acceptance criteria for dispositioning Nonconformance Reports generated under the QCP Task I - Structural effort remains to be clarified within the framework of the AWS D1.1-1972 Welding Code, and AISC Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings, 7th Edition. The licensee stated that the AWS is being contacted in an attempt to obtain a code interpretation regarding maximum and minimum parameters for weld discontinuities. The licensee recognized that these items need to be addressed at the outset before any remedial or continuing work is performed within the area of the Quality Confirmation Program or areas that will interface with this program to assure that the work as performed meets the requirements outlined in the foregoing Codes and Specifications. This matter is considered an unresolved item and will be pursued further during a subsequent inspection. (358/82-01-14)