

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

ZIMMER MONTHLY
STATUS REPORT

July 1982

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A. Summary of the Project for the Month

Region III inspection efforts at the Zimmer facility during the month of July were concentrated on the intimidation and harassment concern, a review of the status of welder qualifications, and the routine monitoring and inspection of ongoing activities.

The Regional Administrator visited the Zimmer site and presented a prepared statement to approximately 600 construction personnel including Quality Assurance Department personnel, union stewards, and construction supervisors on Tuesday, June 29, 1982. A copy is attached. The message of this presentation was that we cannot and will not tolerate incidents of intimidation or harassment as have occurred at the Zimmer site in the past. This was followed up by an informal inquiry by two NRC teams (each consisting of one investigator and one inspector) interviewing approximately 50 randomly selected QA/QC personnel onsite. The inquiry did not disclose problems of intimidation or harassment, however, this inquiry will be followed by an investigation of this matter.

The licensee's review of welder qualifications resulted in the discovery of inadequate documentation to support the qualifications of about 100 onsite welders. Following discussions between the licensee and NRC, the licensee is requalifying the welders and establishing a program for evaluating the past work performed by the welders as appropriate. Region III has required the licensee to have qualified observers present to monitor Kaiser's requalification program.

Meetings were conducted with the licensee on July 9, 1982, regarding the status of welder qualifications; and on July 15, 1982, regarding the documentation of welder qualifications.

Mr. R. F. Warnick testified before the Public Utilities Commission of Ohio (PUCO) on July 14, 1982, in Columbus, Ohio. The testimony was requested by the PUCO and was given at a hearing on a rate increase proposed by the Columbus and Southern Ohio Electric Company, a part-owner of the Zimmer plant. Testimony was in response to questions regarding the Zimmer investigation, Quality Confirmation Program, and QA.

No meetings were conducted with outside groups during July 1982 by RIII regarding Zimmer.

The Region processed three FOIA requests during June and July of 1982.

The licensee reported by telephone on July 9, 1982, in accordance with 10 CFR 50.55(e), that reactor control panels, reactor protection panels, and neutron monitoring panels supplied by General Electric do not conform to design drawings with regard to cable separation. The inadequacy also involves field installed wiring. On July 27, 1982, the licensee verbally reported that the control rod drive system hydraulic control units (HCU), were not adequately qualified for the total loading as a result of unit weight, hydraulic, nozzle, and seismic loads.

The National Board of Boiler and Pressure Vessel Inspectors is continuing inspection efforts onsite. The National Board issued an interim investigation report on May 12, 1982. The licensee has not yet responded to that report. A second interim report is being documented by the National Board and will be discussed together with CG&E's response to the first interim report at a meeting on August 10, 1982. RIII will be represented at the meeting.

Region III is still evaluating the licensee's responses to the investigation report 81-13 and civil penalty; however, little progress was made during the month because of vacations and higher priority work.

No additional independent measurements have been conducted at Zimmer during the past month by RIII. Likewise, no decision has been made regarding the possible future actions discussed with the Commission by RIII on June 7, 1982 including independent third party inspections, consultants, and INPO/PAS appraisals.

The continuation of the Phase II Investigation and the investigation of the H. J. Kaiser investigation report (7/81) is presently stymied due to the shortage of investigators and the need to pursue higher priority issues. These investigations will be continued as manpower and events permit. Plant tours by the resident inspectors have revealed that the plant cleanliness and graffiti removal and prevention are being addressed by the licensee.

On July 16, 1982, Region III Administrator received a letter from the Government Accountability Project (GAP), dated July 15, 1982, which included allegations in two areas, welder qualification and nonconformance reports (NRs). The information included in the GAP letter is being included as part of the ongoing investigation at Zimmer and the findings will be documented as appropriate.

Inspection reports completed and dispatched during June and July 1982 included:

50-358/82-01 - A November 1981 - February 1982 special, announced inspection of personnel qualifications and training and followup on the Quality Confirmation Program. Three items of noncompliance concerning assignment of responsibilities and authorities, certification of qualification, and adequate procedures were identified.

50-358/82-05 - A routine resident inspection report for March - April 1982. Two items of noncompliance concerning corrective action timeliness and evaluations of identified problems were identified.

B. Zimmer Section Manpower Availability and Utilization

1. Assigned Manpower

Section Chief (Assigned to Zimmer full time. Onsite part-time.)

Project Manager (Assigned to Zimmer full-time. Onsite as needed.)

Resident Inspectors

Senior Resident (Full-time onsite)
Resident Inspector (Full-time onsite)
Resident Inspector (Assigned June 27, 1982. Full-time onsite
as of August 9, 1982)

Investigators

On June 7, 1982, when RIII met with the Commission to brief them on the status of the Zimmer investigation, Chairman Palladino instructed the Region to assign a second investigator to the case. At that time we had one investigator assigned full time to Zimmer. Since then we have not only been unable to assign a second investigator, but the one assigned has been designated the acting supervisor for the Office of Investigations in RIII and his involvement in Zimmer has been restricted.

Based on receipt of new high visibility allegations, RIII requested of the Office of Investigations (OI) three additional investigators to assist the one assigned. OI acknowledges the need for additional investigation help; however, as of the end of July, investigators had not been provided to start onsite investigation work. (Subsequently, two investigators have been dispatched to the site to investigate issues related to welder qualifications.)

The lack of investigators has been the single most limiting factor in the progress of this investigation to date.

2. Summary of Manpower Utilization

Onsite and in office professional effort from January 3, 1982 through July 3, 1982 was approximately 5,047 manhours, with 1,201 of these manhours occurring between May 30, and July 3, 1982.

During the month of July, most of the manpower resources assigned to the Zimmer investigation were applied to the questions of (1) intimidation and harassment of QC inspectors and (2) welder qualifications.

C. High Visibility Issues

1. Automobile Accident Death of QC Inspector

A quality control inspector, employed by H. J. Kaiser, was killed on June 1, 1982, in a two-car collision.

Effort by Licensee

The licensee followed the review of the accident by the responsible law enforcement officials.

NRC Effort/Actions

The NRC reviewed the circumstances associated with the individual's position and work assignments onsite and the departure of the individual from the site at 3:45 a.m. on June 1, 1982.

The NRC monitored the review of the collision by the responsible officials, including the state and local agencies.

The NRC has reviewed the accident report and other information provided by the appropriate agencies. The NRC actions will be documented as an investigation report item.

Findings to Date

The Ohio State Police found that the two-car collision was accidental.

Region III has made no findings which conflict with the findings of the state and local law enforcement agencies.

2. Intimidation and Harassment of QA/QC Inspectors

Three Quality Assurance personnel were doused with water on May 27, 1982, in the reactor building.

Effort by Licensee

Following the incident the licensee ceased construction activities the afternoon of May 28, 1982, and personnel continuing to work onsite were required to sign a statement acknowledging their understanding of the Federal regulations regarding protection of nuclear inspectors.

Interviews of associated crafts and quality assurance personnel were conducted.

The licensee retained a private investigator to investigate the water dousing incident. The investigation is continuing.

NRC Effort/Action

Region III met with appropriate on-site CG&E and HJK management personnel on May 28, 1982. Interviews and discussions were conducted by the Senior Resident Inspector onsite.

Region III closely monitored the efforts of the private investigator, including attending some interviews and accompanying the investigator during some field work.

A meeting was held with the Department of Justice in Cincinnati on June 28, 1982, to discuss the investigation status.

In the face of continuing rumors that incidents of harassment and intimidation were still occurring at the site, the Regional Administrator traveled to the site and presented a prepared statement to about 600 selected construction personnel, including Quality Assurance and Quality Control personnel, union stewards, and construction supervisors on June 29, 1982. The message of this presentation was that we cannot and will not tolerate incidents of intimidation or harassment as have occurred at Zimmer in the past.

On June 30 through July 2, 1982, the Region, during an informal inquiry, interviewed approximately 50 Quality Assurance/Quality Control personnel regarding intimidation and harassment.

Findings to Date

The NRC informal inquiry of intimidation and harassment is being followed by an investigation of the matter by OI.

Preliminary conclusions from the informal inquiry at this time are that intimidation and harassment do not appear to be a problem; however, the interviews with the QA/QC personnel indicated problems in two other areas - welder qualifications and procurement activities (Approved Vendor's List).

3. H. J. Kaiser (HJK) Internal Investigation Report

Region III anonymously received a copy of a report of a HJK investigation conducted at Zimmer. The NRC is investigating to determine the safety significance of the matters described in the investigation report and whether or not NRC reporting requirements were met.

Effort by Licensee

The licensee is conducting a review of the report.

NRC Effort/Action

The NRC investigation into the HJK investigation report and its significance has been temporarily delayed. Due to the transfer of the Zimmer investigation activity responsibility to the Office of Investigation recently, the limited manpower, and more pressing issues, no completion date for the investigation has been established at this time.

Findings to Date

The findings will be discussed after the investigation is complete.

4. Review of Welder Qualifications

The qualifications of welders presently onsite and all welders who have worked at Zimmer are being reviewed.

Effort by Licensee

As a part of the QCP and HJK document verification program, a document review task force, consisting of nine H. J. Kaiser and one CG&E full time individuals, is continuing to retrieve and review welder qualification documentation.

To date the review of about 1000 welders qualification records has been completed. Of those reviewed 446 welders are presently onsite. Over 4600 records for about 2150 welders will be reviewed. The licensee has generated approximately 385 nonconformance reports (NR's) and 26 corrective action reports (CAR's) on welders qualifications.

NRC Effort/Action

Current review of onsite welders is viewed as a priority item by the NRC. Review of ten selected welders' qualifications was performed by Region III. Concerns were identified in 5 out of 10 of the qualifications reviewed. Region III required the licensee to commit to requalify all welders as appropriate whose records were questioned either by the NRC or the licensee (approximately 100 welders). The resident inspectors are monitoring the licensee reviews. The NR's and CAR's are being reviewed by the NRC inspectors.

Past welders' qualifications (welders onsite prior to April 8, 1981) are receiving minimal NRC attention at this time. These welders will be reviewed as part of Task II of the QCP.

Findings to Date

The licensee and the NRC have identified problems in the documentation of welder qualifications. Although the licensee believes all welders are qualified, they have agreed (at NRC's insistence) to requalify approximately 103 welders whose qualifications are being questioned. Nonconforming conditions identified concerning welder qualifications included lack of test data, inconsistent records, and inadequate record retention.

Three construction deficiency reports have been identified by the licensee regarding welder qualifications including weld positions, weld thickness, and general welder qualification documentation problems.

The licensee has prepared about 385 NRs and 26 CARs. Five NRs and 16 CARs have been closed to date.

5. Review of Corrective Action System

The licensee's corrective action system is being reviewed including the review of the Inprocess Inspection Deficiency Report (IIDR) system used at Zimmer.

Effort by Licensee

The licensee is reviewing the corrective action system in three major areas including the identification, evaluation, and reporting of nonconforming conditions; the IIDR process; and a review of the HJK corrective action system.

NRC Effort/Action

The NRC is monitoring and inspecting the corrective action system on a sampling basis and giving special attention to the IIDR process.

The resident inspectors review deficiency reports issued by the licensee, including NR's, IIDR's written in the QCP rework program (minimum review to date), Corrective Action Requests (CAR), Condition Evaluation Requests (CER), and Management Corrective Action Requests (MCAR).

Findings to Date

The NRC identified two minor items of noncompliance regarding the corrective action system (50-358/82-05) and the required response regarding one of the items is due to Region III presently.

The licensee's review has revealed some problems with the scope and reviews of the IIDR's and the problems are being corrected via a revision to the controlling procedure. The NRC's review to date identified concerns similar to the licensee's findings. The NRC review is not complete.

The licensee's review of the HJK corrective actions revealed some problems concerning identification, evaluation, and reporting of nonconforming conditions which are being addressed at this time.

D. Quality Confirmation Program (QCP)

1. Task I, Structural Steel

Review of structural beams, beam welds, re-entrant corners, procurement of beams, beam and steel plate heat number traceability, and inspection of cable tray foot connections.

Effort by Licensee

The licensee is continuing to inspect structural steel items including foot connections, drywell steel, control room steel, gallery steel, and switchgear steel.

The task involves 13 personnel and is reported to be 31% complete with an estimated completion date of December 31, 1982 (assumes a substantial increase in the number of inspection and craft persons is provided).

NRC Effort/Action

Reviewed 1,302 initial issue nonconformance reports (NRs) and 108 dispositioned NRs and inspected a selected number of those reviewed.

Resident and specialist inspectors performed field walkdowns of actual conditions and rework activities.

Findings to Date

The licensee has generated 444 NRs identifying about 5000 weld deficiencies. The majority of the deficiencies have been dispositioned as "rework".

Two construction deficiency reports have been reported to the NRC concerning laminated angle iron and cable tray hangers/weld deficiencies.

2. Task II, Weld Quality

Review of welds performed, weld rod control, transfer of weld rod heat numbers, and deletion of weld inspection criteria.

Effort by Licensee

The licensee is continuing to review the areas of structural weld cards, welding procedures, welder qualifications, small-bore piping welds, and large-bore piping welds.

The task involves four people and is reported to be 58% complete with the completion date still to be determined. The licensee is reorganizing the task work with both HJK and CG&E performing the reviews to improve efficiency.

NRC Effort/Action

Reviewed 793 initial issue NRs and 53 dispositioned NRs and inspected a selected number of those reviewed.

Findings to Date

The licensee has identified nonconforming conditions regarding weld data sheets, heat numbers, welder qualifications, and welding procedures. Discrepancies being identified include lack of objective evidence, white-outs and cross-outs, signature differences, inconsistent data, and lack of adequate acceptance criteria. (Welder qualifications are being reviewed by a special HJK/CG&E task group and are covered in paragraph C.4 in this report.)

Due to the identification of the lack of adequate control of drawings, inadequate acceptance criteria, and restart of the review activity under a new program, the large-bore piping weld review has not progressed.

Three construction deficiency reports have been identified to the NRC concerning weld procedure deficiency, carbon weld rod in stainless steel weld, and lack of weld preheat or post weld heat treatment.

3. Task III, Heat Number Traceability

Review of installed large-bore and small-bore pipe heat numbers, heat numbers on isometric drawings, incorrect or marked-up heat numbers, and purchase orders.

Effort by Licensee

The licensee is continuing to review heat number traceability in the areas of large-bore piping, small-bore piping, and by purchase orders.

The task involves 14 people and is reported to be 30% complete with the estimated completion date still to be determined.

NRC Effort/Action

Reviewed 341 initial issue NRs and 88 dispositioned NRs.

Findings to Date

The licensee has identified a substantial number of discrepancies regarding small-bore piping, large-bore piping, and purchase orders. The nonconforming conditions include documentation deficiencies, lack of design change control, unsigned reports, use of unapproved vendors, and upgrade of materials. Two construction deficiencies have been identified to the NRC concerning 2400 ft. of SA-106 Grade B piping and some bolting material.

4. Task IV, Socket Weld Fitup

Review of socket weld fitup to ensure adequate disengagement for small bore piping.

Effort by Licensee

The task is substantially complete with 29,821 fitups reviewed. The final reviews of the identified discrepancies and radiographs are being made.

The task involves one person part-time and is reported as 98% complete with an estimated completion date of August 1, 1982. (An additional Level III radiographer is providing support for the activity.)

NRC Effort/Action

Reviewed 100 initial issue NRs and 49 dispositioned NRs and inspected a selected number of those reviewed.

Findings to Date

The licensee identified 565 weld joints which lacked evidence of disengagement and the joints have been radiographed. Of the 565 welds 106 appear to lack disengagement and 72 of the 106 NRs have been dispositioned "rework".

5. Task V, Radiographs

Review the radiographs which did not meet ASME Code requirements due to inadequately shimmed penetrameters.

Effort by Licensee

The licensee has completed the review of the radiographs and is preparing a code inquiry to ASME concerning the shimming of the penetrameters.

The selected, qualifying radiographs are being reviewed to assess the weld conditions. (Of the 61 welds identified, 31 welds have been radiographed. Twelve welds are inaccessible.)

This activity is reported to be approximately 97% complete with a completion date of August 1, 1982.

NRC Effort/Action

The resident inspector reviewed 5 initial issue NRs.

Findings to Date

A substantial number of the M. W. Kellogg radiographs were not shimmed adequately; however, the quality and sensitivity of the radiographs appears adequate.

Two construction deficiency reports have been identified to the NRC concerning radiographs.

6. Task VI, Cable Separation

Review cable separation regarding essential and associated cables.

Effort by Licensee

The licensee is continuing the review and evaluation of wall penetrations/sleeves, associated cables for Class 1E panels, all 1E panels, and responses to engineering evaluation requests (EERs).

The task involves seven persons and is reported to be 54% complete (scope expanded) with a completion date of December 31, 1982 (scope expanded).

NRC Effort/Action

Reviewed 311 initial issue NRs and 149 dispositioned NRs and inspected a selected number of those reviewed.

Findings to Date

Nonconforming conditions have been identified concerning cable separation, identification, and routing. The licensee has written 497 NRs and 257 NRs have been dispositioned (99 rework and 158 accept-as-is) of which 181 NRs have been closed to date.

Two construction deficiency reports have been identified to the NRC concerning electrical cable separation.

7. Task VII, Nonconformance Reports

Review of nonconformances documented in surveillance reports, punch lists, and exception lists; and nonconformances not documented, not entered, and voided rather than adequately dispositioned. Review 300 closed NRs and solicit NRs not entered into the system.

Effort by Licensee

The licensee is continuing to review and evaluate nonconformances.

Approximately 200 letters to former QC inspectors soliciting nonconformances not entered into the system return receipt requested were mailed by the licensee. The responses were limited. One report has been received from an individual identifying four potential NRs.

Additional procedures, field walkdowns, and a material impound area are being provided.

The task involved two persons and is approximately 61% complete with an estimated completion date of December 31, 1982.

NRC Effort/ Action

Reviewed 91 initial issue NRs and 1 dispositioned NR and inspected a selected number of those reviewed.

Findings to Date

Thirty eight percent of the voided NRs reviewed required additional investigation by HJK and QA.

Thirty eight NRs have been written due to reopening of previously voided NRs. One of these NRs has been dispositioned "Accept-as-is".

8. Task VIII, Design Control and Verification

Review procedures controlling design calculation completion, S&L program for controlling deviations from FSAR, correctness and consistency of FSAR, and design deviation identification and disposition.

Effort by Licensee

The licensee is completing the final review of the items within this task including IE Inspection Report 50-358/81-13, responses and procedure revisions by S&L, review planned documentation at S&L, and preparation of the draft QCP closeout report.

The task involves one person and is 97% complete with an estimated completion date of July 15, 1982.

NRC Effort/Action

The activity is being monitored with a closeout inspection planned to verify completion of the QCP task VIII items, to identify any generic implications, and to evaluate the licensee conclusions.

Findings to Date

No significant findings have been identified to date regarding the S&L work; although, the S&L system has been made more formal.

One construction deficiency report has been identified to the NRC regarding design control.

9. Task IX, Design Document Changes (DDC)

Establish an accurate and complete listing of DDCs, DDC records, and associated QC inspection records.

Effort by Licensee

Review of CG&E, S&L, and HJK DDCs for classification is 95% complete. Review of inspection documentation is 29% complete.

The task involves 11 persons and is 34% complete with an estimated completion date of December 31, 1982. (Review of DDCs associated with all subcontractors not included in the estimated completion date.)

NRC Effort/Action

Reviewed 290 initial issue NRs and 3 dispositioned NRs and inspected a selected number of those reviewed.

Findings to Date

A number of deficiencies have been identified concerning missing documentation, misclassification of DDCs, inspection program deficiencies, failure to incorporate deficiencies, premature inspection, and incomplete inspection documentation.

10. Task X, Subcontractor QA Programs

Confirm the quality of the Bristol Steel work and review all subcontractor QA programs or safety-related work to ensure the safety-related activities performed were acceptable.

Effort by Licensee

Bristol field welds are being reviewed within Task I and 80 audits of subcontractors were identified encompassing 13 subcontractors, and 51 audits have been reviewed.

The task involves two persons and is 60% complete with an estimated completion date of August 13, 1982.

NRC Effort/Action

None during this month.

Findings to Date

Task I has identified many Bristol welds which do not meet the specifications.

Six subcontractor audits may require audits of subsequent activities for confirmation of work that cannot be verified by document review or inspection.

Many of the 51 audits reviewed to not address all applicable criteria.

11. Task XI Audits

Review all past audits of HJK, S&L, GE, GED, EPD, EOTD, and GCD to determine depth and adequacy with respect to Appendix B to 10 CFR 50 and appropriate closeout of audit findings. Justify the acceptability of the areas not audited.

Effort by Licensee

Review of audits, audit summaries prepared, and 207 of 296 past audits have been reviewed.

The task involves two persons and is 70 % complete with estimated completion date of October 8, 1982.

NRC Effort/Action

None during this month.

Findings to Date

Coverage of the audits was not sufficient to verify adequate implementation of program requirements.

E. Ongoing Construction Activities

Major ongoing construction activities include installation and modification of pipe supports, drywell steel modifications, and installation of drywell air coolers. The activities are critical path items with completion scheduled for the end of 1982.

F. Potential Plant Problems

The following is a list of areas or items which Region III considers as potential problems and are being monitored by the inspectors.

- . Rust on the stainless steel liner plate in suppression pool
- . Containment liner leak rate channel leakage (welds)
- . Sacrificial shield weld inadequacies (records and actual weld conditions)
- . Control panel mounting plug weld inadequacies
- . Cable tray trapeze weld inadequacies
- . Past personnel qualifications
- . Past weld procedures
- . Purchase of equipment

G. Freedom of Information Act (FOIA) Requests

The Region recently processed three FOIA requests regarding Zimmer.

<u>FOIA</u>	<u>Title</u>	<u>Request</u>	<u>Response</u>
81-206	IE IR 50-358/81-13 Documents	April 20, 1982 July 9, 1982	June 9, 1982 July 22, 1982 August 2, 1982
81-336	H. J. Kaiser Internal Investigation Report	July 26, 1982	August 1, 1982
81-337	Selected Zimmer Interviews	July 26, 1982	August 4, 1982

Approximately 20 mandays were expended in complying with these three requests.

STATEMENT TO ZIMMER PROJECT PERSONNEL

BY

JAMES G. KEPPLER, NRC REGIONAL ADMINISTRATOR

June 29, 1982

Ladies and Gentlemen --

I have asked for this opportunity to speak to you today, because I want you to understand the important role you have to fill here at the Zimmer Station. I am sure you all realize the high level of attention that the Zimmer project has been receiving -- from the Congress, from the NRC's Commissioners, from the public and from the news media. Construction at Zimmer has become one of the focal points of the national interest in nuclear power plants.

The construction of a quality plant demands teamwork on the part of all employees. We do recognize, however, that at any construction site there is bound to be some friction between those performing the construction work and those doing quality inspections. We are not so naive as to think that such friction can be totally eliminated. We do feel strongly, however, that friction becomes unacceptable intimidation if it results in quality control inspectors not doing their job for fear of some sort of reprisal.

I want you to know that I expect the construction of this plant to be carried out without any further instances of intimidation or harassment. We cannot, we will not, tolerate such incidents as have occurred here at Zimmer in the past. The construction of this plant is too important to be influenced by harassment.

You are also no doubt aware of the findings of the NRC investigation last year, and the quality control problems that the site QA/QC staff has had to overcome. Because of past inadequacies, there is much work to be done to determine the quality of construction here.

When our investigation began to find evidence of quality assurance and documentation problems in early 1981, we seriously considered stopping all ongoing construction work. In fact, there were those on my staff who urged me to do just that. However, I didn't think that stopping all work was the best solution -- and instead, we directed the reorganizing of the Quality Assurance Program and the system of 100 per cent reinspection by Cincinnati Gas & Electric personnel of all subsequent contractor inspections.

These and other required actions resolved our immediate concerns for the ongoing work, subject to continuing NRC inspections.

For the construction work already completed, we found all too many instances where the quality of the work was in question or was not properly documented. The licensee could not prove to our satisfaction that much of the work met the required specifications, codes and standards.

For this reason we have required the utility to develop a quality confirmation program to recheck those areas of construction where the quality of work was in question because of the earlier lapses in the quality assurance system.

As many of you may know, there have been problems found in these areas -- and in some cases rework has already started. Other instances of rework may be identified as the quality confirmation program continues.

Now, I want to ask for the help of all Zimmer project personnel. The help I am seeking is for any of you who have concerns about construction activities - and cannot resolve those concerns through supervisory channels - please bring these to our attention.

Despite all the attention that quality assurance and intimidation problems have received, we continue to hear rumors that harassment incidents are continuing and that the individuals involved are reluctant to come forward with information about the incidents because they fear some sort of reprisal. We intend to pursue fully any suggestion of harassment. NRC personnel will be selecting, at random, a number of quality assurance personnel for informal interviews. We hope they will be candid and open with us. At this point, we are not asking for formal statements but rather we want to determine if there is a harassment problem and how extensive it might be.

NRC inspectors cannot be everywhere and see everything, nor should that be our job. Successful construction of this plant requires the entire construction and quality assurance system to do its job. And each of you has a part in that system.

We at the NRC will not tolerate instances of intimidation or harassment. I can assure you that we will deal with such incidents to the maximum extent of the law and NRC regulations, including referral of the matters to the Department of Justice for possible investigation and prosecution. It should be clear to you that I endorse the importance of the quality assurance function. However, you should also realize that I also expect all employees to responsibly carry out their jobs in the construction of a quality nuclear plant.

NRC Telephone Numbers: 513/553-2052 (Resident Inspector's Office)
312/932-2500 (Regional Office - Collect calls accepted)

QUALITY CONFIRMATION PROGRAM AS OF JUNE 30, 1982

Task I: Structural Steel

AREA	ITEMS COMPLETED THIS MONTH	ITEMS COMPLETED TO DATE	% COMPLETE THIS MONTH	% COMPL TO DATE	MANHOURS EXPANDED THIS MONTH	MANHOURS REMAINING
Foot Connections	0	259	0	100	0	0
Drywell (less 525')	75	236	23	72	517	651
Reactor, Aux & Service Water Bl'dgs	452	782	13	22	2757	17,593

ASSESSMENT/RESULTS

I. December 1, 1982, completion date for remainder of Task I contingent upon a 60% increase in Task I inspection personnel and a 200% increase in construction support personnel.

NONCONFORMANCE REPORT (NR) SUMMARY

AREA	NR's WRITTEN	QUANTITY DEFICIENCIES IDENTIFIED*	NUMBER DEFICIENCIES DISPOSITIONED	TYPE OF DISPOSITION			
				ACCEPT AS IS	REWORK	REJECT	REPAIR
FOOT CONNECTIONS	253	975	242	139	88	0	15
DRYWELL	130	651	192	9	178	4	1
CONTR. RM	21	1989	1989	17	1971	0	1
GALLERY STL	39	121	121	0	121	0	0
SWITCHGEAR 567' 5"	1	1192	192	0	1192	0	0
TOTAL	444	4928	3736	165	3550	4	17

NOTE: 88% OF THE DEFICIENCIES ATTRIBUTED TO: OVERLAP (31%),
UNDERSIZE WELD (14%), UNDERCUT (15%), WELD PROFILE (14%), LACK OF
FUSION (14%).

SCOPE OF INSPECTION

AREA	ITEMS TO INSPECT	INSPECTIONS PERFORMED
FOOT CONNECTIONS	259	259 (100%)
DRYWELL (LESS 525 EL.)	327	236 (72%)
REACTOR & AUX. BLDG SERVICE WATER BLDG	<u>3577</u>	<u>782 (22%)</u>
TOTAL	4165	1277 (31%)

MANPOWER SUMMARY

	<u>ACTUAL</u>
ENGINEERS	0
QUALITY ENGINEERS	2
INSPECTORS	9
DOCUMENT REVIEWERS	7
CLERKS	<u>0</u>
TOTAL	18

STATUS

This task approximately 31% complete.

ESTIMATED COMPLETION DATE

December 1, 1982

Task II: Weld Quality

AREA	ITEMS COMPLETED THIS MONTH	ITEMS COMPLETE TO DATE	& COMPLETE THIS MONTH	% COMPL TO DATE	MANHOURS EXPANDED THIS MONTH	MANHOURS REMAINING
Structural KE-1 Review	0	11,000	0	98	0	160
Welding Procedure Reviews	0	76	0	92	0	40
Welder * Qualification Review	527	1303	11	29	102	1798
Small Bore Pipe	368	25,841	1	79	128	824
Large Bore	0	0*	0	0	0	4118

*ITEMS PREVIOUSLY LISTED AS COMPLETE FOR LARGE BORE ARE TO BE REDONE UNDER NEW PROGRAM.

ASSESSMENT/RESULTS

I. 2% of the inactive welding procedures have undergone preliminary review. Approximately 5 procedures may need to be

requalified on the basis on this review. (Amperage range exceeded, interpass temperature not specified, rate of travel not recorded, etc.)

II. Review of welder qualification has begun. A group of HJK and CG&E experts are working jointly to expedite the review (9 people). There are approximately 1800 welders (approx. 4600 records) to review. 341 NR's have been initiated, of which 11 have dispositioned (7 accept-as-is, 4 rework). 1323 welder qualification forms (for 541 welders) have been reviewed to date.

III. Cannot tell if heat numbers have been transferred from KE-2 form to KE-1 form by someone other than the QA inspector who inspected the weld. Looking for cross outs, white out, etc. Will identify discrepancies during field walkdown for resolution via Document Deficiency Notice (DDN) or Nonconformance Report (NR) as appropriate.

IV. Evaluating results of review of structural KE-1 cards (weld data sheets). Generic Nonconformance Reports will be written after deficiencies have been classified. Deficiencies include lack of weld procedure verification and lack of welder qualification verification.

MANPOWER SUMMARY

Actual

ENGINEERS	0
QUALITY ENGINEERS	2 1/2
INSPECTORS	1
DOCUMENT REVIEWERS	0
CLERKS	<u>1/2</u>
TOTAL	4

STATUS

This task is approximately 58% complete.

ESTIMATED COMPLETION DATE

To be determined after coordination with HJK & CG&E document review group.

Task III: Heat Number Traceability

AREA	ITEMS COMPLETED THIS MONTH	ITEMS COMPLETE TO DATE	% COMPLETE THIS MONTH	% COMPLETE TO DATE	MANHOURS EXPANDED THIS MONTH	MANHOURS REMAINING
IIIA Small Bore (DOC)	0	**0	0	**0	320	**1280
(WALKDOWN)	165	2603	6.3	99		
IIIB Large Bore (DOC)	0	0	0	0	***70	UNKNOWN
(WALKDOWN)	0	0	0	0		
*Purchase Order Review (Secondary)	25	*25	*	*	90	1250

*PURCHASE ORDER REVIEW: 6792 Purchase Orders were initially reviewed to determine their status (essential or nonessential). Of these approximately 4700 were determined essential. The numbers given for this report are from the statistical status plan which is in progress at this time.

**The reasons for the change in status of the Small Bore Piping are as follows:

The original procedure used for the review was not in depth enough and used assumptions, our review was performed prior to the HJK review during which they were, by procedure, able to solve many NR's, and a method to tie the purchase order heat number to the documentation and field heat number had not been satisfactorily established. A new procedure has been submitted to rectify these deficiencies.

***Hours expanded for informational walkdown.

SUMMARY OF SCOPE

IIIA) Small Bore Piping - Perform 100% inspection (Documentation and Field) of systems identified on enclosure 1 and 2 of NRC investigation report #50-358/81-13, Exhibit 17, for traceability in accordance with ASME requirements.

IIIB) Large Bore Piping - Perform 100% inspection (Documentation and Field) of all piping involved in field modifications within the scope of enclosure 1 & 2 (see IIIA above) for traceability in accordance with ASME requirements.

IIIC) Purchase Order Review - Perform 100% review of Purchase Orders to establish a list of acceptable heat numbers to confirm source traceability of all code related items within the scope of IIIA and IIIB.

ASSESSMENT/RESULTS

IIIA) Small Bore Piping - Field Walkdown is 98% complete. Document review in accordance with 19-QA-12 is 88%, however, all packages within the scope will be re-reviewed in accordance with 19-QA-30. This is necessary since 19-QA-12 did not address traceability in the depth required to adequately identify the problems encountered. In addition, the documents will be reviewed after HJK, to allow nonconformances to be identified on HJK NR's (They will be designated as "Q" NR's).

IIIB) Large Bore Piping - The documentation required to identify modifications are not maintained as required, i.e. PSK's (not controlled), NPP-1's (not updated to reflect modifications), S&L M-drawings (not updated with DDC's and referenced properly). CAR No. 82-23 addressed a lack of control of design modifications. The corrective action taken by HJK is evaluated as unsatisfactory, and the CAR is resubmitted.

IIIC) Purchase Order Review - An assessment of HJK's review process is being performed to determine the feasibility of reviewing after them. This will allow NR's to be written under HJK's NR system. ("Q" designation will be assigned) The deficiencies being found include unsigned certified material test reports, vendors, to whom purchase orders issued, were not on the approved vendor list, nonessential materials being upgraded to essential without approval.

MANPOWER SUMMARY

ACTUAL

ENGINEERS	1
QUALITY ENGINEERS	2
INSPECTORS	1 1/2
DOCUMENT REVIEWERS	1
CLERKS	<u>1/2</u>
TOTAL	14

THIS TASK IS 30%**, *COMPLETE.

ESTIMATED COMPLETION DATE

To be determined after coordination with HJK and CG&E documentation review group.

Task IV: Socket Weld Disengagement

AREA	ITEMS COMPLETE THIS MONTH	ITEMS COMPLETE TO DATE	% COMPLETE THIS MONTH	% COMPL TO DATE	MANHOURS EXPANDED THIS MONTH	MANHOURS REMAINING
Document Review	0	29,821	0	99	16*	190

*MANHOURS USED TO REVIEW DOCUMENTATION FOR RT.

ASSESSMENT/RESULTS

I. Records for 29,821 have been reviewed. We are rereviewing those ISK Drawings which were on hold pending receipt of additional documentation. 1623 welds pending direction for closure or additional review.

II. 565 welds lacked evidence of disengagement and have been radiographed.

III. 106 of the 565 welds appear to lack disengagement from radiograph review.

NONCONFORMANCE REPORT SUMMARY

106 Nonconformance Reports have been generated for the 85 welds lacking proper disengagement. 72 of the 106 NR's have been dispositioned rework.

MANPOWER SUMMARY

	<u>ACTUAL</u>
ENGINEERS	0
QUALITY ENGINEERS	1/2
INSPECTORS	0
DOCUMENT REVIEWER	0
CLERKS	0
TOTAL	<u>1/2</u>

CG&E LEVEL III RADIOGRAPHER is also providing support (not included above)

STATUS

This task is approximately 98% complete.

ESTIMATED COMPLETION DATE

August 1, 1982

Task V: Radiographs

AREA	ITEMS COMPLETE THIS MONTH	ITEMS COMPLETE TO DATE	% COMPLETE THIS MONTH	% COMPL TO DATE	MANHOURS EXPANDED THIS MONTH	MANHOURS REMAINING
Radiography Review	---	---	---	100%	---	---
Radiographs Phase II	*0	31	0	51	0	200

*Awaiting the RT of remaining welds before work can continue.

ASSESSMENT/RESULTS

I. All radiographic film from M. W. Kellogg has been reviewed (18,079 pieces of film for 4134 welds) for the above condition.

II. Most radiographs meet code requirements for quality and sensitivity

III. Code inquiry being prepared for submittal to the American Society of Mechanical Engineers (ASME) for clarification of the shimming issue.

IV. Phase II involves reading the qualifying radiographs and the time spent preparing the list of welds for radiography.

V. List of welds for radiography has been sent to construction. Of 61 welds identified, 31 have been radiographed and 12 are inaccessible.

MANPOWER SUMMARY

Personnel assigned to Task III will support this activity.

STATUS

This task is approximately 97% complete.

ESTIMATED COMPLETION DATE

August 1, 1982

Task VI: Cable Separation

AREA	ITEMS COMPLETED THIS MONTH	ITEMS COMPLETE TO DATE	%COMPLETE THIS MONTH	% COMPL TO DATE	MANHOURS EXPANDED THIS MONTH	MANHOURS REMAINING
Wall Penetrations/ Sleeves	0	182	0	100	0	80**
Associated Cables Class IE Panels	0	291	0	100	528**	800**
*IE Panels (Cable Rm to Cable Rm)	0	0	0	0	160***	6100
Review of EER Responses	0	18	0	49	0	392

*EXPANDED SCOPE OF TASK VI

**MANHOURS REQUIRED TO CLOSE INSPECTION FORMS, THIS INCLUDES EER's, PANEL ANALYSIS, ROUTING ANALYSIS AND NR REVIEW

***MANHOURS REQUIRED FOR PRELIMINARY WORK PACKAGES FOR THIS ITEM.

ASSESSMENT/RESULTS

I. A total of 497 Nonconformance Reports have been written for separation, identification and routing deficiencies. 257 NR's dispositioned (99 rework, 158 accept-as-is). 181 of the 257 dispositioned NR's have been closed.

II. Task VI expanded to inspect all class IE panels with potential separation problems. Procedure 19-QA-31 being prepared to perform this inspection. Procedure sent out for review and comment.

III. Awaiting 11 EER responses to close out associated cable inspection records. Responses were due 6/15/82.

IV. Awaiting S&L panel analysis to close out associated cable inspection records.

NOTE: Items III and IV are impacting the productivity of this task.

<u>MANPOWER SUMMARY</u>	<u>ACTUAL</u>
ENGINEERS	3
QUALITY ENGINEERS	--
INSPECTORS	4
DOCUMENT REVIEWERS	--
CLERKS	0
TOTAL	<u>7</u>

STATUS

54% complete (expanded scope)

ESTIMATED COMPLETION DATE

December 31, 1982 (expanded scope)

Task VII: Nonconformance Reports

AREA	ITEMS COMPLETED THIS MONTH	ITEMS COMPLETE TO DATE	% COMPLETE THIS MONTH	% COMPL TO DATE	MANHOURS EXPENDED THIS MONTH	MANHOURS REMAININ
Voided NR's Review (initial)	0	1031	0	61.6	0	921
Voided NR's Review (secondary)	0	900	0	53	183**	807
Surveillance Report Review	0	3129	0	93	0	5590
Punchlist	0	0	0	0	0	1200
Closed NR's	0	290	0	96.6	0	20
Nonconformances from Inspectors*	0	0	0	0	0	80

*ONE REPORT RECEIVED IDENTIFYING FOUR POTENTIAL NONCONFORMANCES.

**SEE ITEM IV UNDER ASSESSMENTS/RESULTS

ASSESSMENT/RESULTS

I. Procedure (19-QA-20) for Review of Punchlists, taking NRC comments into consideration, in Review and Comments process.

II. Approximately 38% of the voided NR's require additional investigation by HJK/QA. Impound area for material removed during rework has been established.

III. A sampling of 300 properly closed Nonconformance Reports will be reviewed to ensure proper dispositioning and closure. The sample has been established and documentation is being gathered. Procedure (19-QA-29) being written to cover this effort.

IV. Approximately 37 Nonconformance Reports are under investigation to confirm if condition addressed on voided NR still exists. This involves field walkdown by Task VII personnel.

V. Task VII personnel to interface with the N-5 program data-report program for turnover. This will result in additional manhours for this task.

NONCONFORMANCE REPORT SUMMARY

38 Nonconformance Reports have been written due to reopening of voided NR's. Only one has been dispositioned to date (Accept-As-Is).

MANPOWER SUMMARYACTUAL

ENGINEERS

--

QUALITY ENGINEERS

2

INSPECTORS

--

DOCUMENT REVIEWERS

--

CLERKS

--

TOTAL

2

STATUS

This task is approximately 61% complete

ESTIMATED COMPLETION DATE

December 31, 1982

Task VIII: Design Control and VerificationSteps to close out this task:

1. Review 81-13 information
2. Review S&L response and procedure revisions
3. Formulate close-out of QCP action items
4. Review plan and documentation at S&L.
5. Present draft close-out report to NRC prior to formal submittal.
6. P. Barrett of the NRC to complete review of items and complete closeout.

CONCLUSION

No problems have been found with the quality of S&L work: Their system has been made more formal.

MANPOWER SUMMARY

Final report to be written by Director, Quality Confirmation Program

STATUS

This task is 97% complete.

ESTIMATED COMPLETION DATE

July 15, 1982

Task IX: Design Document Changes

AREA	ITEMS COMPLETED THIS MONTH	ITEMS COMPLETE TO DATE	%COMPLETE THIS MONTH	%COMPL TO DATE	MANHOURS EXPENDED THIS MONTH	MANHOURS REMAINING
Phase I	0	18,725	0	95	0	80
Phase II	249	2,651	2.7	29	1561	17,443
Phase Ia	0	0	0	0	0	210
Phase IIa	0	0	0	0	5	5,039

Phase I - Review all CG&E, HJK and S&L DDC's to determine proper classification (essential or nonessential)

Phase II - Verify that CG&E, HJK and S&L essential DDC's have been incorporated in inspection documentation.

Phase Ia - Review all WY&B and other site contractor DDC's to determine proper classification (essential or nonessential)

Phase IIa - Verify that WY&B and other site contractor essential DDC's have been incorporated in inspection documentation.

ASSESSMENT/RESULTS

I. Classification of CG&E, S&L, and HJK DDC's as essential or nonessential is 95% complete.

II. Review of inspection documentation is 29% complete for the original scope. 621 deficiencies identified for reporting via Document Deficiency Notices or Nonconformance Reports as applicable.

PROBLEM/DEFICIENCY	ELECT	MECH	STRUCT	TOTAL
1. Missing Documentation	82	8	103	193
2. DDC Mis-Classification	8	3	3	14
3. Inspection Program Deficiencies & Misc.	13	25	19	57
4. DDC Not Incorporated in Documentation	84	10	222	316
5. Inspection Prior To DDC Being Written ("As-Built")	1	10	--	11
6. Incomplete Inspection Documentation	8	--	22	30
TOTAL	196	56	369	621

NOTE: Reduction of problems/deficiencies previously identified are due to implementation of MCAR 82-01 and new sources of documentation.

MANPOWER SUPPLY

ACTUAL

ENGINEERS

5

QUALITY ENGINEERS

--

INSPECTORS

--

DOCUMENT REVIEWERS

5*

CLERKS

1

TOTAL

11

STATUS

This task is approximately 34% complete for Subtask I and II

ESTIMATED COMPLETION DATE

December 31, 1982

Task X: Subcontractor QA Programs

SUMMARY OF CONCERNS

1. The Bristol Project Superintendent was responsible for both the steel erection and the erection quality control.
2. The Bristol Field Inspection Program failed to document specific welds inspected and details of the inspection.
3. Review past audits of subcontractor QA programs.

ASSESSMENT/RESULTS

- I. Bristol field welds are being inspected as a part of Task I.
- II. Procedure for interface with other QCP Tasks to verify adequacy of work is being developed. Draft of this procedure will be completed and ready for review week of 6/28/82.
- III. Eighty audits of subcontractors were identified as being performed prior to April 8, 1981. These audits encompassed thirteen different subcontractors. Of the thirteen subcontractors, six may require audits of subsequent activities for confirmation of the work which cannot be accomplished by document review or inspection. At this time, 51 of the 80 audits have been reviewed. The scope of many of these audits do not address all applicable criteria.
- IV. The estimated time required for completion is 56 man days which includes completion of the review, evaluation of post audits, and potential audits of six subcontractors.
- V. If the scope of this task is expanded to include vendors which supplied material but have not been audited, it is estimated that a minimum of 10 man days per vendor will be required to complete an audit.

STATUS

This task is 60% complete

ESTIMATED COMPLETION DATE

August 13, 1982

Task XI: AuditsSUMMARY OF CONCERNS

1. Past audits by CG&E identified repetitive problems regarding design calculations and verifications not being performed corrective action by Sargent & Lundy (S&L) and follow up by CG&E was not adequate.
2. CG&E had not audited S&L to verify compliance with and the effectiveness of the S&L nonconformance program.

ASSESSMENT/RESULTS

I. 296 audits have been identified, of which 207 have been reviewed.

II. Preliminary evaluation indicates that most audits were of limited scope, however collectively due to the large number of audits performed, the applicable 18 criteria were covered for HJK, EOTD, NED, GCD, and NPD. There were areas not covered in audits of S&L and G.E. subsequent to April 8, 1981, however, current audits of S&L and G.E. have covered the majority of applicable criteria.

III. Procedure for interface with the QCP Tasks to verify adequacy of work is being developed. Draft of this procedure will be complete and ready for review the week of 6/28/82.

IV. It is estimated that eighty-three (83) man days will be required for review and evaluation of the remaining audits, and for auditing the remaining missed criteria.

STATUS

This task is 70% complete.

ESTIMATED COMPLETION DATE

October 8, 1982