

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-461/85-08(DRP)

Docket No. 50-461

License No. CPPR-137

Licensee: Illinois Power Company  
500 South 27th Street  
Decatur, IL 62525

Facility Name: Clinton Power Station, Unit 1

Inspection At: Clinton Site, Clinton, IL

Inspection Conducted: January 15-17 and 28-31, 1985

Inspector: *F. J. Jablonski*  
F. J. Jablonski

Approved By: *RC Knop*  
R. C. Knop, Chief  
Reactor Projects Section 1C

3-1-85  
Date

Inspection Summary

Inspection on January 15-17 and 28-31, 1985 (Report No. 50-461/85-08(DRP))

Areas Inspected: Special, unannounced inspection concerning 27 allegations in the records verification program. The inspection involved 78 inspector-hours onsite by one NRC inspector.

Results: No items of noncompliance were identified.

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DETAILS

1. Persons Contacted

Illinois Power (IP)

\*W. Gerstner, Executive Vice President  
G. Baker, Records Coordinator  
J. Brownell, QA Specialist  
C. Calhoun, Quality Projects Coordinator  
\*R. Campbell, Director of Quality Systems and Audits  
\*J. Cook, Assistant Plant Manager  
W. Cornell, Manager of QA  
\*H. Daniels, Project Manager  
D. Ennen, Technical Adviser  
L. Floyd, Supervisor of Quality Systems  
\*J. Greenwood, Manager of Power Supply (Soyland Power)  
\*D. Hall, Vice President  
R. Hagar, Investigator (SAFETEAM)  
R. Huber, Level II Records Reviewer  
\*J. Loomis, Construction Manager  
\*J. Miller, Director of Startup Testing  
M. Podolsky, Level II Records Reviewer  
\*F. Spangenberg, Director of Nuclear Licensing  
\*J. Sprague, QA Specialist  
P. Vitte, Level II Records Reviewer

Baldwin Associates (BA)

\*A. King, Project Manager  
C. Anderson, Manager of Quality Engineering  
W. Berry, Associate Welding Engineer  
M. Daniel, Manager of Technical Services  
R. Greer, Assistant Manager of Quality and Technical Services  
J. Hawkins, Manager of Quality Assurance  
D. Kozlowski, Quality Engineer  
R. Lebkuecher, Level II QAE, Assistant Lead Document Reviewer  
H. Litz, Level II QAE, Document Reviewer (Nights)  
\*L. Osborne, Manager of Quality and Technical Services  
A. MacDonald, Manager of Document Review  
R. McFall, Quality Engineer  
R. Pennoni, Level II QAE, Document Reviewer (Nights)  
T. Royster, Level II Document Reviewer  
R. Praznik, Level II QAE, Document Reviewer  
D. Shumway, QA Staff Engineer

D. Szymczak, Lead Engineer, Resident Engineering  
J. Tankersly, Level III QAE, Document Reviewer (Nights)  
L. Wheeler, Technical Assistant, Resident Engineering

Other personnel were contacted during the inspection as a matter of routine.

\*Designates those who attended the exit meeting on January 31, 1985.

2. The Record Verification Program at Clinton Power Station

a. Background

Based on the results of two IP sponsored audits IP determined the necessity for a 100% reinspection of documents related to construction of Clinton Power Station (CPS). NRC's understanding of this undertaking is documented in Confirmatory Action Letter of September 1, 1982.

The documents were first subjected to the standing BA QA program including reviews by IP, and then verified as described below.

b. The Program

The Record Verification Program is implemented by approximately 190 persons in two groups known as BA Document Review Group (DRG) and IP Records Review Group (RRG), all of whom have received training and otherwise meet education, experience, and training requirements of ANSI N45.2.6. Within the RRG there was a Document Turnover Receipt Group (DTRG) performing a clerical function of receipt and transfer of documents not included in the Records Verification Program.

The objective of DRG is to authenticate BA construction documents; that is, determine if the documents used to construct Clinton Power Station are acceptable and complete and ready for transfer as records to the IP vault. A record is a completed document; it has been authenticated by stamping, initialing, or signing by authorized personnel. Attributes for accepting documents as records include: legibility, filled out accurately and completely, and traceability; meets purchase specification, applicable codes and standards; and all discrepancies resolved.

The DRG reviews and authenticates all BA construction, fabrication, and installation work documents (travelers), and site generated or maintained purchase order documents including receiving and vendor data. The RRG reviews approximately 20% of DRG's records to verify adequacy of the authentication.

The DTRG was responsible for:

- ° ensuring that records, the 80% not included in the review by RRG, listed on the turnover transmittal document were received;

- ° counting the pages for the records listed on the turnover transmittal document;
- ° resolving any discrepancies from 1 and 2 prior to acknowledging receipt;
- ° sign and date turnover transmittal form and return a copy to the originating organization.

Both RRG and DRG use the same detailed final review checklists. The checklists were derived from applicable codes, standards and design specifications, and contain requirements unique to the specific area(s) being reviewed.

Specific record types being reviewed include:

Procurement  
Civil/Structural  
Piping/Mechanical  
Instrumentation  
Heating, Ventilating, and Air Conditioning  
Electrical  
Subcontracts  
Verification of Heat Numbers/Codes  
Verification of Welder Qualification

### 3. Allegations in the Records Verification Program

- a. On September 19, 1984, an anonymous individual contacted the NRC Headquarters Office of Investigation alleging conflict of interest and incompetence in the IP's Records Review Group (RRG) at Clinton. On October 1, 1984, an anonymous individual contacted the Herald and Review (Decatur, Illinois) newspaper. This was followed on October 2, 1984, by an article which reported that there was possible falsification of documents completed by the documentation review group. On October 9, 1984, IP formally notified NRC RIII that IP would perform an investigation in the area of document review. On October 23, 1984, RIII made telephone contact with an individual who had made similar allegations to IP. The individual had concerns in 18 areas that are described below.

NOTE: The Records Verification is a complex activity. Refer to Section 2b of this report for a brief explanation. For the record, the individual who made the allegations was a member of the Document Turnover Receipt Group (DTRG), part of the RRG.

- (1) (Closed) Allegation (RIII-84-A-0139-01) (#102): Deficiencies with the RRG have been reported to IP but nothing has been done to resolve problems.

On or about September 4, 1984, the individual met with IP management, presented several concerns, and resigned. The same day the IP vice president of nuclear mandated that an investigation be performed. The investigation is documented in a licensee report dated September 18, 1984. On September 28, 1984, IP contacted the individual in writing and informed him of IP's undertakings in response to the concerns brought to their attention. Six of the individual's concerns made known to the NRC on October 23, 1984, were included in IP's investigation and are discussed below in Items 2, 3, 4, 7, 8, and 11. IP's investigation resulted in 65 items to be followed up including possible intimidation, fraud, falsification of records, and misuse of generic resolutions.

IP hired a separate firm to independently review and verify completion of the 65 items excluding intimidation and possible fraud. The inspector has periodically reviewed results of IP's actions and concluded that all concerns have been satisfactorily resolved. The matters of intimidation and possible fraud were independently investigated by a third party investigator. Both charges were disproved in the IP investigation report dated November 13, 1984. IP took appropriate action to resolve the individual's concerns.

This matter is closed.

- (2) (Closed) Allegation (RIII-A-0139-02) (#102): Record reviews were conducted without approved checklists from June 1, 1984, until August 1, 1984. Records should have been reviewed to Records Management Standards (RMS) but were not available.

The inspector determined that completed checklists used for records review prior to release of the RMS on June 29, 1984, were compared to the RMS. There were six discrepancies; each had a detailed explanation of why it had no impact on safety. It was noted that the RMS were an overcommitment by IP. The records, as submitted, fulfilled the requirements of ANSI N45.2.9.

This matter is closed.

- (3) (Closed) Allegation (RIII-A-0139-03) (#102): The reviews were not technical but only required a count of the number of pages and assurance that all blocks had some sort of entry; reviewers were not to make any judgement on the technical merits of the documents.

The allegation is true; however, it is exactly what the existing procedures, QAP 117.01, "Records Control" and QAP 117.04, "Records Review for Turnover", required of the DTRG, the group to which the individual was assigned. (See Section 2b for a detailed description of the DTRG). As a result of this allegation, on October 4, 1984, IP removed the clerical function of

the DTRG from the RRG and terminated the contracts of those persons performing the duties. The function of receipt and turnover of records is now being performed by permanent IP plant staff.

This matter is closed.

- (4) (Closed) Allegation (RIII-84-A-0139-04) (#102): "White Out" was often found on the deviation and disposition blocks of nonconformance reports (NCRs) and field change requests (FCRs); determining the effect on quality of the white out was up to the individual reviewer; a white out log was required to be maintained.

Records used for documenting the quality of CPS come from many sources including some that do not restrict the use of "white out". White out was banned by BA sometime in 1982; however, backfitting was not imposed. White out, correcting fluid, can be used to alter technical content or make clerical corrections. The "quality" content of the records was not to be adversely impacted by illegibility\* or improper corrections. It was up to the ANSI N45.2.6 certified Level II document reviewer to make that determination. A sample of 806 NCRs were re-reviewed by IP using the same checklists as the initial review to determine if white out had been properly documented. No instance of whitening out was found that should have been identified by the reviewers. NRC performed an inspection in this area as documented in Report 83-19, Section 4, Allegation 8; no items of noncompliance were identified.

White out may have the implication of fraud. During an NRC-IP management meeting on November 22, 1983, NRC Report 83-21, it was stated by IP that no deliberate falsification of records had been noted but sensitivity to it had been increased. The re-review of the NCRs by IP did not disclose evidence of fraud. The white out log was a duplicate effort, not required, and its use has been discontinued.

This matter is closed.

- (5) (Closed) Allegation (RIII-A-0139-05) (#102): There were many NCRs in concrete and ASME piping. One NCR was a Class 1 concrete mix dealing with a broken monitor. The NCR was dispositioned use "as is" because the engineers and laborers would have noticed any inconsistencies in the mix and would have taken corrective action. Another dealt with a welder not being certified to either ASME or the weld procedure. It was dispositioned to change the procedure and not fix the weld.

\*As reported in NRC Report 83-19, tracking of changes to documents was extremely difficult because of the numerous line-throughs, initials, dates, etc. required by the procedure used to make changes to documents.

There have been over 25,000 NCRs written during the construction of Clinton Station and it is not feasible to locate the specific NCRs. The NRC is interested in the way NCRs are handled and has performed extensive inspections in that area. Examples of NRC reviews are documented in Reports 83-14, 83-19, 84-08, 84-27, 84-28, 84-29, 84-30, 84-32, and 84-41. Specific inspections of NCRs dispositioned use "as is" are documented in Reports 83-14 and 84-08. Use "as is" NCRs are reviewed by the architect-engineer, Sargent & Lundy (S&L), who is responsible for evaluating the impact on overall safety if left "as is".

In the specific area of concrete, on September 7, 1982, IP initiated Management Corrective Action Report (MCAR) #05. The MCAR included a complete review of structural concrete, that is, physical inspection and review of installation records and change documents such as NCRs. Each discrepancy was evaluated and corrective actions were implemented. The MCAR was closed on November 12, 1984.

All safety related welding at Clinton is required to be performed to either ASME or AWS code. Both codes require welders to be qualified/certified for the welds being performed. Hundreds of welds have been inspected by the NRC including verification of conformance to codes and procedures. Specific NRC inspections of welding are documented in Reports 84-28, 84-35, 84-38, and 84-42.

Nonconforming items are identified by standard deficiency code and tracked for adverse trends. For the period October 1 - December 31, 1984, there were approximately 2,500 NCRs written encompassing 2,749 deficiency code items. 1,837 have been dispositioned. 481 were use "as is" as reviewed and approved by S&L; 84 were repair including 4 welding repairs; 5 of the items included civil/structural (masonry/concrete). In addition, both civil/structural and welding are part of the IP Overinspection Program which includes a planned, statistically based random sample "verification" inspection by BAQA, and a statistically based random "overinspection" of all work performed by BA and inspected by BAQC.

This matter is closed.

- (6) (Closed) Allegation (RIII-84-A-0139-06) (#102): Many times the disposition to NCRs is "rework the traveler" so the traveler would conform to the NCR.

Rework of a traveler relates to administrative errors rather than hardware problems; therefore, it is a legitimate disposition. However, the traveler is corrected to conform to requirements and not to the NCR. An extensive review of NCR report dispositions

was done by IP as described below in allegation (RIII-84-A-0139-07). There were instances found by IP where "rework the traveler" was not the appropriate disposition; however, plant safety was not affected. Similar problems were identified by NRC as documented in Report 83-19 which resulted in one item of noncompliance.

This matter is closed.

- (7) (Closed) Allegation (RIII-84-A-0139-07) (#102): Many FCRs, NCRs, and deviation reports (DRs) were improperly dispositioned and IP management did not seem interested.

As documented in IP's investigation report, IP was given several NCRs and DRs that were allegedly not properly dispositioned. IP reviewed those items and randomly selected a sample of other NCRs, DRs, and FCRs from all disciplines. The inspector reviewed the results documented in IP memorandum N15-85(01-25)-6 dated January 25, 1985. Each item was reviewed to determine if the disposition addressed the condition, was correct, received proper review, and did not degrade safety or reliability. The report showed that there were items improperly dispositioned; however, none were significant or critical.

This matter is closed.

- (8) (Closed) Allegation (RIII-84-A-0139-08) (#102): Document reviewers have worked under the influence of alcohol and drugs. Individual A presented a training class on August 4, 1984, in an inebriated condition and stated he never reviewed films in document packages; Individual B was often under the influence of drugs.

Individual A did not have any official duties related to training nor did he present any training class on August 4, 1984. August 4 was a Saturday; no time sheets were on record for that day for records reviewers. In discussions with other reviewers and Individual A's past supervisor, the inspector learned that none of them recalled the instance of training while in an inebriated condition. The checklist used for reviewing welding records (QAP 117.04C01) did not require films (x-rays) to be reviewed. The inspector also learned that Individual A had been counseled several times for tardiness and absenteeism; however, his technical abilities were highly regarded. Individual A was employed from October 25, 1983, to November 26, 1984, when he resigned for personal reasons.

The inspector learned from Individual B's previous supervisor that on one occasion Individual B asked to be excused from his work station because he was under the influence of a prescription drug. The supervisor stated that to his knowledge the individual was having serious family problems and was under a

doctor's care. The supervisor did not have any reason to suspect a chronic drug problem. Individual B was employed April 16, 1984, and was laid off with several other reviewers on August 31, 1984.

Both IP and BA have documented policies that could result in dismissal for use or possession of alcohol or nonprescription drugs. cursory searches of handcarried items for alcohol are routinely conducted. There have been cases of employee dismissal for attempting to bring alcohol onsite. Dismissals have also occurred for possession of marijuana. NRC does not impose security requirements on the licensee during plant construction. The responsibility is vested in IP and BA, the owner/constructor. As stated above, there was evidence that both had appropriate policies in place.

Both IP and BA have established QA programs designed to detect and correct adverse conditions including those that may result from work performed under the influence of alcohol or drugs. To date the NRC has confirmed through routine inspections and independent measurements that the established QA programs are effective.

This matter is closed.

- (9) (Closed) Allegation (RIII-84-A-0139-09) (#102): Reviewers would lose their jobs if they did not "cover up nonconforming records." Two reviewers, by name, were intimidated because they were isolated in the vault and no one spoke to them; if they asked questions their employment would be terminated; there is a quota system.

Both reviewers were interviewed onsite by the inspector. Neither felt intimidated by their working in the vault or for any other reason. One seemed more reluctant to ask questions but felt there was sufficient information available without asking. There are monthly staff meetings when questions are solicited by management. In the reviewer's opinion, the main obstacle to asking questions was the former records coordinator. Since his removal and replacement, RRG seems to be a smooth organization. Neither reviewer felt required to cover up nonconforming records. Both wanted to be left alone so they could perform the job for which they were hired. Both reviewers stated that there wasn't a quota system; the RRG supervisor stated that there never was a quota system. He recognized that some record packages were more complex than others; however, an informal count was made of average production for purposes of planning and scheduling.

NOTE: For a more detailed explanation of "counting pages" refer to Section 2b "DTRG", and 3a Allegation (3).

This matter is closed.

- (10) (Closed) Allegation (RIII-84-A-0139-10) (#104): There may be falsification of records within RRG.

An article in the October 2, 1984 edition of the Decatur Herald and Review newspaper from an anonymous person was the source of this allegation. The person's identity remains unknown to the NRC.

In addition, the individual contacted by the NRC on October 23, 1984, informed his supervisor that the reviews he completed were invalid (false) because they were done without reference to Records Management Systems Standards (RMS) and he wanted his work to be voided.

The individual contacted by the NRC was employed from May 9, 1984 through September 27, 1984. During that time he had reviewed 2517 NCRs. As documented in the IP report and accepted by an independent third party reviewer, a sample of 290 of the 2517 NCRs were re-reviewed to determine the effectiveness of his review. He had responsibility for accepting/rejecting the item based on the checklist. His performance was correct in all cases. There were seven minor discrepancies that if left "as is" would not have affected plant safety. On October 15, 1984, IP concluded that no further review would be required to substantiate the quality of work performed. Based on the inspector's review of the above it is concluded that no "false" records existed and that even though reviews were made without reference to the RMS the records were still acceptable. (See Allegation 2).

This matter is closed.

- (11) (Closed) Allegation (RIII-84-A-0139-11) (#104): A letter rescinding a QC inspector's certification was removed from the certification file.

Removal of the letter from the file was independently investigated by a third party investigator as documented in his report dated November 13, 1984. It could not be proved that the letter was ever in the file or who may have removed it; however, such a letter had been written. A review of the circumstances by the inspector shows that the letter was written because of an administrative error. Records showed that the QC inspector was qualified to have performed all inspections during the period he had been inadvertently decertified. This matter is documented in letter BAQC 485-84.

This matter is closed.

- (12) (Closed) Allegation (RIII-84-A-0139-12) (#104): Records were made with water based ink which smeared. The individual questioned how records could be considered permanent when the ink smeared and made the records illegible.

The only requirement for ink was that it be black (BAP 2.1 "Records Control"). It was the record reviewer's responsibility to verify that "the quality of records is not adversely impacted by illegibility" (example: checklist QAP 117.04C01). Numerous deficiencies have been documented on Deficiency Notices and are being evaluated/corrected as described in BA letter CA-865-84.

This matter is closed.

- (13) (Closed) Allegation (RIII-84-A-0139-13) (#104): BA sends records to IP which BA considered final, then BA comes into the records vault and makes changes to the records. At one time there were several 4' x 8' tables in the vault with final NCRs being changed by BA.

Both BA and IP allow certain changes, corrections, and supplements to records under controlled conditions as described in IP Nuclear Support Procedure NS Proc. No. 1.50 "Document Plan", and BA Procedure BAP 2.1 "Records Control". As of the dates of this inspection there were tables as described above. Procedures require that each document be under the observation of at least two persons at all time during the review and handling process. The inspector observed activities in and around the vault and they were according to procedure.

This matter is closed.

- (14) (Closed) Allegation (RIII-84-A-0139-14) (#104): IP's idea of corrective action is to show that only a minor problem exists; they have no intention of reviewing design or welds.

IP has a corrective action program with all elements imposed on BA. Within that program nonconforming conditions are categorized as critical, major, or minor in accordance with established acceptance criteria. (Ref. IP CNP 3.02; BA BAP 1.0). Even so called minor problems, including welding, must be reworked to conform to requirements. Repair and use "as is" dispositions are reviewed and approved by the architect engineer. (See Allegation 5). NRC performed a study of use "as is" NCRs, including welding (see Reports 83-14 and 84-08); no items of noncompliance were identified.

The Bechtel Corporation has recently completed an intensive design review of CPS as documented in their report "Independent Design Review for Illinois Power Company" dated January 1985. Mechanical system design reviews included structures, piping, pipe supports, stress, and layout. The review encompassed standards and procedures, specifications, drawings, and changes thereto, interfaces, calculations, and observations of installations. NRC activities regarding the design review are included in Report 84-37.

This matter is closed.

- (15) (Closed) Allegation (RIII-84-A-0139-15) (#104): Most document reviewers were unqualified in that they did not know basic terminology. Many reviewers did not know what the terms "ANI" or "spool piece" meant.

The inspector reviewed personnel qualification training and certification records of 16 document reviewers including those with whom the individual had worked. In all cases they were certified Level II Records Reviewers in accordance with ANSI N45.2.6. Nuclear related experience ranged from 2-11 years with the average being 5.5 years.

The terms "ANI", authorized nuclear inspector, and "spool piece", a section of pipe between two consecutive field welds, are examples of jargon used by people involved with construction of a nuclear power plant; however, knowledge of these terms is not required to perform an adequate review of documentation.

This matter is closed.

- (16) (Closed) Allegation (RIII-84-A-0139-16) (#104): Anyone who has voiced a concern has been laid off.

The RRG has been in existence for 21 months, that is, from May 1983 to the present. The RRG is entirely made up of contracted employees from five vendors. During its existence approximately 60 contractors have been involved with RRG. The population of the RRG ranged from a low of 4 in May 1983 to a high of 41 in July 1984. 75% of the people originally hired are still with RRG. By October of 1984 the population of RRG was reduced to its present size of 30. The overall average length of stay in RRG is approximately 7 months within the range of 0 to 21 months.

IP management reserves the right to take actions appropriate to get work accomplished including the dismissal of personnel who are incompetent, refuse to follow company rules, or otherwise disrupt the work place. As previously reported, IP initiated an investigation into the concerns of a former reviewer who had resigned just after being assigned to the RRG from the DTRG. Within that report are documented comments of present RRG reviewers who expressed their concerns to the investigator; they are still employed. IP did not take any action against those personnel for their statements. Also documented in the report are statements that, in the opinion of the reviewers, the three persons named who were laid off in September 1984 deserved it because they were poor performers and disrupted the record review process. Other layoffs occurred for general cut backs and when the contractor need had been terminated, for example, dissolution of DTRG. The inspector could find no evidence of personnel being laid off because of voicing concerns.

This matter is closed.

- (17) (Closed) Allegation (RIII-84-A-0139-17) (#102): Document reviewers conducting initial document work are now in the review process of their own work. The individual indicated this was a possible conflict of interest and indicated inappropriate separation and lack of independence.

The inspector reviewed current employment records of 16 records reviewers. There were two cases where they had previously performed work onsite in a different capacity. One reviewer was still employed; however, both persons had the potential to have reviewed their own work. This matter was expanded by IP to include all reviewers in BA DRG and IP RRG. Final results showed that 9 out of 136 DRG reviewers and 4 out of 27 RRG reviewers had performed work onsite; however, none had reviewed documentation completed by them. Results of IP's review are in letter Y-22150 dated January 22, 1985. Procedures have been modified to safeguard against persons reviewing their own work.

This matter is closed.

- (18) (Closed) Allegation (RIII-A-0139-18) (#102): During mid July 1984 the DTRG coordinator told reviewers that records should be reviewed to the RMS but they were not available. This was identified in an audit but the auditor (not known) was told by his supervisor (identity not known) to destroy the audit report.

During the period described above an IP technical advisor, not an auditor, was attempting to review some records that were being reviewed by DTRG. By review of the DTRG procedures he determined that an inordinate amount of time was being taken by DTRG to perform a rather basic records review. He noted the apparent discrepancies and discussed them with the IPQA manager and RRG supervisor in charge of DTRG. The notes are Attachment 7 to the IP report described in Allegation (1). The technical advisor stated that the discrepancies were resolved to his satisfaction. The actual conditions were not as the individual described.

This matter is closed.

- b. Over the period December 26, 1984, through January 29, 1985, an individual made contact with the NRC and supplied over 50 pieces of documentation that were delivered to either the regional or the resident inspector's office in person or by certified mail. The materials included signed statements of position, letters, copies of IP and BA documents, and copies of selected pages from a personal diary. Within the context of the above materials, the individual expressed numerous concerns which were summarized into the nine areas described below:

- (1) Allegation (RIII-84-A-0196-01) (#113): The individual stated that he was being harassed and intimidated by BA Quality and Technical Services (Q&TS) management, that is, moved to day

shift for retraining without being told why. The individual concluded that the reason was for performing technical reviews beyond the scope of approved checklists.

The individual is a BA document reviewer working on the night shift in the DRG. Document reviewers search for documentation errors and record them on document exception lists (DELs) for forwarding to DEL resolvers. Three groups make up the DEL resolution group: resident engineering (RE), quality control (QC), and technical services (TS). QC and TS have night crews that facilitate verbal communication between themselves and document reviewers. Most communication between the night crew document reviewers and RE is by memoranda.

The individual has been employed for about six months as a Level II document reviewer. During that period, according to the Lead RE, the individual had submitted many memoranda wherein he would express disagreement with DEL resolutions. The Lead RE also stated that the individual was responsible for submitting many "GA-099s", that is, administrative or technical items beyond the scope of the established checklist. According to the Lead RE, the individual's GA-099 items were "frequently off the wall", or "off on a tangent" and often, after expending inordinate amounts of time, it would be found that a wrong reference was quoted, or in some other way, the item would not apply. On December 11, 1984, the Senior QA Engineer in the DRG sent a memorandum to all document reviewers to discontinue using the GA-099 designator code and to instead use an expanded version to help facilitate proper and expeditious resolutions to DEL items.

On or about December 12, 1984, the Lead RE approached the acting Senior QA Engineering Document Reviewer, a QA staff engineer, with two memoranda from the individual dated December 12, 1984 expressing disagreement with DEL resolutions. One memorandum was about an obvious transposition of numbers and the other concerned a welding symbol interpretation that the individual insisted was incorrect. (The inspector verified that the DEL resolver's interpretation was correct by obtaining three independent interpretations from persons qualified and experienced in welding engineering.) Based on the memoranda and discussions about previous occurrences, the QA staff engineer made the decision to transfer the individual to the day shift for retraining. During discussions with the QA staff engineer, it was corroborated by the NRC inspector that the individual was transferred to day shift for training without being counseled or otherwise advised of the reasons for the actions.

On or about December 14, 1984, the individual notified the SAFETEAM of seven items, including harassment and intimidation. On December 17, 1984, the individual commenced training. As previously stated, on December 26, 1984, the individual contacted the NRC about his concerns. On December 28, 1984, the

resident inspector suggested that the individual contact the U.S. Department of Labor concerning the alleged discrimination by BA; the individual declined as documented in a letter from the individual to the resident inspector dated December 29, 1984. On January 16, 1985, after completing retraining the individual was returned to night shift document review duties.

On January 17, 1985, the inspector discussed this matter with the IP Manager of QA who had no knowledge of it. As has been found by the NRC on previous occasions, this matter appeared to be not one of noncompliance but of poor communication and management judgement. Considering that IP was not aware of these proceedings, and they have ultimate responsibility for project management, the matter was referred to them for resolution.

On January 28, 1985, the inspector learned from IP management the following:

- ° On January 17, 1985, the BA Manager of QA had discussed with the individual the reasons for being transferred from DRG second shift to day shift for training in generic resolutions, DEL completion, etc. The training was required because it seemed apparent to BA management that the original training did not supply all necessary tools and instruction for the individual to perform his assigned tasks. (This is documented in BA memorandum JVH #1801185.)
- ° On January 21, 1985, the BA Manager of QA admonished the QA staff engineer for not explaining the reason for transfer and retraining. The QA staff engineer was notified that he did not have any supervisory responsibility over DRG and would not have any in the future. (This is documented in BA memorandum JVH #1801285.)
- ° On January 25, 1985, at the BA Q&TS staff meeting, communication with employees was stressed. It was explained that lack of communication is a common thread in complaints and allegations; in many cases it is the sole cause. It was also discussed that change of employee status will include the reason and will be discussed with the employee before the change takes place. (This is documented in BA Q&TS meeting notes for week ending January 25, 1985).

On January 29, 1985, the inspector met with the individual. The inspector explained that out of the 50 or so documents given to the NRC by him, the concerns were reduced to nine items as discussed in this report. The individual agreed that the nine items covered his concerns. The inspector explained the manner in which NRC conducts inspections/investigations, and the responsibilities imposed upon IP and BA for managing and constructing the plant. During the meeting the subject of SAFETEAM was discussed. The inspector explained the results of the inspection/investigation to date which showed that with the exception of some minor

points, his concerns were unfounded although BA was going to make some changes to their programs. After discussing the specific findings regarding his perception of intimidation and harassment he seemed to understand why certain things happened or did not happen. The inspector discussed the IP/BA actions described above. The individual stated that he did meet with BA management but did not recall being told why he was transferred to days for retraining.

During the meeting the individual gave the inspector another package. In it was a group of concerns about the night shift DRG including:

- ° apprehensiveness of reviewers to express concerns to management for fear of being transferred to day shift for retraining;
- ° dissatisfaction with the method of resolving DELs, that is, submitting memoranda to the DRG manager rather than directly to the DEL resolution group;
- ° 3 dissatisfaction with DEL resolutions as provided.

These matters were made known to IP management on January 30, 1985. Results of IP's actions will be reviewed during a subsequent inspection. These are considered as an open item (461/85-08-01).

Subsequent to meeting with the individual, the inspector learned that a meeting between the BA Manager of Quality and Technical Services and the individual would be held the evening of January 31, 1985, to specifically discuss the individual's need for retraining especially since he had documentation showing that on several occasions he acted in the Level III spot and currently was an assistant lead document reviewer. Results of that meeting will be reviewed and substantiated by the inspector. This is an open item (461/85-08-02).

On January 30, 1985, IP made presentations to all DRG shifts and departments reiterating ways employees have to express concerns or solve perceived problems including: their own local management, senior BA management, IP's SAFETEAM, hotline, and quality concern programs.

The foundation of any management corrective action program is the day-to-day involvement of supervisors at all levels of responsibility to ensure that matters adverse to quality are identified, trended, and analyzed and corrected to preclude recurrence. The inspector is convinced that the individual's terms of employment were changed to facilitate training because the individual had, over a period of time, performed his job in a way his management considered in need of retraining. The

chronology of events clearly shows that the decision to retrain the individual was not made because of his contact with NRC. There is no doubt that the individual felt intimidated by the actions which BA took; however, the matter was one of poor communications and management rather than intentional intimidation or harassment as defined by NRC rules and regulations.

This matter is closed.

- (2) (Closed) Allegation (RIII-84-A-0196-02) (#113): IP and BA management were aware of harassment and intimidation yet no disciplinary action was taken against the person responsible.

As previously reported, NRC determined that intimidation in the form of a threat or other action against one's person or employment for performing a quality function did not exist.

Notwithstanding that determination, it was also previously reported that the individual notified the site SAFETEAM on December 14, 1984, of several matters including harassment and intimidation. As part of an ongoing SAFETEAM investigation of the BA DRG, which commenced November 21, 1984, and ended December 27, 1984, the individual was interviewed along with 58 other DRG employees. As described in SAFETEAM report 00392 of January 7, 1985, SAFETEAM apprised the BA Assistant Manager of Q&TS of its findings in eight categories including intimidation. The investigation of intimidation involved several personnel including the individual and a QA staff engineer. The QA staff engineer was reported to have performed in a way that would intimidate most people; he yelled a lot. The report went on to say that proposed personnel changes by the Assistant Manager of Q&TS would rectify that situation. It was never stated that the QA staff engineer was responsible for intimidating the individual.

BA and IP personnel were interviewed by the inspector on January 16 and 17, 1985, to determine if they were aware of the individual's charges and if disciplinary action had been taken because of harassment and intimidation. Results of the interviews are as follows:

- ° The BA Manager of Q&TS was generally aware of the SAFETEAM investigation but not aware of the specifics regarding the individual's charges.
- ° The Assistant Manager of Q&TS was aware of the SAFETEAM investigation but stated he was not specifically aware of the details regarding the individual's charges. He stated that the reassignment of the QA staff engineer was directed by him and was not disciplinary nor related to the individual's charges of harassment and intimidation. The reassignment was made in order to better measure the QA staff engineer's performance and hold him accountable if goals and objectives were not met.

- ° The Manager of QA, the immediate supervisor of the QA staff engineer, was generally aware of the details of the SAFETEAM investigation and the details surrounding the reassignment of the staff engineer. The manager stated that the reassignment was not disciplinary but routine. The role of a QA staff engineer is to perform special projects as directed by the person whom he is supporting. In this case a reorganization within the DRG came about with the resignation of the Senior QA Engineering Document Reviewer. As previously stated, the QA staff engineer had been acting in that capacity and made the decision to transfer and retrain the individual. Because of the reorganization, the QA staff engineer is performing the duties of coordinating the efforts of subcontracted document reviewers.
- ° The QA staff engineer reiterated the details of the discussion between him and the lead RE, and the decision to retrain the individual. He stated that he did not have personal knowledge of the individual and made his decision based on the facts presented to him by the Lead RE. Being in the acting position of Senior QA Engineering Document Reviewer, he assumed that the individual's Level III would have informed the individual of the reason for the retraining, and the day shift Level III would inform the individual of the type of retraining required. According to the QA staff engineer, a brief meeting was held between the two Level IIIs and himself regarding this matter. He stated that, to his knowledge, his new assignment was routinely made and was not a disciplinary action.
- ° On January 15, 1984, the IP QA manager confirmed that he did not have any specific or general knowledge of the matters previously discussed.

Based on the above, it is concluded that the QA staff engineer's reassignment was routine and neither IP nor BA management considered the individual's reassignment to retraining a basis for disciplinary action against the QA staff engineer.

This matter is closed.

- (3) (Closed) Allegation (RIII-84-A-0196-03) (#113): Removal from inprocess final review activities preclude efforts to document "all" questionable conditions noted during review.

As described in items a. and b. above, the individual was transferred to the day shift for retraining on December 17, 1984. Formalized training is given on day shift only and takes approximately 40 hours to complete. Training consists of classroom, reading, and on-the-job. On-the-job training includes reviewing document packages just as was done on the night shift. The individual was not in any way precluded from performing a complete

review and noting all questionable conditions. After training was completed the individual remained on the day shift as a document reviewer and was transferred back to the night shift on January 16, 1985.

This matter is closed.

- (4) (Closed) Allegation (RIII-84-A-0196-04) (#113): During retraining, the individual was continually told that review of documentation is administrative, not technical.

During conversations with personnel in charge of retraining the individual it was confirmed that the individual was told that the review of documentation was administrative. As described elsewhere in this report, the BA/IP record review program has been determined by NRC to meet the requirements of ANSI N45.2.9. Within the context of that standard, the objective of the DRG is to authenticate BA construction documents, that is, determine if the documents are acceptable, complete, and ready for transfer as records to the IP vault. For the most part, before final review, the documents have been extensively reviewed by the architect engineer, site engineering, and various quality organizations for technical compliance to specifications, codes, standards, etc. Final document reviews are done according to checklists that have been prepared with reference to specifications, codes, standards, procedures, etc. As a result, the review tends to be more administrative than technical; however, technical reviews have not been precluded. Provisions have been made for document reviewers to identify perceived technical problems. Again, because of the checklist, the review is mainly an administrative verification that items are present or not present. All document reviewers have technical backgrounds and are otherwise certified to ANSI N45.2.6. It is expected that when a reviewer identifies a technical problem he document it to the best of his ability and forward it for resolution. Per BAP 2.1.1, "Verification of BA Records", if a significant quality related deficiency is identified, a nonconformance report should be prepared and handled in accordance with BAP 1.0, "Nonconformance Reports".

This matter is closed.

- (5) (Closed) Allegation (RIII-A-84-0196-05) (#113): DRG changed procedures and no longer requires supervisor's review of reviews and resolutions.

The allegation is fact. Revision 4 to BAP 2.1.1 removed the requirement for supervisors to review reviews and resolutions. BAP 2.1.1 states, "As each resolution is completed, DRG acceptance shall be documented by a Level II QAE (DRG) who initials

in 'Clearing Authority Block' opposite the resolution on the DEL." ANSI N45.2.6 requires that a Level II person have demonstrated capabilities in evaluating the validity and acceptability of inspection, examination, and test results. All DRG reviewers are certified in accordance with ANSI N45.2.6, including the individual.

This matter is closed.

- (6) (Closed) Allegation (RIII-A-0196-06) (#113): Neither IP nor BA have any intention of complying with the intent of IP's letter U-10189 to NRC.

The basis for NRC's involvement with DRG is the Confirmatory Action Letter of September 1, 1982. IP submitted their program to NRC on November 15, 1982, letter #0982-L; Revision 1, on January 20, 1983, letter #U-10025; and Revision 2 on September 26, 1984, letter U-10189, the letter of interest. The objective, purpose, and intent of IP's record verification program is to verify the acceptability of QA records applicable to the CPS. Acceptability means legible, completely filled out, and identifiable to the item involved; requirements identified in the purchase specification, and applicable codes and standards have been met; all documentation discrepancies have been resolved; and the records are ready for transfer to IP. None of the revisions changed the original intent.

Between IP and BA there are approximately 200 persons assigned to the final review of QA documents. NRC has performed several inspections in this area including 83-08, 83-16, 84-02, 84-30, and 85-03. Results have shown that several thousand document exceptions have been documented and satisfactorily resolved.

Based on the actions taken by IP and BA, such as establishing the program, expending the resources, and the results verified by NRC inspectors, it is concluded that both IP and BA are conducting an adequate document review program which exceeds the requirements of ANSI N45.2.9.

This matter is closed.

- (7) (Closed) Allegation (RIII-A-0196-07) (#113): There is and will continue to be the vaulting of BA safety related documentation with major technical deficiencies that do not comply with code, specification, or procedural requirements.

On November 12, 1984, the individual prepared a memorandum for his supervisor documenting a situation that resulted in the alleged vaulting of documentation which had unresolved discrepancies. According to the individual's account, he started a review on night shift of NCR 17399 that had four referenced

NCRs. The individual found what appeared to him to be discrepancies with the attached NCRs and prepared DEL A050996 for two of the four NCRs. Because it was the end of the shift the individual did not complete the DEL for the other two NCRs. He placed the package in the "overnite" file for completion on the following night shift. Because the record package was associated with a system soon to be turned over, the day shift completed the review. The day shift reviewer completed the review and determined that there were no exceptions and stamped the record "no exceptions" and forwarded it to the vault. The inspector discussed this matter with the night shift DRG Level III, the memorandum addressee, who said he informed his supervisor about the individual's concern but no apparent action was taken.

In addition to NCR 17399, the individual supplied the resident inspector 11 other documents that the individual in some way disagreed with, including:

DEL H051296  
DEL F045001  
NCR 70458, 70488  
DEL E044218  
DEL I054895  
DEL B045658  
DEL F043263  
DEL C024627  
DEL ??40781  
MISC ISPS-RT032-57

On January 16, 1985, the inspector referred the items to BA for review to determine the technical merits of the individual's concerns.

On January 29, 1985, the inspector reviewed results of the reviews as documented in BA memorandum CA-1123-85\*. The results showed that there were no hardware deficiencies identified; however, two items did require administrative corrections. The individual was correct in those cases; however, the matters if left "as is" did not present "a major technical deficiency". Several recommendations were made to improve DRG and Technical Services review of documentation to avoid confusion in the future.

There was one subject, the evaluation of bend hardness for two inch and under Type 316L tubing, which had not been resolved. In documentation given to the inspector on January 29, 1985,

\*Refer to Attachments 1 and 2 for the technical results.

the individual states that bend hardness had not been verified before January 17, 1985, and BA was not making an attempt to backfit all travelers that have been reviewed. This matter will be reviewed during a subsequent inspection and is an open item (461/85-08-03).

In addition, for DEL F045001, Resolution 2, the FSAR, Section 1.8, commits IP to Regulatory Guide 1.143, 1978, which recognizes the systems for handling liquid, gaseous, and solid radwaste materials as having limited impact on safety, that is, important to safety but not safety related. As such, the guide goes on to say that to ensure proper performance, the construction of such systems should be performed with a QA program such as one that meets ANSI N199-1976. The BA program exceeds that standard and is used for constructing the radwaste systems at Clinton. The radwaste system is NOT safety related but for purposes of BA's QA manual and program is, with stated exceptions, "considered" safety related. The drawing specified in Item 20 of the DEL was appropriately checked "non-safety related".

On January 28, 1985, the individual was notified by BA of the specific reasons why NCR-17399 had been correctly reviewed by another reviewer and properly stamped "no exceptions" as documented by BA memorandum JVH No. 803385. During the meeting on January 29, 1985, between the inspector and the individual, the individual agreed that the matter was satisfactorily resolved.

Based on the above, it is concluded that safety-related documentation is not being placed in the vault with major technical deficiencies.

This matter is closed.

- (8) (Closed) Allegation (RIII-A-84-0196-08) (#113): In some instances the allegor has been told cited conditions are outside scope of review checklist and not provided a justified resolution; sometimes documentation is redirected to other "unsuspecting" reviewers for subsequent acceptance. Examples include travelers FTP-DG-002 and ISPS-RT032-57.

It is accepted practice for a reviewing "organization" to accept/reject results of reviews, tests, or inspections, for example, Criterion III of 10 CFR 50, Appendix B. It is presumed that the reviewing "organization" is comprised of designated personnel that are trained and qualified to perform such duties; it is therefore not necessary for the preparer/identifier to perform the accepting function. It is also recognized that everyone has

opinions and different levels of acceptance. "Justified resolution" is a subjective phrase; however, BAP 2.1.1, "Verification of BA Records" requires discipline resolution to resolve discrepancies on DELs in a most objective way as follows:

- ° perform necessary research of codes, standards, procedures, project documentation, and hardware to determine resolution
- ° obtain copies of required backup documentation to support resolution
- ° initiate NCRs when a DEL item indicates a nonconforming condition
- ° document each resolution, including steps to correct or insert missing information as required, describe the required change/correction in the "Discipline Resolution" block, and obtain concurrence of Engineering, QA, QE, QC, and TS where applicable for such corrections or changes to the records or concurrence with the resolution.

If, after that, an "unjustified" resolution is received the reviewer is responsible for referring his concern to the lead QAE (DRG reviewer). In addition, both IP and BA have policies in place to deal with concerns related to quality matters that are not satisfactorily resolved. Personnel have direct access to the next higher level of management in the organization with ultimate direct access to the Chairman and President of Illinois Power and/or the Baldwin Associates Chairman of the Board of Directors. (Reference IP Nuclear Policy Statement dated May 9, 1984; and BA QA Manual Figure 0-3, Revision 11).

It was determined that traveler FTP-DG-002 did not exist and should probably have been FTP-DG-D002; however, it is a flush procedure performed by IP and would not have been reviewed by BA DRG.

Traveler ISPS-RT032-57 is addressed below and also in Item 12 of Attachment 2 to this report. The "unsuspecting" reviewer was very mature with many years experience and a registered professional engineer. He stated that he knew exactly what he was reviewing and knew there was nothing administratively or technically wrong with his review of traveler ISPS-RT032-57 or the hundreds of others he had reviewed.

This matter is closed.

- (9) (Closed) Allegation (RIII-84-A-0196-09) (#113): There is a direct conflict between Generic Resolution (GR) 10R/3 and 8aR/3 - 8bR/1, and the allegor has been told to not interface them because the conflict is beyond the scope of review. Subsequent to the inspection, on February 2, 1985, the individual sent a letter to NRC stating that GR 75, "Justification", is in conflict with the definition of "Final Documentation Review".

The inspector determined that all travelers, supporting inspection records, and referenced procedures are inspected by DRG for the same attributes including:

- ° verification that referenced procedures are included, correctly stated, and have appropriate revision status (reference GR 10R/3);
- ° signed off by Level I inspector and countersigned by Level II inspector (reference GR 8aR/2);
- ° signed off by appropriate individuals (reference GR 8bR/1).

The apparent conflict is that travelers and supporting documentation can have all signatures and countersignatures in place yet still have references that are missing, erroneous, or with incorrect revision status. The object of the DRG review is to verify that all signatures and references are correct and complementary. There is an apparent doubt in the mind of the individual about the reviews performed by a Level II QC inspector if there are discrepancies with referenced procedures, that is, how good could the inspection have been if the wrong procedure was used?

GR 10R/3 provides generic resolution for the type of discrepancies described. There is no need to interface GR 10R/3 with GRs 8aR/2 and 8bR/1. Each GR stands alone and addresses specific discrepancies; however, a DRG reviewer must review all aspects of a document package to appropriately complete his review. This matter was discussed between the inspector and the Level II responsible for retraining the individual. Through the discussions and by independent review, the inspector determined that the resolutions and justifications to resolve the problems described by the GRs were appropriate.

The problem of apparent conflict was discussed between the individual and the person responsible for retraining him; however, the individual did not discuss the apparent conflict with his management. He did bring it to the attention of the SAFE-TEAM on December 17, 1984.

The phrase "Final Document Review" is not specifically defined. BA Procedure BAP 2.1.1, "Verification of BA Records", has as its stated purpose "to examine all AS'E, safety-related, fire protection, and augmented D records for verifying they are completed in comparison to codes, standard, and procedures and are therefore acceptable as a quality record prior to transfer to IP." (A brief description of the Records Verification Program is given in Section 2b of this report.)

GR 75 is used with travelers and inspection checklists for piping hanger inspections without record of tool serial numbers and/or calibration due date specifically for Phase II hanger inspections done prior to September 24, 1982. Phase III inspections are now and have been considered "in-process" type inspections with ultimate hanger acceptability depending upon results of Phase III inspection. Phase III inspections determine the final acceptance and provide the documentation required by the BAQA manual. All Phase II items requiring the use of a calibrated tool are re-checked during Phase III inspections. Based on the above, there does not appear to be a conflict between GR 75 and "Final Document Review".

This matter is closed.

4. Open Items

Open items are matters that have been discussed with the licensee and will be reviewed further by the inspector, and which involve some action on the part of the NRC or licensee or both. Three open items were disclosed during this inspection as discussed in paragraphs 3.b.(1) and (7).

5. Exit Interview

The Region III inspector met with the licensee representatives (denoted under paragraph 1) at the conclusion of the inspection on January 31, 1985. The inspector summarized the purpose and findings of the inspection. The inspector stated that it was not the intent nor desire of the NRC to become involved with personnel problems relating to poor interpersonal relationships or management problems; however, when management actions or inactions are perceived by inspection personnel to be intimidating, NRC does get involved. The inspector further stated that there appeared to be a potentially serious management problem in the BA DRG. The licensee acknowledged the information.

Attachments:

1. List of Concerns from Allegation RIII-A-0196-07
2. Detailed Description and Resolution of Concerns from Allegation RIII-A-0196-07

ATTACHMENT #1

<u>Item</u>	<u>Document</u>	<u>Problem</u>
1	DEL A050996 (Memo to J. Taknersley 11-12-84)	NCR 17399 and references: Preheat and interpass temp. not verified. (Supposedly processed "No Exceptions" to Vault.)
2	DEL H051296	Disagree with resolutions 3 (QC) and 5 (PE)
3	DEL F045001 (2 items)	Disagree with resolutions 1 (TS) and 2 (PE)
4	NCR 70458, 70488	Do not agree with disposition. Is accepting NCR disposition beyond scope of DRG? Yes. If yes, where is it stated? Checklist GBC.
5	DEL E044218	Disagree with disposition to NCR 22012.
6	DEL I054895	Resolution (1), can't close out traveler with NCR which requires QA/DRG Final Review.
7	DEL B045658	Exceptions 1 & 2
8	DEL F043263	Disagree with resolution 3 (TS)
9	DEL C024627	Exceptions 3 & 4 (TS)
10	DEL ZZ40781	Disagree with resolution 3 (TS)
11	Misc.	Evaluate

## ITEM #1

Problem #1 - NCR 17399, BTSF-055, Area-4, Page 3 indicates that weld build-up was performed per NCR-14913. Review of NCR-14913, Page 4, BTSF-055, Weld 4A reveals that preheat and interpass temperatures were not verified by Technical Services (T.S.).

Evaluation: Problem as identified by DEL reviewer is correct. However, per Baldwin Procedure BTS-405 R/14 Paragraph 8.1, TS is required to verify preheat and interpass temperature at the time weld rod is documented on the Weld Repair Form (BTSF-055). When all welding is complete T.S. then signs the applicable block on the 055. Since T.S. felt that the weld build-up being performed to NCR-14913 would not allow for an acceptable ISI profile, they stopped all work and wrote NCR-17881. NCR-14913 was then closed out as nonconforming. Consequently, the 055 generated by NCR-14913 did not get completed. T.S. will not complete 055 due to nonconforming condition and did not document preheat and interpass temperature because the new NCR might have required more welding. NCR-17881 was dispositioned Use-As-Is for weld profile and rework the NDE. New BTSF 055 was generated to document NDE. At this time T.S. should have completed the sign-off for preheat and interpass temperature because no more welding was required. This step should have been placed on new 055 per NCR-17881. Processing of "Close Nonconforming" NCRs could have possibly caused this error. Therefore, the above is a documentation problem. Preheat and Interpass Temperature was verified for this joint.

Recommendation: New NCRs generated as a result of NCRs "Closed Nonconforming" shall be routed with the "Closed Nonconforming" NCR so that any work activities not completed on original NCR can be included on new NCR for T.S. to complete.

Corrective Action: Inform T.S. to review old work prior to preparing any new BTSF-055 so that any T.S. inspections that were not completed, can be placed on new documentation thus assuring all inspections are properly documented.

Problem #2 - Review of this NCR and I.P. finalized travelers RH-12-B and RH-12-L revealed no Post Weld Heat Treating for this weld repair.

Evaluation: PWHT is not required for this material type and size per ASME III-Subsection NB 4000 (12" SCH 100/SA-333 SMLS Grade 6 Class 1, 0.8444 nominal wall.)

Problem #3 - NCR-17399, Page-4, BTSF-055, Area 5 indicates that weld build-up for Area 5 was documented per NCR #14649. Review of this NCR revealed NO BTSF-055 for min/wall build-up.

Evaluation: BTSF-055 for NCR-14649 is attached to NCR 17399, Sheet #2.

Problem #4 - No record of PWHT could be located for the weld repair.

Evaluation: Same as for Problem #2.

## Item #2 (DEL #H051296)

DEL & Resolution #3: No documentation of inspection to cover bolt torquing. (JV-339-3, Item #3, BAP 2.10).

Resolution: No deficiency. Torquing of bolts is not required for traveler operations.

Evaluation: No torque required for these bolts. K-2841 only puts a size and material type restriction on carbon steel (3/8" Dia. minimum) and stainless steel (Type 304 or 316) bolts. Per BAP 2.10 Paragraph 5.4.2 G) and Attachment #5 Paragraph 1.4, these bolts are only kept snug tight.

DEL & Resolution #5: No traveler requirement to maintain traceability of manway inspection cover bolts and/or nuts. (NOTE: No QC documentation to indicate whether original material/items were re-installed and/or new nuts/bolts installed).

Resolution: QC sign-off of Step 3 indicates tank was closed properly. No new material was requisitioned, so the original material was re-installed. No requirement in traveler to document bolting material. Per Engineering evaluation, Quality not affected.

Evaluation: No traveler requirement for replacement of bolts and nuts. No indication that bolts were replaced. These bolts are all thread stud bolts used to secure manway cover to tank. When entry is required, nuts are loosened and the whole hold down bracket assembly is removed along with cover. They are then wired or tied to the cover. This was verified by QE - Systems Engineers upon inspection of Tank 1DG-01TB. No torque or material verification required.

## Item #3 (DEL F04 5001)

DEL & Resolution #1 - Purge not verified for welds number 12, 13, 14, 15. (JV-577, Page 1, Block - 8 Line 8) (BAP 2.26) (NOTE: H/P not deleted until 12-28-81.)

Resolution: Accepted per Generic Resolution 13 Rev. 2 Resolution A.

Evaluation: Resolution is correct as stated. Aug-D, Non-Safety work requires only final visual. This was determined after this traveler was prepared. Subsequently, purge Hold Points were deleted. See Generic Resolution 13 Rev. 2, Resolution A Paragraph C.

DEL & Resolution #2 - Drawing indicates Non-Safety, D- only. (BAP 2.26, Paragraph 2.1 Aug-D, Safety Related) (10CFR50, App-B, Criterion III)

Resolution: Aug-D is Non-Safety Related per K-2882, Section 113.

Evaluation: Resolution as stated is correct per K-2882 Section 113.

## Item #4 (NCR 70488)

Problem #1 - Do not agree with disposition.

Evaluation: Originally the wrong base material was identified on the traveler and subsequently the wrong WPS was used. However, the WPS used to weld the correct base material (A-575), N-1-1-A1-L, has the same variables as the correct WPS N-1-1-A-X. The NCR correctly states and resolves this problem.

Problem #2 - Is accepting NCR disposition beyond the scope of DRG? If yes, where is it stated?

Evaluation: Per conversation with A. MacDonald, Manager of DRG, NCR disposition review is beyond the scope of DRG. This is not stated formally however. DRG does use a review checklist (GBC) for reviewing PAD and Stand Alone NCRs. This only requires that all back-up documentation to support the NCRs are present and filled out correctly. NCRs contained within travelers do not get reviewed. (Disposition)

Recommendation: Have Manager of DRG issued memo to Department explaining the above.

## Item #5 (DEL E044218)

DEL & Resolution #1 - Insufficient instructions and documentation to indicate scope of rework activities. (i.e., - pipe welding, hanger welding, snubbers/swaystrut re-adjustment, flange connections, torquing, etc.)

Resolution: Per Engineering evaluation and IR No. M84-3323, the pipe was reworked to achieve correct pump alignment. Rework to the hangers that may of been required would be performed on TVLRS. H-SC-751-E Supp. 5, H-SC-751-J Supp2 and H-SC-751-H Supp 3 which were issued 8/10/84 to assist modification/restoration work for the Hydro. Quality not affected.

Evaluation: Instructions and documentation for the rework of the pipe were documented in Traveler HTP-SC-1 per Addendum #2. Deficiency was also noted in Traveler HTP-SC-751-B. NCR should not have been designated as a Stand Alone NCR. Stand Alone NCRs require that all documentation necessary to support the NCR disposition be attached per BAP 1.0 Rev. 14, Change B Paragraph 5.5 L), approved 8-20-84. IR attached to NCR refers to Traveler HTP-SC-1 and HTP-SC-751-B. Copy of completed NCR will be placed in traveler.

Recommendation: Re-instruct RE on the BAP requirement for Stand Alone NCRs.

## Item #6 (I054895)

DEL & Resolution #1 - HT# for head fitting not traceable per RIR. (IMC-45, HT.#345, Blk. 16, Page 2. Reference BAP 2.14.)

Resolution: NCR 70620 generated 1/2/35. Attached is copy of dispositioned NCR 70620.

Problem: Can't close out Traveler with NCR which requires QA/DRG Final Review.

Evaluation: NCR 70620 was identified as a Stand Alone NCR. Work will be documented on applicable IR's, Checklist, etc. and attached to the NCR. A separate DRG review will then be performed on the NCR per DRG Checklist GBC. NCR (copy) will then be put in traveler before it is sent to ANI.

## Item #7 (DEL B045658)

DEL #7 - Block 18, Item #3 not complied with. CMTR's not traceable to orifice plates. (Ref. Page 5 of NCR-70234) (NOTE: Page 24 applies to Block 16 only and is applicable to 3/4" orifice plates only ) (BAP 2.1.1)

DEL #2 - No QC/IR to indicate that Block 18, Item 3 disposition complied with. (Marking per Code) (BAP 1.0)

Evaluation: Block 27 of NCR 70234 notes that Item 3 of Block 18 can not be complied with. Consequently NCR 70270 was generated. Disposition of NCR 70270 downgraded all but four (4) plates to Class D. The four used were accepted per ECN 4543.

## Item #8 (DEL F043263)

DEL & Resolution #3 - Counterbore Reports - Calibration due date not recorded. (Pages 24 & 25) (BAP 2.5)

Resolution: Counterbore Reports are not controlled documents. (NO JV No.) info not required to be documented. Quality not affected.

Evaluation: Counterbore check performed by a BA Subcontractor (NDT Consultants, P.O. C44343). Therefore BAP 2.5 does not apply. UT instrument in question was calibrated on 7-8-83. Counterbore check performed on 7-21-83. Per NDT Consultants procedure 5-C-14 dated 7-1-82, calibration interval is every two (2) months. Also see 50:55E, 55-83-02.

## Item #10 (DEL C024627)

DEL & Resolution #3 - WPS N-1-1-BA-M violated 4th layer. (SMAW process required) (JV-488 Page 1, Block 11 A & B) (JV-488, Page 2, Block-12) (Note: 4th layer based on material thickness and wire diameter.)

Resolution: WPS N-1-1-BS is an acceptable procedure for materials used as an inert gas backing purge was used. WPS N-1-1-BA-M requires 4th layer build-up of E7018. However, WPS N-1-1-BA-M was not used. Procedure was not violated. Quality not affected.

## Item #10 Continued

DEL & Resolution #4 - Alternate WPS N-1-1-BS Note 4A improperly entered. (JV-488, Page 4, Block 20) (JV-488, Page 1, Block 11A) (Note: Entry made after weld performed) (BAP 2.14, Paragraph 5.2.2 Item-b3)

Resolution: Entry should have been made initially when weld procedure listed originally not performed. However WPS used is satisfactory for material specification. Quality not affected.

Evaluation: Previously, when alternate weld procedure (WPS) were used, it was allowed to enter the alternate WPS after welding. However this practice is no longer condoned. WPS is required to be referenced in traveler prior to welding. This was correctly identified by the DEL resolver. The alternate procedure used for this weld is acceptable for this pipe, Class (Class C), material type (P1) and size (.438 wall) without argon backing purge. This is the proper resolution for resolving DEL's.

Recommendation: Retrain T/S DEL resolver on WPS requirements for welding carbon steel Class C pipe, that no argon purge is required.

## Item #11 (DEL 40781)

DEL & Resolution #3 - Welder not certified GTAW process. (F\*191, S.D. Short) (JV-488, Block-12, W/S) (Welds 23Q1 and 24Q1) (N-1-1-BS R/10) (BTS-412)

Resolution: Welder F\*191 was qualified to weld GTAW process on 8-23-84. Invalid DEL item. Not a deficiency.

Evaluation: Weld F\*191, S.D. Short was qualified on 3-29-84 for GTAW and used the process on 5-16-84 and 7-19-84. Using 90 day requirement for extending qualification, he was qualified to use GTAW process for making welds per traveler on 8-23-84. Using the dates above, He's qualified up to 10-19-84.

ATTACHMENT #2

## Item #12 (Miscellaneous)

Seismic Cat. - I

Instrument Pipe Stand

Tvl/# 1SPS-RT032-57

(Containment Building)

Installation & Welding

Documented using BA Tvlr/Form JV-339 and QC Checklist JV-522

Ref. Trvl. Procedures:

(Page 3, Item II)

BAP 2.4 - Storage & Maintenance

BAP 2.7 - Housekeeping

BAP 2.10 - Equipment Installation

BAP 2.11 - Rigging & Hoisting

BAP 2.12 - Pipe Fab & Installation

BAP 2.16 - Expansion Anchors

BAP 3.5.12 - QC Inspection

Ref. Regulatory Guide 1.29

10CFR50 (B) Criteria V

Review of BAP 2.6, Instrumentation Procedure Page 4, Item 3, indicates that an "Instrumentation Hanger Installation Traveler" form JV-704 and JV-704.1 as required shall be utilized. Page 7, Item G) indicates that for containment hangers - A "Surveyors Verification of building attachment location" sign-off shall be provided on Form JV-704.

Problems are as follows:

1. Referenced procedures are not applicable to the scope work being performed.
2. QC Inspection Checklist (JV-522) does not address applicable "Instrumentation" inspection attributes.
3. Traveler (JV-339) does not provide for surveyor's verification of location as required by BAP 2.6.
4. Traveler (JV-339) leads QA-DRG-P/M Reviewer to utilize inappropriate "checklist" for final QA review. (MAF for equip. verses IDC for instrumentation.)

These problems were identified verbally to BA supervision in early November 1984. Their response was that this is the format BA chose to document seismic cat. 1 instrument pipe stands on, and that we would review these packages in accordance with the appropriate QA/DRG traveler checklist (MAF).

My response to their response was that I refused to review Cat. I refused to review Cat. I instrument pipe stands documented on equipment installation travelers. No objections were raised by my lead regarding my position. Traveler in question was subsequently given to another reviewed for processing.

## Item #12 (continued)

Evaluation: BA Resident Engineering has classified the instrument pipe stands as equipment, thus using BAP 2.10 for installation. As equipment surveyors verification is not required. BAP 2.6 does reference pipe stands. Paragraph 5.1c)3) establishes traveler numbering requirements and paragraph 5.6.3e) has requirements for location and orientation of the stands. Installation in accordance with BAP 2.10 sets traveler requirements for QC to verify that stands are located per BA Isometric Drawings. Travelers are numbered in accordance with BAP 2.6. Referenced procedures in pipe stand traveler are applicable to ensure adequate protection, handling, cleanliness, setting, anchor bolt installation, fabrication and QC inspection. Form JV-522 (QC mechanical traveler verification/inspection checklist) covers all necessary inspection attributes to ensure proper installation. DRG checklist "MAF" is satisfactory for traveler review.

Recommendation: Issue procedure change request to BAP 2.10 and insert the BAP 2.6 requirements for pipe stand traveler numbering and location/orientation criteria. Also have BAP 2.6 included in procedure reference section of BAP 2.10.