

# NATIONAL BOARD TASKS REPORT

Revision 23

SEPTEMBER 16, 1983

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NATIONAL BOARD  
TASKS REPORT  
REVISION 23 - EXECUTIVE SUMMARY

|       |  |    |
|-------|--|----|
| NBT-1 | Generic Design Specification   |    |
|       | CLOSED   |    |
| NBT-2 | Material Release by Non-Certificate Holders  |    |
|       | Current Status is updated; Schedule remains indefinite. HJK is still having difficulty obtaining documentation from Pullman-Kellogg and its suppliers.   | 23 |
| NBT-3 | Material Manufacture, Certification, and Supply  |    |
|       | Note under Current Status is updated to reflect re-audits being performed by HJK, however final acceptance of the audits is planned after results of forthcoming ASME audit. National Board action is pending audit results. | 23 |
| NBT-4 | CG&E Takeover of Partial Piping Systems  |    |
|       | Schedule is extended two weeks for review of CG&E implementing procedures; Current Status is updated.  | 23 |
| NBT-5 | Owner's ANI  |    |
|       | CLOSED   |    |
| NBT-6 | Catalytic's Modifications to Piping System   |    |
|       | CLOSED   |    |
| NBT-7 | State Acceptance of Containment Liner  |    |
|       | Action Plan, Schedule and Current Status have been changed to address the complete scope of the containment liner.   | 23 |
| NBT-8 | Vessel Modification by HJK   |    |
|       | No change in status. This task cannot be completed until the NRC Stop Work Order is lifted. Text, Action Plan, Schedule, and Current Status are deleted until that time.   |    |

NBT-9 Mandatory Preheat Requirements

CLOSED

NBT-10 Pumps and Valves to the 1968 Code

CLOSED

NBT-11 Shimming of Penetrameters

CLOSED

NBT-12 Overstress During Hydrostatic Tests

CLOSED

NBT-13 Improperly Stamped Flow Check Valves

No change in status. This task cannot be completed until the NRC Stop Work Order is lifted. Text, Action Plan, Schedule, and Current Status are deleted until that time.

NBT-14 Non-Code Components

Current Status is updated to reflect CG&E decision to replace Main Turbine Oil Coolers; Schedule is awaiting location of replacements.

23

NBT-15 As-Constructed Drawings

Current Status is unchanged; resolution of NRs on generic problems is still indeterminate. Resolution plan now includes activities under NBT-16.

23

NBT-16 Closure of NR's Prior to Stamping

Action Plan, Schedule and Current Status have been changed to reflect activities on management of NR Computer Data Base.

23

NBT-17 Issuance and Control of NR's

CLOSED

NBT-18 Review of Construction Procedures

CLOSED

NBT-19 Review of IIDR's

CLOSED



NBT-20 Temporary Change Notices

CLOSED

NBT-21 Qualification of NDE Personnel

Schedule is extended one week for completion of record reviews by Quality Assurance. Current Status is updated. | 23

NBT-22 Radiographic Weld Identification

No change in status; awaiting National Board Audit Team action. The National Board has indicated closure will be postponed until completion of walkdowns and as-constructed drawings.

NBT-23 Weld Procedures

No change in status; awaiting HJK action.

NBT-24 Weld Filler Metal

CLOSED

NBT-25 Generic NR's

Schedule is indeterminate; Current Status is updated to show HJK is performing the necessary procedure revisions. | 23

NBT-26 Data Reports for Piping Subassemblies

Resolution and Schedule will be provided by HJK by September 30, 1983. | 23

NATIONAL BOARD TASKS

| Task No. | Description                  |
|----------|------------------------------|
| NBT-1    | Generic Design Specification |

NATIONAL BOARD FINDINGS  
(Interim Report #1)

This task has been closed by the State of Ohio as of June 29, 1983. Refer to Revision 16 of this report for text.

## NATIONAL BOARD TASKS

| Task No. | Description                                 |
|----------|---|
| NBT-2    | Material Release by Non-Certificate Holders |

### NATIONAL BOARD FINDINGS (Interim Report #1)

"2.2 Cincinnati Gas and Electric Company procured piping subassemblies from M.W. Kellogg Company, ASME N-1251 NPT Certificate of Authorization number (now Pullman Power Products, Williamsport, Pennsylvania). As part of these purchase orders, M.W. Kellogg Company supplied loose material such as pipe, fittings, flanges, etc... The material was received by Kaiser and was accepted for release to construction based on a notification of release from CONAM, CG&E's source inspection Agency.

2.2.1 National Board considers this procedure for the release of material by Kaiser through CG&E and or CONAM, who do not hold N Certificates of Authorization to be in apparent nonconformance to Paragraph NA-4441, NA-4442."

### SUMMARY

All material (such as pipe, fittings, flanges, etc.) which was received by Kaiser, should have been accepted for release based on their own inspection and review, and not based on reviews by others, because Kaiser is the responsible Certificate Holder.

### CG&E RESPONSE (Interim Report #1, Item 2.2)

"The Henry J. Kaiser (HJK) Quality Assurance Program requires HJK to perform receipt inspection on all Code material used or installed under the HJK QA Program. HJK will review all material documentation for acceptance in accordance with their ASME QA Program. Any nonconforming material identified will be documented on Nonconformance Reports and properly dispositioned. Receipt inspection by HJK will be performed on all incoming Code material."

### STATE OF OHIO COMMENTS (Interim Report #1, Item 2.2)

"Documentation should be given to the National Board Audit Team in order that they may verify that it complies with the code. Acceptable."

ACTION PLAN

- HJK: a. Review documentation to assure that all material received from M.W. Kellogg was reviewed and accepted by Kaiser based on HJK receipt inspections.
- b. Identify any material which is determined to be unacceptable or of indeterminate quality. The method of identification shall be in accordance with the HJK Quality Assurance Program and acceptable to the jurisdictional and regulatory authorities.
- S&L: Revise Piping Design Specification to identify material specifications of later Code Editions and Addenda that are acceptable and reconcilable with the Design/Stress Report.
- RFR: a. Review the results of the HJK actions for items "a" and "b" above.
- b. Review revision to Piping Design Specification.
- CG&E: a. Monitor the above HJK activities for items "a" and "b" above.
- b. Review and approve revision to Piping Design Specification.
- c. Present the results of the above activities to the National Board and the State of Ohio.

SCHEDULE

| <u>Responsibility</u> | <u>Estimated Completion</u> | <u>Actual Completion</u> |
|-----------------------|-----------------------------|--------------------------|
| <u>HJK:</u> a.        |                             | November 11, 1982        |
| b.                    | No date available from HJK  |                          |
| <u>S&amp;L:</u>       |                             | March 22, 1983           |
| <u>RFR:</u> a.        | Awaiting HJK action         |                          |
| b.                    |                             | March 31, 1983           |
| <u>CG&amp;E:</u> a.   | Awaiting HJK action         |                          |
| b.                    |                             | March 31, 1983           |
| c.                    | Awaiting HJK action         |                          |

CURRENT STATUS

HJK: a. Completed.

b. Closure of CAR 416 and CAR 455 is expected in mid October. Additional documentation is still required and is being sought from Pullman-Kellogg and CG&E. | 23

S&L: Completed.

RFR: a. Awaiting HJK action.

b. Completed.

CG&E a. Awaiting HJK action.

b. Completed.

c. Presentation of documentation review is awaiting completion by HJK.

NATIONAL BOARD TASKS

| Task No. | Description                                     |
|----------|---|
| NBT-3    | Material Manufacture, Certification, and Supply |

NATIONAL BOARD FINDINGS  
(Interim Report #1)

"2.3 CG&E, in some cases, refused to allow Henry J. Kaiser Company to perform qualification surveys of material manufacturers. CG&E insisted that only they (CG&E) could approve whom Kaiser was to qualify. In some instances Kaiser was required to place material manufacturers on the Approved Vendors List based on CG&E's "personal experience" or by virtue of appearing on the Case Register.

2.3.1 The National Board Audit Team considers this procedure to be an apparent non-conformance to ASME Code requirements. Paragraph NA3451, Subarticle NA-3110 specifically states that responsibilities set forth in Section III relate only to Code compliance and not to contractual relations or legal liabilities. Cincinnati Gas and Electric Company must cease preventing Kaiser from the performance of those Code activities which are required to be performed by Kaiser's Certificate of Authorization."

NATIONAL BOARD FINDINGS  
(Interim Report #1)

"3.2 Purchase Order 7070 22506 (and further documented on Nonconformance Report No. #E3633R1) was released to:

LaBarge, Inc.  
Tubular Division  
20 South Fourth Street  
St. Louis, Missouri 63102

to supply 20' 2-1/2" Sch. 40 SA 106 Gr B ASME Section III Cl 1 pipe and 220" 4" Sch. 40 SA 106 Gr B ASME Section III Cl 1 pipe. HJK required: 'All material contained in this order shall be manufactured by J&L Steel Corporation, Aliquippa and Pittsburgh, Pennsylvania, a purchaser-approved supplier.'

3.2.1 There is no record of a J&L Steel Corporation, Pittsburgh, Pennsylvania, Vendor Survey, nor does J&L Steel Corporation, Pittsburgh, appear on any HJK AVL.

- 3.2.2 The J&L Steel Corporation CMTR for Mill Order #263 556674 does not identify which plant, Aliquippa or Pittsburgh, manufactured this material.
  - 3.2.3 20' of 2 1/2" SA 106 Gr B pipe was manufactured by Youngstown Sheet & Tube Company and not J&L Steel as required by this purchase order.
  - 3.2.4 Material was manufactured prior to any HJK Vendor surveys of either Youngstown Sheet & Tube Company or J&L Steel Corporation.
  - 3.2.5 CMTR's are not certified as meeting the special requirements of NB-2000.
  - 3.2.6 Ultrasonic examination required by NB-3350 was performed by Industrial Testing Laboratories, Inc. for LaBarge, Inc. and would appear to be invalid in that this NDE company does not appear on any HJK AVL as a supplier of Nondestructive Examination.
  - 3.2.7 The material reported on the CMTR for heat #31582 appears to have been shipped from Youngstown to LaBarge on or about February 27, 1976, on truck #PIE 28114. Approximately fifteen (15) months prior to the release of this HJK purchase order, this material does not carry any type of certification to Section III requirements, and the pipe was manufactured about three (3) months prior to Youngstown's being placed on HJK AVL. In addition, we do not have copies of LaBarge purchase documents used to acquire this pipe.
- 3.3 It is the opinion of the National Board Audit Team that disposition "Accept As Is" documented NR No. E3633 R1 appears invalid based on the above-listed apparent non-conformance with Section III requirements. The National Board Audit Team shall be provided with documentation to assure this material was manufactured and purchased in accordance with Code Quality Assurance requirements, alternatively or removed. Acceptable documentation shall be in the form of the following:
- 3.3.1 LaBarge purchase and receiving documents for material provided on the P.O.



- 3.3.2 Certification provided by Youngstown Sheet & Tube and J&L Steel that Section III requirements, except UT were met.
- 3.3.3 The National Board Audit Team further believes that a thorough evaluation of all HJK P.O.'s to LaBarge (as a supplier of Nuclear Quality Material) shall be made.
- 3.4 Kaiser P.O. 7070-17688 dated June 22, 1976 for Carbon Steel SA106 GR B ASME Section III CL2 was purchased through LaBarge Tubular Division, St. Louis, Missouri. This material was manufactured by Gulf States Tube Corporation, Rosenberg, Texas sometime prior to November 25, 1974 and February, 1975. Gulf States Tube Corp. is listed on HJK's AVL, approved date September 28, 1976. The National Board Audit Team noted the following:
  - 3.4.1 The material reported on the CMTR for Heat #KA-2097 appears to have been shipped from Gulf States Tube Corp. on or about November 25, 1974, approximately one year and seven months prior to the release of this HJK P.O. and one year and ten months prior to this organization's being placed on the HJK AVL.
  - 3.4.2 The material reported on the CMTR for Heat #HA-0001 and #HA-0005 appears to have been shipped from Gulf States Tube Corp. on or about February, 1975, approximately one year and four months prior to the release of this HJK P.O. and one year and seven months prior to this organization's being placed on the HJK AVL.
  - 3.4.3 This material does not carry any type of certification to Section III requirements.
- 3.5 The National Board Audit Team shall be provided with documentation to assure that this material was manufactured and purchased in accordance with Code Quality Assurance requirements. Acceptable documentation shall be in the form of the following:
  - 3.5.1 LaBarge purchase and receiving documents for the material provided on this P.O.  
  
Certification provided by Gulf Sates Tube Corp. that Section III requirements were met.
- 3.6 One additional problem noted during this review was: Material identified by Heat #KA2097 was shipped to



LaBarge Tubular Division, 121 East Koeln, St. Louis, Missouri. This supplier/warehouse facility does not appear on HJK's AVL.

- 3.7 The National Board Audit Team believes that similar problems exist in all Section III materials provided by LaBarge and possibly other suppliers. This shall be resolved by HJK."

#### SUMMARY

1. All material purchased by HJK must be received from Material Manufacturers who have been qualified by HJK as meeting applicable requirements of the Code.
2. Documentation for all material used by HJK must be reviewed to assure all Code requirements have been met.
3. Documentation for material purchased by HJK and any associated NR's must be available for National Board review.
4. Documentation of HJK's evaluations of Material Manufacturers shall be made available for National Board Review.
5. CG&E must not perform any Code responsibilities assigned to a Certificate Holder.

#### CG&E RESPONSE

(Interim Report #1, Item 2.3)

"Cincinnati Gas & Electric understands that the Code responsibility for qualification of Material Manufacturers is a responsibility of the ASME Certificate Holders. HJK will assure that the Material Manufacturers for Code materials have a QA Program meeting the requirements of NX-2600 (Section III, Summer 1973 Addenda). CG&E will not assume the HJK responsibilities for the performance of any Code activities required by the Code to be performed under the HJK Certification of Authorization.

A special task force has been formed to evaluate purchases made from suppliers that were not listed on HJK's Approved Vendors List. The vendors are being identified and Nonconformance Reports written as part of the document review process. There is no longer a requirement for HJK to obtain CG&E approval to perform vendor surveys. Both organizations are cooperating to clear up all deficiencies involving unapproved suppliers.

As of July 28, 1982, approximately 98% of the purchases made from vendors not listed on the AVL have been evaluated. This evaluation has identified 33 vendors not appearing on the AVL at the time of procurement, resulting in 62 Nonconformance Reports.

Final disposition and acceptance has been completed on two of the Nonconformance Reports."

STATE OF OHIO COMMENTS ON CG&E RESPONSE  
(Interim Report #1, Item 2.3)

"Task Force should meet with the National Board Audit Team and report on progress and identify NCR's generated on this subject and their disposition. Your response acceptable."  
(Also see below.)

CG&E RESPONSE  
(Interim Report #1, Item 3.2)

- "3.2.1 The material was manufactured by J&L Steel Corporation, Aliquippa. The Pittsburgh location should not have been listed in the HJK purchase order for this material.
- 3.2.2 The number 263 on the mill order is the J&L Steel Corporation identification number for the plant. In addition, the Pittsburgh plant of J&L does not produce pipe material. This information is to be documented by J&L Steel Corporation and a copy will be available to the National Board for review.
- 3.2.3 The Purchase Order has been amended to provide that the material was to be furnished by Youngstown Sheet & Tube Company who has been on the HJK Approved Vendors List.
- 3.2.4 LaBarge will be requested to assure that both Youngstown Sheet & Tube Company and J&L Steel Corporation meet the requirements of NX-2600, Summer 1973 Addenda.
- 3.2.5 All material ordered and received on Purchase Order 7070-22506 has been reviewed and accounted for and none of the material has been used in Class I piping systems. Wherever any of this material is to be used on ASME Class 2 or 3 piping systems, HJK will assure that the requirements of NC/ND-2000 have been met for the material. This material will not be used on Class I piping systems unless the material test reports can be certified per the requirements of NB-2000.
- 3.2.6 In the event that the Industrial Testing Laboratory cannot be qualified, then HJK will not use

the material which had been ultrasonically examined by Industrial Testing Laboratories in any ASME Class I piping system.

- 3.2.7 HJK has requested that LaBarge provide their purchase and receiving documents for all materials provided on this purchase order and the documentation that the requirements of Section III were met."

STATE OF OHIO COMMENTS ON CG&E RESPONSE  
(Interim Report #1, Item 3.2)

"Meeting with National Board Audit Team should be held to review HJK procedures and progress report on the subject of material verification and certification. In addition Task Force should present to the National Board Audit Team all NCR's and their final disposition. Acceptable." (Also see below.)

CG&E RESPONSE  
(Interim Report #1, Item 3.3)

"The Authorized Nuclear Inspector (ANI) will be provided with documentation that the material was manufactured and purchased in accordance with the requirements of Section III. The disposition will follow the National Board guidelines above."

STATE OF OHIO COMMENTS ON CG&E RESPONSE  
(Interim Report #1, Item 3.3)  
(See below.)

CG&E RESPONSE  
(Interim Report #1, Item 3.4)

"The material in question shall be documented on an NR and action will be taken to assure that the requirements of NX-2000 have been met."

STATE OF OHIO COMMENTS ON CG&E RESPONSE  
(Interim Report #1, Item 3.4)  
(See below.)

CG&E RESPONSE  
(Interim Report #1, Item 3.5)

"The ANI will be provided with the documentation to assure the material was manufactured in accordance with the Code requirements of NX-2000."

STATE OF OHIO COMMENTS ON CG&E RESPONSE  
(Interim Report #1, Item 3.5)  
(See below.)

CG&E RESPONSE  
(Interim Report #1, Item 3.6)

"The address given for LaBarge is the address of a shipping point for route deliveries from the Material Manufacturer and does not have an effect on HJK's review of the LaBarge tubular division."

STATE OF OHIO COMMENTS ON CG&E RESPONSE  
(Interim Report #1, Item 3.6)  
(See below.)

CG&E RESPONSE  
(Interim Report #1, Item 3.7)

"HJK shall assure that all materials provided by LaBarge meet the requirements of Section III, NX-2000. Also, other suppliers shall be reviewed to see if similar problems exist and the appropriate resolutions will be addressed.

HJK has committed to perform a full scale review of all Section III Purchase Order Documentation, with the first priority being LaBarge. This review has already begun, and will be completed with all deficiencies resolved.

As of this date 110 ASME Purchase Orders involving 40 different companies have been identified. Nonconformance Reports have been written due to the AVL problems on ASME Purchase Orders and the HJK AVL Task Force has the primary responsibility to perform the research required to disposition these NR's."

STATE OF OHIO COMMENTS ON CG&E RESPONSE  
(Interim Report #1, Item 3.7)  
(See below.)

STATE OF OHIO COMMENTS  
(Interim Report #1, Items 2.3, 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7)

"The National Board Audit team has reviewed the documentation presented and while we have agreed, with reservations, with the proposed methods of correcting these deficiencies at this time these findings cannot be closed out for the following reasons.

1. The National Board questions the validity of audits #17, 18, 19, 21, 22, 23 and 24. From the review of these audits it appears that the only criteria used to qualify these manufacturers was records of calibrated tensile machines. The National Board Audit Team is of the opinion, that the manufacturers Q. C. system must have also provided for procedures for I.D. of heat traceability, during the heating and melting practice and identification of traceability during the testing of coupons. Also the quality program should have been documented in a manual.

2. Henry J. Kaiser has stated that no material procured through LaBarge was used in ASME Class 1 Systems. However, the matrix presented to the National Board Audit Team in many cases only identifies material to a system and not an individual ISK or PSK. The systems identified do have Class 1 requirements (per piping line list).
3. The National Board Audit Team cannot at this time make any meaningful review of the presented documentation until it is identified to a specific PSK or ISK.
4. In addition, in many instances the matrix referenced above also identifies multiple heat numbers.
5. The National Board also is of the opinion that given the fact that these audits are being performed several years after the fact they must be comprehensive and complete including the statement by the material manufacturer.

If the above concerns can be satisfied the National Board Audit Team will be in a position to make a further review of the findings and we will inform you as to the acceptability of the corrective action."

#### ACTION PLAN

- HJK:
- a. Review documentation of all material (not subassemblies) purchased and installed by HJK.
  - b. Small bore piping (2" nps and less).
    1. Determine whether Material Manufacturers were qualified in accordance with the HJK QA Program.
    2. If not on HJK AVL, assure Material Manufacturers met the requirements of NX-2610 Winter '75 Addenda.
  - c. Large bore piping (over 2" nps).
    1. Determine whether Material Manufacturers were qualified by HJK in accordance with QA Program.
    2. If not on HJK AVL, assure Material Manufacturers met the requirements of NX-2610, Summer '73 Addenda.
    3. Exempt backing rings from NX-2000 on the basis of NX-2121(e) in the Summer '77 Addenda and Interpretations III-1-77-208 and III-1-79-69.



- d. Where material does not comply with Code or applicable Code Cases, material is to be dispositioned in accordance with HJK QA Program, or by other methods acceptable to the jurisdictional and regulatory authorities.
- e. Assure documentation of all HJK material NR resolutions (see item (d) above) is available to the National Board.
- f. Respond to State of Ohio comments of December 8, 1982.
- g. Verify that no LaBarge material has been installed in ASME III, Class 1 systems.

S&L: Revise Design Specification to allow the use of NX-2610, Winter '75 Addenda and NX-2121(e), Summer '77 Addenda.

- RFR:
- a. Review HJK actions "a" through "g" above.
  - b. Review Design Specification changes.
  - c. Review HJK response to State of Ohio comments.

- CG&E:
- a. Assure that all Material Manufacturers used by HJK are also on HJK AVL.
  - b. Assure all HJK material evaluations are available to the National Board.

#### SCHEDULE

| <u>Responsibility</u> | <u>Estimated Completion</u> | <u>Actual Completion</u> |
|-----------------------|-----------------------------|--------------------------|
| <u>HJK:</u> a.        |                             | October 15, 1982         |
| b.1                   |                             | October 15, 1982         |
| b.2                   |                             | November 4, 1982         |
| c.1                   |                             | October 15, 1982         |
| c.2                   |                             | November 4, 1982         |
| c.3                   |                             | October 25, 1982         |
| d.                    | Pending                     |                          |
| e.                    |                             | January 27, 1983         |
| f.                    |                             | January 27, 1983         |

|                  |    |                  |
|------------------|----|------------------|
|                  | g. | March 9, 1983    |
| <u>S&amp;L:</u>  |    | October 25, 1982 |
| <u>RFR:</u>      | a. | January 27, 1983 |
|                  | b. | December 7, 1982 |
|                  | c. | January 27, 1983 |
| <u>CG&amp;E:</u> | a. | Pending          |
|                  | b. | January 27, 1983 |

CURRENT STATUS

HJK:

- a. Completed.
- b. Completed.
- c. Completed.
- d. Final resolution of NR's pending National Board and State of Ohio approval of historical qualification of vendors.
- e. Awaiting National Board review.
- f. Awaiting National Board comments.
- g. Completed. NR-E-10764 QD issued on single occurrence. NR has been dispositioned for removal of the material.

S&L: Completed.

RFR: Completed.

CG&E:

- a. Awaiting National Board review.
- b. Completed.

Note: The National Board Audit Team has reported that no action will be taken on this item at this time. HJK is re-auditing sixteen (16) vendors, as committed to the ASME; fourteen (14) are complete at this time. Audit reports and documentation will be reviewed by CG&E and the National Board Audit Team.

NATIONAL BOARD TASKS

| Task No. | Description                             |
|----------|---|
| NBT-4    | CG&E Takeover of Partial Piping Systems |

NATIONAL BOARD FINDINGS  
(Interim Report #1)

- "2.4 CG&E has a procedure, ADMIN-3, Rev. 0, 2/21/80, "Performing Construction on Systems/Areas under EPD Control: (Electrical Production Department). This procedure has been implemented to allow CG&E to take over piping systems which are still within the jurisdiction of HJK and are not completed or covered on an N-5 Data Report Form.

CG&E then directs the performance work on these systems or portions of systems, which in some instances may include the removal of or addition of welds. In some cases this work has been done with the use of HJK craft, but neither HJK QA or the ANI has been involved in the activities or review of proposed activities. Further, there is the possibility that there have been no records kept of weld material or piping material which may have been used to make these system modifications.

- 2.4.1 It is the opinion of the National Board Audit Team that this is an unacceptable practice. This also is in conflict with NA-3440, NA-3451, NA-3460, and the specific requirements of Interpretation III-1-77-159, dated June 30, 1978. The National Board Audit Team is of the opinion that until such time that an N-5 has been completed, piping systems that are to be Code symbol stamped must remain in the custody of the NA Certificate Holder.

Further, any modifications or changes to these systems shall be made under the requirements of the QA program of the NA Certificate holder who is responsible for executing the N-5 Data Report.

All turnover packages and associated documents involving modified Code piping systems shall be reviewed to assure that no Code work has been performed by other than the holder of an appropriate Certificate of Authorization and that this modification was properly reconciled with the design specification and documented final record package."



SUMMARY

1. Portions of piping systems are being turned over to others prior to the completion of a partial N-5 Data Report Form.
2. CG&E may be directing some additional Code work on these systems.
3. Possibly there are no records of welding material or piping material used for these piping system modifications.
4. The provisions of NA-3440, NA-3451, and NA-3460 and Interpretation III-1-77-159 must be met.
5. All modifications must be performed by a Certificate Holder and documented on an N-5 Data Report Form.

CG&E RESPONSE

(Interim Report #1, Item 2.4)

"CG&E recognizes that Code piping systems must remain in the custody of the NA Certificate Holder until an N-5 Data Report Form has been completed by the Certificate Holder. With regard to the Code piping systems at the Zimmer Station, all modifications or changes shall be made under the requirements of the QA Program of HJK or another N-type Certificate Holder authorized for the Zimmer site.

The provisions of ASME Code Interpretation III-1-77-159, dated June 30, 1978 shall be followed.

All turnover packages and associated documents involving modified Code piping systems shall be reviewed to assure that no Code work has been performed by other than the holder of an appropriate ASME Certificate of Authorization and that modifications are properly reconciled with the Design Specification and Stress Report or calculations and documented in the final record package."

STATE OF OHIO COMMENTS ON CG&E RESPONSE

(Interim Report #1, Item 2.4)

"Turnbacks to remain in custody of "NA" Certificate Holder until N-5 is completed. You refute this statement by saying "or another N-type Certificate Holder." When and how will the review of all turnover packages and associated documents involving modified piping systems occur, be reconciled with design specification and documented, and final records packaged? How are you monitoring this now? Acceptable provided the NB Audit Team is properly advised."

ACTION PLAN

- HJK:
- a. Run a pilot N-5 to determine the best system for N-5 compilation.
  - b. Finalize N-5 Data Report procedures (ZAPO-6, QRM-1, QRM-13, MCP-1, and MIP-1).
  - c. Demonstrate the N-5 Data Report procedures to assure HJK accountability for ASME III work to be certified by HJK.
  - d. Develop procedure or revise ZAPO-6 for HJK maintaining administrative control of partially completed piping systems during CG&E pre-op testing.
- CG&E:
- a. Determine whether CG&E or any other non-Certificate Holders performed any Code work on partially completed piping systems.
  - b. Develop a procedure or revise existing procedures for performing pre-op testing on piping systems under HJK administrative control prior to completion of the N-5 Data Report.
  - c. Review procedures related to control of partially completed piping systems with the National Board.
  - d. Documentation of work orders reviewed, review of bolting material per MCP-7, and HJK documentation of review associated with N-5 procedure will assure that work performed by others is identified. Documentation of work orders reviewed and MCP-7 to be presented to the National Board.
- RFR:
- a. Assure that the above HJK procedures comply with the requirements of the Code.
  - b. Review CG&E pre-op procedure for compatibility with the Code.

SCHEDULE

| <u>Responsibility</u> | <u>Estimated<br/>Completion</u> | <u>Actual<br/>Completion</u> |
|-----------------------|---------------------------------|------------------------------|
| <u>HJK:</u> a.        |                                 | February 21, 1983            |
| b.                    |                                 | August 12, 1983              |
| c.                    |                                 | June 15, 1983                |
| d.                    |                                 | March 4, 1983                |
| <u>CG&amp;E:</u> a.   |                                 | November 9, 1982             |
| b.                    |                                 | March 29, 1983               |
| c.                    | September 30, 1983              | 23                           |
| d.                    |                                 | February 23, 1983            |
| <u>RFR:</u> a.        |                                 | August 18, 1983              |
| b.                    |                                 | February 9, 1983             |

CURRENT STATUS

|                     |   |    |
|---------------------|---|----|
| <u>HJK:</u> a.      | Completed.  |    |
| b.                  | Completed.  |    |
| c.                  | Completed.  |    |
| d.                  | Completed.  |    |
| <u>CG&amp;E:</u> a. | Completed.  |    |
| b.                  | Completed.  |    |
| c.                  | CG&E procedure will be reviewed with National Board beginning September 19, 1983. | 23 |
| d.                  | Completed.  |    |
| <u>RFR:</u> a.      | Completed.  |    |
| b.                  | Completed.  |    |

NATIONAL BOARD TASKS

| Task No. | Description |
|----------|-------------|
|----------|-------------|

|       |             |
|-------|-------------|
| NBT-5 | Owner's ANI |
|-------|-------------|

This task has been closed by the State of Ohio as of April 28, 1983. Refer to Revision 14 of this report for text.

NATIONAL BOARD TASKS

Task No.

Description

NBT-6      Catalytic's Modifications to Piping Systems

This task has been closed by the State of Ohio as of March 7, 1983. Refer to Revision 9 of this report for text.

NATIONAL BOARD TASKS

| Task No. | Description                           |
|----------|---------------------------------------|
| NBT-7    | State Acceptance of Containment Liner |

NATIONAL BOARD FINDINGS  
(Interim Report #1)

"2.7 The containment vessel apparently is within the scope of the State of Ohio Boiler and Pressure Vessel law regarding construction, inspection, and stamping, and there is no evidence of compliance with these requirements.

2.7.1 It is the opinion of the National Board Audit Team that CG&E contact the Boiler Pressure Vessel Division of the State of Ohio for possible resolution."

SUMMARY

There is no evidence that the containment vessel meets the State of Ohio Boiler and Pressure Vessel Law.

CG&E RESPONSE  
(Interim Report #1, Item 2.7)

"Mr. E. A. Borgmann has made arrangements with Chicago Bridge & Iron Co. to provide liner Data Report Forms, nondestructive examination records, and inspection records, procedures and material documentation. These records will be available for review by the National Board at the Zimmer site."

STATE OF OHIO COMMENTS ON CG&E RESPONSE  
(Interim Report #1, Item 2.7)

"National Board to receive documentation for review within two weeks -- is satisfactory progress."

ACTION PLAN

|                  |  |    |
|------------------|--|----|
| <u>CB&amp;I:</u> | Provide Data Reports, NDE records, inspection records and material documentation to CG&E.  |    |
| <u>RFR:</u>      | Assist in presenting CB&I information to the National Board and the State of Ohio as requested by CG&E.                              |    |
| <u>CGE:</u>      | Present CB&I records to State of Ohio.   |    |
| <u>CGE/HJK:</u>  | Resolve and complete modification package format; assemble and review documentation on balance of HJK work on the containment liner. | 23 |
| <u>HJK:</u>      | Resolve all NR's and deficiencies.   |    |
| <u>CGE:</u>      | a. Present to National Board and State of Ohio.  | 23 |
|                  | b. Make RCI records on liner penetrations for CRD system available to the National Board.  | 23 |

SCHEDULE

| <u>Responsibility</u> | <u>Estimated Completion</u> | <u>Actual Completion</u> |
|-----------------------|-----------------------------|--------------------------|
| <u>CB&amp;I:</u>      |                             | December 2, 1982         |
| <u>RFR:</u>           |                             | December 2, 1982         |
| <u>CG&amp;E:</u>      |                             | December 2, 1982         |
| <u>CG&amp;E/HJK:</u>  | November 14, 1984           |                          |
| <u>HJK:</u>           | No schedule at this time    |                          |
| <u>CG&amp;E:</u>      | No schedule at this time    |                          |

| 23

CURRENT STATUS

|                      |   |    |
|----------------------|---|----|
| <u>CB&amp;I:</u>     | This portion of this task has been closed by the State of Ohio as of April 28, 1983. State witnessing of primary containment pressure test is still required.   |    |
| <u>RFR:</u>          | Completed.  |    |
| <u>CG&amp;E:</u>     | Completed. CB&I portion closed by State of Ohio as of April 28, 1983. Primary containment pressure test not scheduled.  |    |
| <u>CG&amp;E/HJK:</u> | HJK review of modification packages is on schedule. Balance of HJK work on containment liner has been initially defined, to be confirmed by as-constructed inspection. Schedule for review of balance of documentation has estimated completion of December 30, 1983, for HJK and January 1, 1984, for CGE. | 23 |
| <u>HJK:</u>          | Schedule for resolution of NRs and deficiencies on liner modifications is not available at this time. Complete review of all HJK containment liner work is to being November 1, 1983; deficiencies in schedule for resolution not known at this time.   | 23 |
| <u>CG&amp;E:</u>     | Awaiting HJK completion. Review of HJK documentation will be performed as they are completed by HJK. RCI documentation on liner penetrations for CRD system will be made available to the National Board.   | 23 |

NATIONAL BOARD TASKS

| Task No. | Description                |
|----------|----------------------------|
| NBT-8    | Vessel Modification by HJK |

SUMMARY

Modification of the Standby Liquid Control Tank was not made as originally specified and approved. Additionally, it must be shown that the ANI inspected the modification, witnessed the hydrostatic test and completed the required Data Report Form.

Note: The text of this task has been removed from the National Board Tasks Report and will be reprinted when the NRC Stop Work Order has been lifted and the vessel modification can resume. Refer to Revision 7 of this report for text.

Due to the Stop Work Order currently in effect at the Zimmer site the Standby Liquid Control Tank modification cannot be completed. Actions to date include finalization of necessary calculations, authorization by General Electric and approval by the State of Ohio. The National Board has determined that the stated concern will remain open until the vessel modification has been completed and the Data Report filed.



NATIONAL BOARD TASKS

| Task No. | Description                    |
|----------|--------------------------------|
| NBT-9    | Mandatory Preheat Requirements |

This task has been closed by the State of Ohio as of July 22, 1983. Refer to Revision 19 of this report for text.

NATIONAL BOARD TASKS

| Task No. | Description                       |
|----------|-----------------------------------|
| NBT-10   | Pumps and Valves to the 1968 Code |

This task has been closed by the State of Ohio as of March 7, 1983. Refer to Revision 9 of this report for text.

NATIONAL BOARD TASKS

| Task No. | Description               |
|----------|---------------------------|
| NBT-11   | Shimming of Penetrameters |

NATIONAL BOARD FINDINGS  
(Interim Report #1)

This task has been closed by the State of Ohio as of June 9, 1983. Refer to Revision 16 of this report for text.

NATIONAL BOARD TASKS

| Task No. | Description                         |
|----------|-------------------------------------|
| NBT-12   | Overstress During Hydrostatic Tests |

NATIONAL BOARD FINDINGS  
(Interim Report #2)

This task has been closed by the State of Ohio as of June 9, 1983. Refer to Revision 16 of this report for text.

NATIONAL BOARD TASKS

| Task No. | Description                          |
|----------|--------------------------------------|
| NBT-13   | Improperly Stamped Flow Check Valves |

SUMMARY

Two ASME Section III, Class 2 flow check valves installed in the reactor recirculation system are stamped indicating design conditions inadequate for that service. These valves are to be replaced and a walkdown performed to assure no similar occurrences.

Due to the Stop Work Order currently in effect at the Zimmer site, the replacement of the flow check valves cannot be completed. The National Board has determined that the stated concern will remain open until the replacement has been completed.

NATIONAL BOARD TASKS

| Task No. | Description         |
|----------|---------------------|
| NBT-14   | Non-Code Components |

NATIONAL BOARD FINDINGS  
(Interim Report #2)

- "2.4 A letter dated February 22, 1979 by S.A. Zych and D.D. Crisp of Sargent and Lundy Engineers contains "Notes of Inspection - February 5, 1979 regarding a Steam-Jet Air Ejector Condenser William H. Zimmer Unit 1."

Apparently this steam jet air ejector condenser failed due to overpressure causing cracks on the shell side to the tube sheet and the pulling of some tubes in the outer two (2) rows of tubes. A reference in the report was made to "poor penetration" (Weld), and the National Board Audit Team became interested in a possible Code violation by the manufacturer of the pressure vessel. In addition, the Team wished to confirm that the vessel was replaced as recommended in the above- referenced "Notes of Inspection."

- 2.4.1 The National Board Audit Team examined externally the pressure vessel ICD03AALIA and noted a Westinghouse nameplate with information as follows:

Westinghouse  
1-8A 2679-1  
Steam Pressure -200  
Cooling Water -7600

There was a tag as follows:

HJK  
PO #CG&E 2043  
MR #10247 Received 7/1/74  
ID ICD-03AA  
Location - Compound

- 2.4.2 There was no evidence externally on the pressure vessel that it had been constructed and stamped in accordance with the ASME Code (a State of Ohio requirement for pressure vessels designed for 15 or more psi). It was also noted that the pressure vessel had apparently been repaired in the field.

2.4.3 The National Board Audit Team has attempted to obtain documentation from the CG&E vault and the Henry J. Kaiser vault for this pressure vessel and any repairs that have been made to it, and none has been made available to date.

2.4.4 It is the opinion of the National Board Audit Team that documentation shall be presented to the National Board Audit Team assuring the pressure vessel(s) in this condensate system and repairs to pressure vessels in the system are in accordance with the requirements of the State of Ohio."

#### SUMMARY

1. Verify whether or not the original pressure vessel has been repaired.
2. Verify whether or not the vessel meets ASME and State of Ohio rules.
3. Present documentation concerning the above to the National Board.

#### CG&E RESPONSE (Interim Report #2, Item 2.4)

"We recognize that some non-Code vessels were used in applications for which compliance with the ASME Code may be required by the State of Ohio. We are conducting a generic evaluation to determine if other non-Code vessels have been installed in similar applications. CG&E will assure that all State of Ohio regulations are met for each pressure vessel installed."

#### STATE OF OHIO COMMENTS ON CG&E RESPONSE (Interim Report #2, Item 2.4)

"Your response is unacceptable. Unless these vessels comply with the requirements of ASME Section VIII and the rules of the State of Ohio, they must be replaced. In addition, your generic evaluation of other vessels in the systems shall be presented to the National Board Audit Team; and, if they do not comply with the State of Ohio's requirements they shall be replaced."

ACTION PLAN

- CG&E:
- a. Contract with U-Stamp holder for fabrication of vessels.
  - b. Present U-Stamp holder fabrication plan to the National Board and the State of Ohio.
  - c. Conduct generic evaluation to determine if other non-Code vessels have been installed.
  - d. Present results of evaluation to National Board.
  - e. As identified by the generic evaluation, resolve acceptability of Main Turbine Oil Coolers with State of Ohio. NR-C-NDE-0831-N documents this deficiency.
- RFR:
- a. Review fabrication proposal.
  - b. Review results of evaluation.
  - c. Review Main Turbine Oil Cooler calculations and fabrication drawings for compliance with the design requirements of Section VIII, and review CG&E proposed resolution.

SCHEDULE

| <u>Responsibility</u> | <u>Estimated Completion</u> | <u>Actual Completion</u> |
|-----------------------|-----------------------------|--------------------------|
| <u>CG&amp;E:</u> a.   |                             | May 9, 1983              |
| b.                    |                             | March 10, 1983           |
| c.                    |                             | April 20, 1983           |
| d.                    |                             | April 21, 1983           |
| e.                    | No date available from CG&E |                          |
| <u>RFR:</u> a.        |                             | March 10, 1983           |
| b.                    |                             | April 21, 1983           |
| c.                    | Awaiting action from CG&E   |                          |



CURRENT STATUS

CG&E: a. Completed.

b. Completed.

c. Completed.

d. Completed.

e. Main Turbine Oil Coolers will be replaced. Suitable U-Stamped vessels are being sought. No Schedule for replacement is available at this time. | 23

RFR: a. Completed.

b. Completed.

c. Awaiting calculations, drawings, and proposed resolution.

## NATIONAL BOARD TASKS

| Task No. | Description             |
|----------|-------------------------|
| NBT-15   | As-Constructed Drawings |

### NATIONAL BOARD FINDINGS (Interim Report #2)

"3.1 During the review of various work packages for the essential service water system (WS), the National Board Audit Team requested copies of the "As Constructed" drawings for the embedded portions of the (WS) system. The National Board Audit Team was informed that no "as-built or as-constructed" drawings exist.

3.1.1 The National Board Audit Team is of the opinion that before the (WS) system can be Code Symbol Stamped and a Code Data Report certified, Henry J. Kaiser Company shall present to the National Board Audit Team a procedure for review that shall describe how Henry J. Kaiser will assure that the (WS) piping system is installed in accordance with the requirements of Design Specification and drawings. In addition, all material used shall be tabulated in accordance with ASME Code requirements."

### SUMMARY

As-constructed drawings and material tabulations are required for the (WS) system.

### CG&E RESPONSE (Interim Report #2, Item 3.1)

"H.J. Kaiser is investigating the problem to determine and verify their compliance with ASME code requirements concerning the as-built or as-constructed condition of the embedded portions of the essential service water system. A procedure is being developed to assure reconciliation of installed systems with applicable design documents. This information will be made available to the National Board for their review."

### STATE OF OHIO COMMENTS ON CG&E RESPONSE (Interim Report #2, Item 3.1)

"We are at this time not prepared to either accept or reject your response. Acceptance or rejection will be made after the National Board Audit Team has received and reviewed your proposed procedure. Be aware, however, that the only acceptable response is one which shall assure compliance with all ASME Code requirements."

ACTION PLAN

- HJK: a. Prepare as-constructed drawing procedure (MCP-1) and material reconciliation procedure (QRM-1).  
b. Provide change data sufficient for S&L to finalize "as-constructed" drawings.  
c. Provide material tabulations or equivalent records acceptable to the ANI and the National Board.

RFR: Review procedure and documents.

CG&E: Present procedure, drawings, and tabulations to the National Board.

SCHEDULE

| <u>Responsibility</u> | <u>Estimated Completion</u> | <u>Actual Completion</u> |
|-----------------------|-----------------------------|--------------------------|
| <u>HJK:</u> a.        |                             | June 6, 1983             |
| b.                    | Indeterminate               |                          |
| c.                    | Indeterminate               |                          |
| <u>RFR:</u>           | Indeterminate               |                          |
| <u>CG&amp;E:</u>      | Indeterminate               |                          |

CURRENT STATUS

- HJK: a. Completed.  
b. Specific NRs have been dispositioned, however NRs on generic problems remain.  
c. Awaiting completion of as-constructed drawings and tabulations of material.

RFR: Procedures reviewed. Awaiting as-constructed drawings and tabulations of material. Completion cannot be scheduled without NR Computer Data Base. | 23

CG&E: Procedures reviewed. Awaiting as-constructed drawings and tabulations of material.

## NATIONAL BOARD TASKS

| Task No. | Description                       |
|----------|-----------------------------------|
| NBT-16   | Closure of NR's Prior to Stamping |

### NATIONAL BOARD FINDINGS (Interim Report #2)

"3.2 The National Board Audit Team is also reviewing and is concerned with the Henry J. Kaiser non-conformance report system (NR). A major concern is how HJK will assure that all NR's affecting a specific system are dispositioned and closed prior to the Certification and Code symbol stamping of the completed system.

3.2.1 It has been determined by the National Board Audit Team that all NR's generated are not identified to a specific system or item. As an example, there are some NR's that have been generated against material, weld procedures and welder qualification records. Of particular concern to the National Board Audit Team is how HJK will assure that those NR's which are not identified to a system or item are closed, or do not affect the system or item prior to Stamping and Certification of the N-5 Data Report.

3.2.2 A meeting with HJK to discuss this concern was proposed. However, to date (July 1, 1982) this meeting has not been held."

### SUMMARY

A method must be established for closing NR's on generic problems for systems or partial systems that are to be stamped or turned over.

### CG&E RESPONSE (Interim Report #2, Item 3.2)

"A response to the National Board Audit Team's concern relating to HJK's ability to assure that all NR's affecting a specific system are dispositioned and closed prior to the Certification and Code Symbol stamping of the completed system has been prepared by HJK. The HJK Document Review Group will assure that all NR's are properly addressed before any system or item is stamped and certified or the N-5 Data Report is completed. Weld procedures are being reviewed by both the HJK Document Review Group and CG&E Quality Confirmation Program. No N-5 Data Reports will be prepared by HJK until assurances have been made that all weld procedures affecting a specific system or item are acceptable. The proposed program and its description in the next revi-

sion of QRM-1 will adequately resolve the concerns of the National Board Audit Team."

STATE OF OHIO COMMENTS  
(Interim Report #2, Item 3.2)

"This response is similar to our answer to Item 3.1. Until the revised procedure QRM-1 is received and reviewed by the National Board Audit Team, no acceptance or rejection will be made."

ACTION PLAN

- HJK: a. Establish procedures to assure that NRs on generic problems do not apply or have been closed before certification and stamping.
- b. Correct and update HJK NR Computer Data Base whereby NRs are components/iso specific and may be identified in Code Certification procedures. | 23
- RFR: a. Review HJK procedure.
- b. Review development of HJK NR Computer Data Base. | 23
- CG&E: a. Review HJK procedure.
- b. Present procedure and demonstrate NR Computer Data Base to National Board. | 23

SCHEDULE

| Responsibility       | Estimated Completion | Actual Completion |
|----------------------|----------------------|-------------------|
| <u>HJK</u> : a.      | No date available    |                   |
| b.                   | January 2, 1984      | 23                |
| <u>RFR</u> : a.      | Awaiting procedure   |                   |
| b.                   | Indeterminate        | 23                |
| <u>CG&amp;E</u> : a. | Indeterminate        |                   |
| b.                   | January 2, 1984      | 23                |

CURRENT STATUS

- HJK: a. Awaiting review by CG&E and S&L.  
b. Activity to begin as soon as possible. | 23
- RFR: a. Awaiting Revision 4 of QRM-1.  
b. To begin with HJK activity. | 23
- CG&E: a. In process.  
b. Awaiting final issuance of QRM-1 and development of NR Computer Data Base. | 23

NATIONAL BOARD TASKS

| Task No. | Description                  |
|----------|------------------------------|
| NBT-17   | Issuance and Control of NR's |

This task has been closed by the State of Ohio as of March 7, 1983.  
Refer to Revision 9 of this report for text.



NATIONAL BOARD TASKS  
Description

Task No.

NBT-18      Review of Construction Procedures

This task has been closed by the State of Ohio as of April 28, 1983. Refer to Revision 14 of this report for text.

NATIONAL BOARD TASKS

| Task No. | Description |
|----------|-------------|
|----------|-------------|

|        |                  |
|--------|------------------|
| NBT-19 | Review of IIDR's |
|--------|------------------|

This task has been closed by the State of Ohio as of April 28, 1983. Refer to Revision 14 of this report for text.

NATIONAL BOARD TASKS

| Task No. | Description              |
|----------|--------------------------|
| NBT-20   | Temporary Change Notices |

This task has been closed by the State of Ohio as of July 22, 1983. Refer to revision 19 of this report for text.

NATIONAL BOARD TASKS

| Task No. | Description                    |
|----------|--------------------------------|
| NBT-21   | Qualification of NDE Personnel |

NATIONAL BOARD FINDINGS  
(Interim Report #2, Supplement 1)

"3.5 Non-Destructive Examination by the Henry J. Kaiser Company's (the Installer's) Sub-Contractors.

- 3.5.1 Nuclear Energy Services Inc. (NES) is currently the non-destructive examination (NDE) sub-contractor to Henry J. Kaiser (HJK) for radiographic (RT), magnetic particle (MT), non-destructive examination.
- 3.5.2 The National Board Audit Team is reviewing and will continue to review NDE procedures, personnel qualification and certification records of NDE performed for the Installer, Henry J. Kaiser, under their ASME "NA" and "NPT" Certificates.
- 3.5.3 NES apparently was placed on the HJK Approved Vendor List (AVL) on May 14, 1982 as a result of a March 9, 1982 audit conducted by HJK. However, a review of HJK's historical and current vendor documentation does not confirm that their NDE sub-contractor(s) had been surveyed and qualified by HJK prior to this date (3/9/82) as required by ASME Section III, 1971 Edition, Summer 1973 Addenda. ASME Section III, 1971 Edition, Summer 1973 Addenda requires the Installer (HJK) to survey and qualify the Q.A. programs of suppliers of sub-contracted services, including their NDE sub-contractors.
- 3.5.4 A review of NES records indicates that NES began invoicing HJK for NDE services on approximately March 10, 1980. Prior to that time, Peabody Magnaflux Testing Laboratory was the NDE sub-contractor to HJK for non-destructive examination. Peabody Magnaflux Testing Laboratory appears on HJK's Approved Vendor List from August 2, 1976 to 1980; however, no records of audits or surveys have been presented to the National Board Audit Team by HJK or CG&E that show Peabody Magnaflux Testing Laboratory was ever surveyed or audited by HJK as required by the ASME Code.

- 3.5.5 The National Board Audit Team, during the week of July 12, 1982, requested from both CG&E and HJK records of Peabody Magnaflux Testing Laboratory's NDE personnel qualification and certification records, NDE procedures used during the period on the Zimmer site, and a list of all personnel indicating time periods on site involved in NDE activities. To date these records have not been made available to the National Board Audit Team.
- 3.5.6 In the opinion of the National Board Audit Team, ASME Section III, 1971 Edition, Summer 1973 Addenda requires survey and audit of NDE sub-contractors for qualification and retention of those records during the period of construction, and these records should be available for audit."

NATIONAL BOARD FINDINGS  
(Interim Report #5)

- "3.1 The National Board Audit Team reviewed at random thirty (30) of the fifty (50) NDE personnel files of NDE examiners employed by Peabody Magnaflux (H.J.K. NDE subcontractor at an earlier date). This review was conducted to determine if the review of these NDE personnel performed by HJK document reviewers and the HJK NDE Level III examiner, was adequate corrective action to allow HJK to confirm NDE qualification levels as being in compliance with ASME Section III (SNT-TC-1a 1968, 1975) and to close out CAR 118. CAR 118 was generated because of a previous HJK review of Peabody Magnaflux NDE personnel records that indicated deficiencies.
- 3.2 As a result of the National Board Audit Team review it has been determined that apparent deficiencies exist in the documentation used to support the certifications of several NDE examiners. The following are examples of these deficiencies.
- A. William Baldyga
1. Resume contains no names or dates of employment to permit verification to experience or training.
  2. Certification statements are signed by persons of unknown status.

B. Russel M. Araujo

1. No resume or adequate statement of experience to support certification.
2. Certification statements not signed by employer's Level III or the employee.

C. R. Buckner

1. No resume or adequate statement of training or experience to support earlier certifications.
2. Grades for RT Level 1 had been penciled in by unknown person with unknown basis for doing so (file copy of the examination record) in addition the examinations is neither signed nor legible. (Attachments 2-3 & 4)

3.2.1 It is the opinion of the National Board Audit Team that the review conducted of the Peabody NDE personnel files by HJK as a result of HJK Car #118 was inadequate in that NDE personnel have been certified as qualified without sufficient records to support the certifications as required by SNT-TC-1A and ASME Section III and in some cases certification statements are signed by persons of unknown status.

3.2.2 It is the opinion of the National Board Audit Team that HJK shall perform such audits and reviews as necessary, of Peabody NDE examination personnel files, to assure that the NDE examiners used at the Zimmer Nuclear Power Plant were qualified in accordance with ASME Section III and SNT-TC-1A requirements. Also the required documentation to support their certifications are in the NDE examiners file. If the NDE examiners cannot be properly certified or qualified, the NDE performed by that NDE examiner is nonconforming and shall be brought into conformance in accordance with H.J.K. QAP's. The National Board Audit Team shall be presented documentation resolving these findings."

SUMMARY

1. The National Board Audit Team has questioned whether or not NDE subcontractors were qualified by the NA installer (Henry J. Kaiser) prior to performance of NDE service.
2. The National Board Audit Team has requested access to and has reviewed a portion of Peabody-Magnaflux NDE certification records on file with Henry J. Kaiser to determine whether corrective actions through HJK CAR-118 were adequate. The National Board review indicates the Peabody-Magnaflux NDE personnel documentation is incomplete and contains apparent deficiencies despite closure of CAR-118. If NDE personnel qualifications and certification cannot be properly documented as adequate, the NDE performed is nonconforming and shall be brought into conformance in accordance with HJK QAP's.

CG&E RESPONSE

(Interim Report #2, Supplement 1, Item 3.5)

"We recognize the requirement for documentation of qualification and certification of NDE personnel, and for survey, audit, and qualification of organizations to whom NDE is subcontracted. H. J. Kaiser is currently assembling the qualification and certification records of NDE personnel used, and is reviewing records to provide evidence of the qualification of the subcontractors used. This documentation will be made available to the National Board when it becomes available to CG&E."

STATE OF OHIO COMMENTS ON CG&E RESPONSE

(Interim Report #2, Supplement 1, Item 3.5)

"Comments withheld until H. J. Kaiser provides the requested records to the National Board Audit Team for its review and evaluation."

CG&E RESPONSE

(Interim Report #5, Items 3.1 and 3.2)

CG&E agrees the NDE personnel documentation is currently inadequate and has been identified by HJK. Additional documentation has recently been acquired from Peabody-Magnaflux and will be provided to HJK. HJK will review all NDE personnel certification records. Where such records are identified as inadequate, proper steps will be taken to assure all Code requirements are met.



ACTION PLAN

- HJK: a. Provide records of all NDE subcontractor surveys and audits to CG&E.
- b. Provide personnel qualification and certification records, NDE procedures used, and a list of personnel with dates of site work to CG&E.
- c. Review documents provided by Peabody and identify any deficiencies.

RFR: Review NDE records from (a), (b), and (c) above.

CG&E: Make records available to the National Board.

SCHEDULE

| Responsibility   | Estimated Completion | Actual Completion  |    |
|------------------|----------------------|--------------------|----|
| <u>HJK:</u> a.   |                      | October 25, 1982   |    |
| b.               |                      | December 10, 1982  |    |
| c.               | September 23, 1983   |                    | 23 |
| <u>RFR:</u>      |                      | September 16, 1983 | 23 |
| <u>CG&amp;E:</u> | September 30, 1983   |                    | 23 |

CURRENT STATUS

HJK: a. Completed.

b. Completed.

c. Records with deficiencies will be documented on CARs. Completed records to be reviewed by HJK Quality Documentation and transmitted to CG&E. | 23

RFR: Completed. | 23

CG&E: Awaiting records for review and presentation to National Board. | 23

NATIONAL BOARD TASKS

| Task No. | Description                      |
|----------|----------------------------------|
| NBT-22   | Radiographic Weld Identification |

NATIONAL BOARD FINDINGS  
(Interim Report #2, Supplement 1)

"3.6 Radiographic Weld Identification

- 3.6.1 The National Board Audit Team requested HJK's Quality Engineering to identify procedures that address the responsibility for flagging or marking to verify the correct identity of field welds to be radiographed. Quality Engineering indicated to the Audit Team that no procedures exist.
- 3.6.2 An "NDE Request Instruction" was reviewed by the National Board Audit Team. The instruction vaguely addresses the topic; however, it is an uncontrolled document which is not approved and distributed in accordance with HJK's QAP 8, Rev. 9. In the opinion of the National Board Audit Team, this does not meet the requirements of ASME Section III, 1971 Edition, Summer 1973 Addenda.
- 3.6.3 Since HJK Quality Engineering has stated that no procedure exists, the National Board Audit Team is concerned with the possibility that personnel who are not properly trained and qualified may have been identifying and marking welds, causing a potential loss of integrity of the radiographic weld identification. HJK should provide to the National Board Audit Team evidence that proper radiographic weld identification integrity has been maintained during the period of construction.

SUMMARY

There is a concern that personnel identifying welds for NDE may not have been adequately qualified.

CG&E RESPONSE  
(Interim Report #2, Supplement 1, Item 3.6)

"We are evaluating this situation with H.J. Kaiser to assure that all field welds were properly identified and examined. The

results of our evaluation will be made available to the National Board. In addition, document review will assure correlation of radiographs for all welds in a given system requiring radiography."

STATE OF OHIO COMMENTS ON CG&E RESPONSE  
(Interim Report #2, Supplement 1, Item 3.6)

"Comments withheld until H. J. Kaiser evaluation is complete and documentation is presented to the National Board Audit Team for its review and response."

ACTION PLAN

HJK: a. Provide evidence that proper radiographic weld identification has been maintained during construction.  
b. Perform sampling of RT film versus physical characteristics for weld identification, and report results.  
RFR: Review HJK sampling report.  
CG&E: Present results to the National Board.

SCHEDULE

| <u>Responsibility</u> | <u>Estimated Completion</u> | <u>Actual Completion</u> |
|-----------------------|-----------------------------|--------------------------|
| <u>HJK:</u> a.        |                             | December 15, 1982        |
| b.                    |                             | May 18, 1983             |
| <u>RFR:</u>           |                             | May 26, 1983             |
| <u>CG&amp;E:</u>      |                             | May 27, 1983             |

CURRENT STATUS

HJK: a. Completed.  
b. Completed.  
RFR: Completed.  
CG&E: Completed.

Note: The National Board Audit Team has judged that this item will remain open until line walkdowns and as-constructed drawings have been completed, whereby it can be audited and verified.

NATIONAL BOARD TASKS

| Task No. | Description     |
|----------|-----------------|
| NBT-23   | Weld Procedures |

NATIONAL BOARD FINDINGS  
(Interim Report #3)

"3.1 Henry J. Kaiser Weld Procedure SPPM 3.1.50, Rev. 0.

- 3.1.1 This procedure was originally qualified with impact testing. The procedure was used on primary containment main steam penetration to seal head welds. The materials involved in these welds are SA350 Gr LF1 to SA516 Gr 70. The welds are identified on HJK Drawings PSK IMS 46, 48, 49 and 52. The welds are identified as Welds MS-M1, MS-M2, MS-M3 and MS-M4. The line numbers are identified as Lines IMSOA24, IMSOB24, IMSOC24 and IMSOD24.
- 3.1.2 ASME Section III, 1971 Edition/Summer '73 Addenda, Para. NB 2300 requires impact testing of materials within the thickness range of these weldments and base materials.
- 3.1.3 ASME Section IX, 1971 Edition/Winter '73 Addenda, states that a separate procedure qualification is required for each type and grade of material when impact testing is a requirement.
- 3.1.4 ASME Section IX, 1971 Edition/Winter '73 Addenda, lists an increase of more than 100°F in the specified maximum interpass temperature as an essential variable. ASME Section IX further lists as an essential variable a change in type of current (AC or DC), polarity, or specified range for amperage, voltage and speed of travel.
- 3.1.5 Weld Procedure Specification SPPM 3.1.50, Rev. 0, was qualified using SA106 Gr. B pipe and did not specify maximum interpass temperatures. Nor did it establish a speed of travel.
- 3.1.6 It is the opinion of the National Board Audit Team that Procedure WPS SPM 3.1.50, Rev. 0, shall be qualified in accordance with the requirements of ASME Section IX, 1971 Edition/Winter '73 Addenda. The National Board Audit Team also is of the opinion that Henry J. Kaiser (HJK) shall review other weld procedures of this type to assure that they comply with ASME Sec-

tion III requirements and provide the National Board Audit Team with documentation of this review identifying welds in the various systems where improperly qualified weld procedures were used and the proposed corrective action."

#### SUMMARY

Some weld procedures have not been properly qualified for all the essential variables as required by the ASME Code. Weld procedures should be reviewed to determine which procedures require requalification. If welds were welded with improperly qualified procedures, appropriate corrective actions should be identified to the National Board.

#### CG&E RESPONSE (Interim Report #3, Item 3.1)

"CG&E agrees that SPPM 3.1.50, Rev. 0 was not properly qualified in accordance with Sections III and IX. We are currently reviewing the impact of this problem on the welding which was done using this procedure. We will determine whether or not we can comply with the audit team's recommendation that this procedure be qualified. Regardless of whether or not we can comply with their recommendation, corrective action will be taken to bring the affected welds into compliance with Section III. We are currently reviewing other weld procedures of this type to determine the extent of this nonconformance."

#### ACTION PLAN

- HJK:
- a. Identify all welding performed on materials requiring impact testing. Determine the procedures, base materials, and weld filler metals used, and the heat treatment condition of the welds.
  - b. Submit results of (a) to RFR for review.
  - c. Perform procedure qualification testing for the procedure variables identified in (a) above, using the maximum possible heat input, and the appropriate base materials.

- RFR: a. Review documentation of HJK review of welding performed.  
b. Review the HJK plans to qualify those procedures.  
c. Review completed procedure qualification.

CG&E: Present documentation to National Board.

SCHEDULE

| <u>Responsibility</u> | <u>Estimated<br/>Completion</u> | <u>Actual<br/>Completion</u> |
|-----------------------|---------------------------------|------------------------------|
|-----------------------|---------------------------------|------------------------------|

HJK: No schedule provided by HJK

CURRENT STATUS

HJK: In process; no results. Final results anticipated after complete historical review of all weld procedures.

RFR: Awaiting HJK action.

CG&E: Awaiting HJK action.

NATIONAL BOARD TASKS

| Task No. | Description       |
|----------|-------------------|
| NBT-24   | Weld Filler Metal |

NATIONAL BOARD FINDINGS  
(Interim Report #3)

This task has been closed by the State of Ohio as of June 9, 1983. Refer to Revision 16 of this report for text.



NATIONAL BOARD TASKS

| Task No. | Description  |
|----------|--------------|
| NBT-25   | Generic NR's |

NATIONAL BOARD FINDINGS  
(Interim Report #7, Item 3.3)

- "3.3.1 The National Board Audit Team discussed with HJK personnel the use of the Generic NR. This entity was devised and first appeared in ZAPO-5, Rev. 2, TCN #5-7. The National Board does not understand either the intent of or need for a Generic NR.
- 3.3.2 TCN #5-7 has been reviewed and the National Board Audit Team has several questions: (1) Does each Generic NR have a corresponding Generic Disposition? (2) Are Generic NR's dispositioned as other NR's, i.e., "accept as is", "reject", etc.? (3) If Generic NR's are created and processed as any other NR, why have them? (4) How does the dispositioner know when to disposition an NR with a Generic Disposition? (5) HJK's QA manual, QAP-16, Rev. 9, does not discuss the Generic NR. Will this be revised? (6) How does the AI get in the Generic Disposition cycle?
- 3.3.3 The National Board Audit Team further is of the opinion that if nonconforming conditions are such that a special NR system has to be created to handle them, then the proper vehicle to correct these conditions is by issuance of either a stop work order or a corrective action request, both of which are described in the HJK Quality Assurance Manual."

SUMMARY

The National Board Audit Team has questioned the use of Generic NR's; i.e., Generic Nonconformances and Generic Dispositions.

CG&E RESPONSE  
(Interim Report #7, Item 3.3)

"CG&E understand the National Board Audit Team's concerns regarding the use of Generic NR's. CG&E will make arrangements for a meeting to be held between CG&E, HJK and the National Board to discuss these concerns and identify an action plan for resolution."

ACTION PLAN

HJK: Revise and issue QAP-16 to incorporate Generic NR's.

SCHEDULE

| <u>Responsibility</u> | <u>Estimated<br/>Completion</u> | <u>Actual<br/>Completion</u> |
|-----------------------|---------------------------------|------------------------------|
|-----------------------|---------------------------------|------------------------------|

|              |               |  |
|--------------|---------------|--|
| <u>HJK</u> : | Indeterminate |  |
|--------------|---------------|--|

CURRENT STATUS

HJK: QAP-16 has been revised to comply with this task and other ASME activities and will be circulated for review and signature. Conflicting directions from CG&E are due to concerns not related to this task. 23

NOTE: The National Board Audit Team has judged that this item will remain open until the use of Generic NR's has been implemented for a sufficient period of time whereby it may be audited and verifiable.

NATIONAL BOARD TASKS

| Task No. | Description                           |
|----------|---------------------------------------|
| NBT-26   | Data Reports for Piping Subassemblies |

NATIONAL BOARD FINDINGS  
(Interim Report #13, Item 3.1)

- "3.1 The National Board Audit Team has recently been advised that HJK will not prepare NPP-1 Data Reports for field fabricated piping subassemblies as required by ASME Section III.
- 3.1.1 Piping subassemblies which have been fabricated in the on site fabrication shop have not been Code Symbol stamped and the NPP-1 Data Report Forms completed as required by ASME Section III, 1971 Edition, Summer 1973 Addenda. Nor, apparently, was the alternate method as provided for by the Code used.
  - 3.1.2 The National Board Audit Team is further of the opinion that identification and control of materials and parts, including partially fabricated assemblies, shall be maintained either on the item or on records traceable to the item throughout manufacture or installation.
  - 3.1.3 It is the opinion of the National Board Audit Team that HJK is in apparent violation of ASME Code requirements and HJK established procedures (Attachments 1 thru 12).
  - 3.1.4 The National Board Audit Team shall be provided with HJK's proposed resolution of this apparent Code deficiency and documented evidence to indicate that HJK has complied with the requirements of the ASME Code.

SUMMARY

The National Board Audit Team has questioned HJK's procedure for documenting field-shop-fabricated piping subassemblies and HJK's implementation of their procedures for such documentation.

CG&E RESPONSE  
(Interim Report #13, Item 3.1)

In preparation.

ACTION PLAN

In preparation.

SCHEDULE

| <u>Responsibility</u> | <u>Estimated<br/>Completion</u> | <u>Actual<br/>Completion</u> |
|-----------------------|---------------------------------|------------------------------|
| <u>HJK:</u>           | Not available                   |                              |

CURRENT STATUS

HJK: HJK is reviewing National Board finding and preparing response. Response will be provided to CG&E by September 30, 1983.