



PDR-016

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

DEC 27 1984

Deborah B. Bauser, Esq.
Shaw, Pittman, Potts & Trowbridge
1800 M Street NW.
Washington, DC 20036

Subject: FOIA-84-415

Dear Ms. Bauser:

This is an interim response to your letter of May 22, 1984 requesting, pursuant to the Freedom of Information Act (FOIA), copies of all agency documents relating to the October 1983 report by Judge Helen Hoyt and Sebastian Aloat on NRC investigations at the Zimmer Nuclear Power Station. In responding, we have construed your request to encompass only those documents generated or reviewed by the investigation team.

A listing of the responsive documents is attached. The following are being released in their entirety in connection with this interim response: 1-10, 19, 39, 42-43, 45, 47, 57, 62, 66, 74, 80a, 81, 82, 88, 95-98, 100, 110-111, 114, 119, 126, 128-29, 132, 138, 140, 141, 144a, b and c, 146, 148, 151, 162-163, 172, 210-213, 216-228, 230-231, 233-237, 241-248, 251-255, 258-261, and 270-275.

In addition, the following documents are being released in part and withheld in part: 130, 149, 164, 167, and 170. The portions of the above documents being withheld in part at this time contain information the release of which could, in the agency's judgment: (1) cause an invasion of privacy of individuals who assisted in NRC investigations (Exemptions 6 and 7(C)); (2) interfere with ongoing investigations or enforcement matters (Exemption 7(A)); or (3) reveal a confidential source of information (Exemption 7(D)). 5 U.S.C. 552(b)(6) and (7) and 10 CFR 9.5(a)(6) and (7). The agency is unable to identify a countervailing public interest in disclosure which, in its judgment, outweighs the agency's or individuals' interests in confidentiality under Exemptions 6 and 7 of the FOIA. The documents or portions identified above as being released at this time are being placed in folder FOIA-84-415 under your name in the NRC Public Document Room (PDR), 1717 H Street, NW, Washington, DC 20555. In addition, copies of these documents, at a cost to you of seven cents (7¢) a page, are enclosed with this interim response.

The following documents are being withheld in their entirety under Exemption 5 of the FOIA (5 U.S.C. 552(b)(5), 10 CFR 9.5(a)(5)): 145, 229 and 232. These documents are drafts of document number 237 (released in its entirety in connection with this interim response.) Because the documents reflect the deliberative process between the Chairman and the investigation team, the documents are exempt from mandatory disclosure pursuant to Exemption 5

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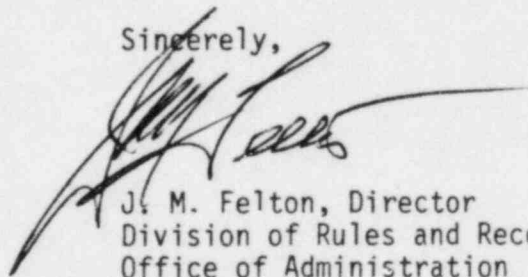
of the FOIA, 5 U.S.C. 552(b)(5), and the Commission regulations, 10 CFR 9.5(a)(5). Release of these documents would tend to inhibit the open and frank exchange of ideas essential to the deliberative process. Mr. C. Sebastian Aloit, Office of the General Counsel, is the withholding official with respect to the documents or portions thereof identified in this and the preceding paragraph.

In addition, the following documents are tapes, typing diskettes or indices of diskettes containing interviewee statements which were reduced to writing and are subject to your request in that form: 172-209. The indices identified in documents 191-201 and 206-208 are being released in connection with this response. Since the information contained in the tapes or diskettes is in written form, the agency can identify no overriding need to separately release these tapes or typing diskettes. However, should you desire to refer to the tapes or diskettes, please contact Carol Ann Reed at (301) 492-7246 to obtain access to these documents.

This denial may be appealed to the NRC within 30 days from the receipt of this letter. Any such appeal must be in writing, addressed to the Secretary of the Commission, U. S. Nuclear Regulatory Commission, Washington, DC 20555, and should clearly state on the envelope and in the letter that it is an "Appeal from an Initial FOIA Decision."

Due to the possible impact on matters unrelated to the October 1983 report, the remaining documents require the review of the originating agency offices to determine whether: (1) the withholding of any portion of a document is warranted under FOIA; and (2) whether the public interest requires the release of such portions notwithstanding the existence of a relevant exemption under the FOIA. These reviews should be completed in the near future. Once they are completed, a final response to your May 22, 1984 request will be provided.

Sincerely,



J. M. Felton, Director
Division of Rules and Records
Office of Administration

Attachments: As stated

LIST OF RESPONSIVE DOCUMENTS

1. Ltr. to Earl A. Borgmann, Cincinnati Gas & Electric, fr. James G. Keppler, Director, Region III (2/1/79) with Notice of Violation & I&E Inspection Report No. 50-358/78-30
2. Ltr. to Earl A. Borgmann, Cincinnati Gas & Electric, fr. G. Fiorelli, Engineering Support Branch, Region III (3/26/79) with Ltr. fr. Cincinnati Gas & Electric dated 3/2/79 re: Corrective Actions Taken
3. Ltr. to Earl A. Borgmann, Cincinnati Gas & Electric fr. G. Fiorelli, Engineering Support Branch, Region III (1/7/80) re Inspection of K. D. Ward on 9/18-20 and 12/11 & 12/79 - Enclosure: I&E Inspection Report No. 50-358/79-17
4. Memo to V. Stello, Director, I&E fr. William J. Ward, Senior Investigator, I&E - (4/30/80) Subj: Discussion of Interrelationship of I&E Investigative Program with that of OIA
5. Ltr to Earl A. Borgmann, Cincinnati Gas & Elec., fr James G. Keppler, Dir., Reg III (7/2/80) re Zimmer Investigation by Phillips, Ward & Vandell on 7/2/80 4/7-9 and 4/30, 5/1-2 and 5/20, 1980 with Notice of Violation & I&E Inspection Report No. 50-358/80-09
6. I&E Inspection Report No. 50-358/80-09 (7/3/80) re inspection conducted April 7-9 and 30, May 1-2 and 20, 1980
7. Ltr. to James G. Keppler, Director, Region III fr. Earl A. Borgmann, Cincinnati Gas & Electric, (8/4/80) re Corrective Action Taken in Response to Notice of Violation, I&E Inspection Report No. 80-09
8. Memo to James Cummings, OIA fr. Commissioner Ahearne (12/15/80) re Thomas W. Applegate Allegations
9. Ltr. to Commissioner Ahearne (12/29/80) fr. Mary Eastwood, Office of Special Counsel - Transmitting Thomas Applegate & GAP Allegations re Zimmer (annotated)
10. Memo to Commissioner Ahearne fr. James Cummings, OIA (1/5/81) re Thomas A. Applegate Allegations

11. Memo to V. Stello, Director, I&E fr. James G. Keppler, Director, Region III, (1/12/81) Subj.: Zimmer - GAP Request for Investigation by Merit System Protection Board Concerning NRC's Handling of Applegate Allegations
12. John Sinclair - Handwritten draft of Report of Interview with Gary Phillip, Region III Senior Investigator (12 pages) (1/13-15/81)
13. John Sinclair - Handwritten draft of Report of (Interview with Gaston Fiorelli, Engineering Support Branch, Region II (1/26/81) (3 pages)
14. John Sinclair - Handwritten draft of Report of Interview with Charles Norelius, Chief (Assistant to the Director), Region III (1/26/81) (4 pages)
15. Memo to Norman Moseley, I&E fr. David Gamble, OIA 1/25/81 - Subj: I&E Investigation into Information Flow Concerning the TMI Accident (with Moseley 2/2/81 response to Gamble)
16. John Sinclair - Handwritten draft of Report of Interview with Kavin Ward, Inspector Region III (3 pages) (1/27/81)
17. John Sinclair - Handwritten draft of Report of Interview with James G. Keppler, Director, Region III (6 pages) (1/29/81)
18. John Sinclair - Handwritten draft of Report of Interview with Gerald A. Phillips, Senior Inspector, Region III (22 pages) (2/3/81)
19. Ltr. to Louis Clark, Director, GAP fr. James J. Cummings (2/4/81) - Discuss Arrangements of Confidentiality Made at January 7, 1981 Meeting with Cummings, Devine, Sinclair and Schnebelen
20. Memo to File fr. John Sinclair, OIA (2/5/81) - Subj: Investigation of I&E Efforts Pertaining to Investigations of Alleged Construction Deficiencies at the Zimmer Nuclear Facility (Applegate)
21. Memo to C. E. Corelius and R. F. Heishman, Region III fr. Bert Davis, Region III (5/9/81) - Subj: requesting documentation of areas investigated relating to Applegate allegations)

22. Memo to V. Stello, Director, I&E, fr. James Cummings, OIA (2/10/81) - Subj: Transfer of Documentation Provided by GAP (2/9/81)
23. John Sinclair - Handwritten notes re contact with Thomas Devine, GAP (2/13/81)
24. John Sinclair - Handwritten draft of Report of Interview with Thomas Vandell, Resident Inspector - with interview notes attached (2/18/81) (14 pages)
25. John Sinclair - Handwritten notes re Interview of FBI, Special Agents, Chicago Field Office (R. Buckley & William Dyson) (2/19/81) (1 page)
26. John Sinclair - Handwritten draft of Report of Interview with David Ward, Region III Inspector re Applegate allegations 2/23/81 (8 pages)
27. Memo to File fr. Bert Davis, Region III (2/23/81) - Subj: Telephone Call fr. Thomas Applegate, February 19, 1981
28. Memo to File fr. Bert Davis, Region III (2/25/81) - Subj: Telephone Call with Thomas Applegate, February 23, 1981
29. Memo for File fr. Bert Davis, Region III (3/5/81) - Subj: Telephone Call with Ira Rosen, "60 Minutes"
30. Memo for R. F. Heishman, Director, Resident Project Inspector, Region III fr. Bert Davis, Region III (3/9/81) - Subj: Comments on first Applegate allegation drafts & M.S.P.B. Request for Investigation of Allegations 1-19)
31. Memo to File fr. Arthur Schnebelen, OIA (3/9/81) - Subj: Telephone call from Thomas Applegate
32. Memo to File fr Arthur Schnebelen, OIA - (3/9/81) Subj: Telephone conversation between Schnebelen, OIA, and Bert Davis, Reg. III re Applegate identifying himself as undercover NRC investigator.
33. John Sinclair - Handwritten draft of Report of Interview with Duane H. Danielson, Chief, Materials & Process Section Region III (3/11/81) (4 pages)

34. John Sinclair - handwritten draft of Report of Interview with Richard C. Knop, Chief, Project Section, Region III (3/11/81 (3 pages)
35. Transcript of 2/26/81 mtg. between Region III personnel, T. Applegate, and representatives of GAP (131 pages).
36. Memo for V. Stello, Director, I&E fr. James G. Keppler, Region III (3/17/81) - Subj: Investigation of Applegate Allegations Related to Zimmer
37. Ltr. to Jim Cummings, OIA fr Julian Greenspun, DOJ (3/17/81) - discusses problems related to civil and criminal proceedings, willingness to expedite joint cases. Attached -3/14/81 note to Dudley Thompson forwarding DOJ Letter.
38. List of items (3/17/81) transferred to I&E fr. John Sinclair, OIA, (with note of receipt of items by T. Devine, GAP 5/5/81)
39. Note to Art Schnebelen, OIA, fr Dave Gamble, OIA (3/24/81) re breakdown of GAP/Applegate Allegations between IE and OIA.
40. J. Sinclair - handwritten draft of Report of Interview Interview with Thomas E. Vandell, Inspector - Wolf Creek. (4/1/81) (12 pages)
41. J. Sinclair - handwritten draft of Report Section "Review of Welding Records." (4/1/81) (3 pages)
42. Note to Commissioners fr. James Cummings, OIA (4/9/81) Forwarding Draft GAO Report on OIA, without Report.
43. Memo to Multiple Addressees fr. James Cummings (4/10/81) Forwarding Draft GAO Report on OIA without Report
44. Draft of agenda and briefing documents prepared for 4/10/81 Headquarters/Region III Discussions - Zimmer Nuclear Power Station, Unit 1 with attached background documents
45. Memo to Chairman Hendrie fr. James Cummings, OIA - (4/14/81) Subj: Forwards GAO ltr. transmitting their draft on OIA to NRC w/o ltr.

46. Memo to File 80A-36 fr. Tracy Wiest, Auditor, OIA (4/22/81) - on clarification of certain questions in GAO Draft Report on OIA)
47. Ltr. to Honorable Milton J. Socolar, Acting Comptroller General, GAO, fr. Chairman Hendrie, NRC (5/1/81) requesting extension of time in providing comments on Draft GAO Report on Improvements needed in the NRC's Office of Inspector and Auditor
48. Memo to Dudley Thompson, I&E, fr. James Cummings, OIA (5/5/81) - Subj: I&E Manual, TI 1250/02, Rev. 1 - "I&E Investigative Program"
49. Memo to file fr. Sinclair (5/5/81) on meeting with U.S. Attorney's Office in Cincinnati on April 22, 1981.
50. Memo for R. F. Heishman & C. E. Norelius, Region III fr. James Keppler, Region III (5/6/81) - Subj: Evaluation of Problems Identified - Zimmer Investigation (Enclosure - list of problems identified & evaluation of those problems)
51. GAP Letter to Keppler, Reg. III (5/11/81), regarding supervision of Zimmer construction activities.
52. Memo to File fr. Arthur Schnebelen, OIA (5/15/81) Subj: Redlegation of Authority to John Sinclair to Administer Oaths & Affirmations to be Used in Matter of Allegations re Zimmer
53. Ltr. fr. Earl A. Borgmann, Cincinnati Gas & Elec to James Keppler, Director, Reg. III (5/18/81) re postponement of May 18, 1981 meeting on QA Problems attaching draft CG&E proposal for QA Improvement Program and QC program.
54. Ltr to Cummings, OIA, fr. Greenspun, DOJ, (5/26/81) re problems presented by parallel investigations and ways to minimize those problems.
55. Note to Schnebelen fr. Gamble (5/29/81) setting out major issues in Zimmer investigation.
56. Memo to V. Stello, I&E, fr. James Cummings, OIA (6/1/81) - Subj: Transmitting DOJ guidance resulting from questions raised in connection with Zimmer - w/o guidance attached

57. Memo to R.C. DeYoung, IE, fr. James Keppler, Reg. III (6/12/81) - Subj: forwarding summary of Zimmer status w/attachment
58. Memo to File fr. David Gamble and Albert Puglia, OIA (6/15/81) - Subj: - Information relating to review of Kaiser Engineering QA Nonconforming Material Report Logs.
59. John Sinclair - Handwritten notes of 7/7/81 re contact with Pat Gwinn, Region I Zimmer on locating weld records
60. Sinclair handwritten draft of report section on weld records (undated)
61. Ltr. to M. J. Socolar, Acting Comptroller General, fr. James Cummings, OIA (7/14/81) concerning unfair manner in which agency comments on draft GAO Report were evaluated and/or admitted)
62. Note to Cummings/Schnebelen, OIA, fr. John Sinclair, OIA (7/16/81) attaching for review draft Report re section on Weld Records w/attachment
63. Ltr. for J. Cummings, OIA, fr. Tracey, USA (7/20/81), advising of the assignment to Zimmer investigation.
64. Memo to Streeter, Warnick, and Davis Davis fr. J.E. Foster, Investigator, Region III - (8/4/81) listing investigative concerns re content of draft report
65. John Sinclair - Handwritten notes (8/6/81) on various contacts re weld information and notes re Applegate (4 pages).
66. Memo to Commissioners fr. James Cummings, OIA 8/6/81 - responding to Applegate allegations
67. Memo to Commissioner fr. James Cummings, OIA (8/7/81) - transmitting OIA Report on Adequacy of I&E Investigation 50-358/80-09 at the William H. Zimmer Power Station w/attachment. (2 different annotated versions fr. Region III files)
68. Memo to James Keppler, Region III, fr. James Cummings, OIA (8/10/81) advising R III to allow OIA time to review report before release due to possible subsequent criminal action)

69. SECY-81-480 (8/12/81) discussing Final GAO Report entitled "Improvements Needed in the Nuclear Regulatory Commission's Office of Inspection" enclosing 1 page of recommended response
70. Note fr. J. Sinclair to D. Gamble (8/10/81) re insertion of asterisks into OIA report
71. Ltr. To Ann Marie Tracey, Assistant U.S. Attorney, Southern District of Ohio fr. James Cummings, OIA - (8/17/81) Forwarding copy of OIA Report of Investigation Pertaining to April 1980 Investigation by I&E at Zimmer w/o attachment
72. Ltr. to Ann Marie Tracey, Assistant U.S. Attorney, Southern District of Ohio, fr. James Cummings (8/18/81) forwarding copy of Draft OIA Report on I&E Investigation at Zimmer w/o attachment
73. Ltr to Cong. M. Udall fr. N. Palladino, NRC (9/23/81) transmitting NRC response to GAO report on OIA w/attachment
74. Note to Dudley Thompson fr. Schnebelen, OIA (8/19/81) forwarding copy of OIA's report of investigation into Applegate allegation w/o attachment
75. Letter to Ann Marie Tracey, USA, fr. J. Cummings, OIA (8/26/81) transmitting list of exhibits to IE draft report w/o attachments.
76. Memo for James G. Keppler, Director, Region III, fr. James E. Foster, Investigator, Region III (9/3/81) - commenting on OIA report on adequacy of 50/358/80-09
77. Memo for R. F. Warnick, Region III fr. Bert Davis, Region III (9/4/81) - Subj: Zimmer Investigation, Weld CY-516
78. Memo for J. Keppler, Region III fr. G. A. Phillip, Investigator, Region III (9/8/81) re Comments on OIA Report on I&E Investigation 50-358/80-09 (Zimmer)
79. Letter to Cummings, OIA, fr. Patrick Hanley, USA (9/9/81) recommending criminal investigations be held in abeyance pending completion of IE Investigations.
80. Handwritten note to John Sinclair fr. Dave Gamble (9/16/81) re Confidentiality of FBI Agents Names

- a. sanitized version
- b. unsanitized version

81. Memo to Chairman Palladino fr. William Dircks, EDO (9/17/81) - Subj: Comments on OIA Report on I&E Investigation 50-358/80-09 (Zimmer)
82. Memo to Chairman Palladino fr. William Dircks, EDO (9/17/81) OIA Report on I&E Investigation - expressing his concerns with findings of OIA Report on IE 50-358/80-09
83. Ltr. to Pat Hanley, Chief, Special Prosecutions Unit, Southern District of Ohio fr. James Cummings, OIA - (9/17/81) Discusses Information fr. DOJ relative to Question of Parallel Proceedings w/o attachment
84. Memo to James Cummings, OIA, fr. Bert Davis, Region III (9/30/81) - Confirming phone conversation re Sargent & Lundy Audit at Zimmer
85. Memo to Dudley Thompson, I&E fr. James Keppler, Region III (10/1/81) discussing I&E problems OIA Philosophy regarding I&E's conduct of investigations
86. Memo to James Cummings, OIA, fr. Chairman Palladino (10/2/81) requesting OIA Comments on EDO Memo of 9/17/81 & Requesting OIA Not to Release Report to Public
87. Memo to Chairman Palladino fr. James Cummings, OIA (10/8/81) transmitting OIA's comments on EDO's 9/17/81 memo
 - a. Region III annotated version
 - b. Clean copy
88. SECY-81-588 10/3/81) - "Investigative Jurisdiction of the Office of Inspection & Enforcement
89. Memo to Region III Files fr. J. F. Streeter, Region III (10/8/81) - Subj: Telephone Call with Thomas Applegate
90. Memo to Commissioners fr. James Cummings, OIA (10/26/81) - Forwarding OIA Comments on SECY-81-588
91. Annotated staff briefing documents for use at 10/27/81 Commission mtg. on Zimmer w/copies of slides used at briefing

92. Memo to V. Stello, I&E fr. James Keppler, Region III - (10/28/81) Subj: Zimmer Commission Meeting - October 27, 1981 -
93. Ltr. to Cong. Morris Udall fr. Chairman Palladino - (11/16/81) answering questions concerning adequacy of I&E Investigation of Zimmer (Incoming Udall ltr of 8/20/81 attached)
- a. annotated version
 - b. clean concurrence copy
94. Memo to Bert Davis, Region III, fr. James Cummings, OIA (11/18/81) - transmitting Zimmer interviews and corporate documents w/attachments.
95. Cincinnati Enquirer newspaper article (11/18/81) - Zimmer Plant Probe
96. Ltr. to Douglas Lowenstein, Cox Newspaper, fr. J. W. Felton, NRC (11/20/81) re FOIA 81-376 Request for OIA Report on Zimmer Investigation w/enclosure
97. Memo to Robert Carlson, et al., Directors, EIS, Regional Offices fr. Dudley Thompson, I&E (11/23/81) - Subj: Investigative Guidance Memoranda w/enclosure
98. Ltr to Director, NRC fr. Thomas Devine (11/23/81) (FOIA-81-488) - All FOIA Office Documents Related to Processing Request and 2/3/82 FOIA response to Tom Devine, GAP, fr. John Carr, Chief, FOIA Branch (attached)
99. Memo to James Keppler, Region III, fr. J. F. Streeter, Region III (11/23/81) - Subj: Investigation of Inspector Signatures on Final Zimmer Investigation Report 50-358/81-13
100. Cincinnati Enquirer Article (11/30/81) - "Area NRC Worker Hit Back at Critique"
101. Ltr. to Ann Marie Tracey, Assistant U.S. Attorney, Southern District of Ohio, fr. James Cummings, OIA - (12/3/81) w/o enclosures
- 102A. Memo to File fr. David Gamble, OIA, (12/10/81) - Subj: Zimmer Nuclear Power Station w/list of enclosures and enclosures

- 102B. Annotated copy of document 102A w/o list of enclosures or enclosures
103. Memo to Commissioners fr. James Cummings, OIA (12/14/81) - Subj: OIA Review of NRC's QA/QC Activities for Nuclear Power Reactors Construction attaching 10/30/81 Memo to Dircks fr. Cummings re OIA Survey of NRC's QA/QC Program
104. Ltr. fr. A. Tracey, USA, to J. Cummings, OIA, (2/24/82) re Cincinnati Gas & Electric Company/Zimmer plant.
105. Memo to R. F. Warnick, Region III, fr. J. B. McCarten, Investigator, (2/25/82) - Subj: Zimmer Document and Investigation Leads
106. Ltr to R.F. Warnick, Reg. III, fr. Barnes, USA (3/19/82), re Zimmer Nuclear Power Plant
107. Memo to J. Cummings, OIA, fr. Keppler, Region III (3/22/82) re coordination of Zimmer effort
108. Ltr. to C. Barnes, USA, fr. R. Warnick, Reg. III (3/24/82), advising status of Reg. III Zimmer investigation w/document 106 above.
109. Note to Bill Dircks, EDO fr. James Keppler, Region III (4/20/82) transmitting draft memo on transmittal of Zimmer investigation material to Udall committee.
110. Memo to Tom Combs, SECY, fr. George Messenger, OIA (5/3/82) Subj: Responses to Questions fr. Congressman Ottinger w/o attachment
111. Memo to Richard DeYoung, I&E, fr. James Cummings, OIA (5/6/82) - Subj: OIA Input to Congressman Ottinger's Request w/o attachments.
112. Note to File fr Sinclair thru Cummings (5/15/82) placing Reg. III computer listing of Zimmer allegations into file
113. Ltr. to T. Devine, GAP, fr. Keppler, Reg. III, (5/14/82) providing information
114. Ltr. to Cong. Richard Ottinger fr. Chairman Palladino (5/14/82) providing summary of Zimmer investigation

115. Ltr. to J. Cummings, OIA, fr. A. Tracey, USA, (5/28/82), w/enclosure
116. Memo for Zimmer File fr A. Bert Davis, Reg. III (6/1/82) - Subj: Meeting with US Atty, Cincinnati, OH on May 20, 1982 -
117. Memo for Region III Files fr D.R. Hunter, Reg. III (6/1/82) Subj: Zimmer Briefing for Chm Palladino - May 10, 1982
118. Ltr. to James Cummings, OIA, fr. Christopher Barnes, U.S. Attorney, Southern District of Ohio (6/2/82) re Zimmer
119. Memo to Joe Felton, DRR, fr. James Cummings, OIA (6/3/82) - Subj: Disclosure Determination FOIA - 82-206
120. Ltr. to James Keppler, Region III, fr. Christopher Barnes, U.S. Attorney, Southern District of Ohio - re Zimmer Nuclear Power Plant (6/4/82)
121. Note to Commission fr. James Cummings, OIA (6/4/82) - Forwarding 6/2/82 ltr. fr. C. Baines, U.S. Attorney w/o attachments
122. Memo to Chairman Palladino fr. James Cummings, OIA - 6/17/82) Subj: Zimmer w/attachment
123. Memo to Alphonse Gauthier, OIA, fr. James Cummings 6/23/82) Subj: Zimmer
124. Memo to Bert Davis, Region III, fr. James Cummings, OIA (6/24/82) - Subj: Zimmer Nuclear Plant w/attachment
125. Memo to Commissioners fr. Carl Kammerer, OCA (6/29/82)- Subj: Concerns of Dr. Meyers Regarding Zimmer
126. Complaint filed in - Thomas Applegate v. NRC U.S.D.C., D.C. No. 82-1829 (6/30/82)
127. Transmittal Slip to Rick Parrish, OGC, fr. Ron Smith, OIA (7/1/82) forwarding OIA documents
128. Ltr. to James Cummings, OIA, fr. Gerald Charnoff, Shaw, Pitman, Potts & Trowbridge (7/2/82). Requesting tape of interview with Floyd Oltz

129. Memo to Cummings, OIA, fr. Lil, OCM (Ahearne's Office) (7/12/82) forwarding 7/9/82 memo to Commissioners fr. C. Kammerer, OCA - Subj: Zimmer Investigation w/attachments
130. Memo to Commissioners fr. Carl Kammerer, OCA - (7/12/82) - Subj: Request for Interview re Zimmer and attaching document 124, above.
131. Memo to William Dircks, EDO, fr. James Cummings, OIA (7/15/82) Subj: Zimmer Allegations of Harassment by NRC Inspectors w/6/15/82 annotated memo fr. Keppler to Cummings attached
- 131a. Applegate ltr. to Palladino (8/16/82) re staff deception.
132. Ltr. to T. Applegate fr. James Cummings, OIA (9/20/82) in response to 7/16/82 ltr. to Chairman fr. Applegate
133. Ltr. to Ann Marie Tracey, Assistant U.S. Attorney, Southern District of Ohio, fr. James Cummings, OIA (9/23/82) Confirms Issues Discussed in September 8, 1982 Meeting
- 133a. Memo to file from N. Haller (9/23/82) re Applegate telephone call of 9/23/82
134. Ltr. to Cong. Udall fr. D. Gamble (10/20/82) noting in OIA 1981 investigation w/list of attachments but no attachments
135. Memo to Gilinsky, Ahearne, Roberts & Asselstine fr. Chairman Palladino (11/2/82) - Subj: Request fr. Mr. Applegate
136. Note to G. Schuetze fm Malsch, OGC, (11/12/82) re telephone call fr. Applegate
137. Memo to Commissioners fr. James Cummings, OIA (11/10/82) - Subj: Zimmer w/o attachments
138. Ltr. fr. Cong. Morris Udall to Chairman Palladino (12/7/82) re removal of document fr. Zimmer Investigation File
139. Ltr. to Cummings, OIA, fr. A. Tracey, USA (12/10/82) re Zimmer investigation

140. News Release 12/10/82 Cincinnati Enquirer titled "Congressman Accuses NRC of Zimmer cover-up? w/article based on release.
141. "Notice of Disclosure" (12/27/82) filed in Applegate v. NRC, U.S.D.C., D.C. No. 83-1829.
142. Memo for J. Keppler, A. Davis, D. Dougherty, and R. Warnick fr. Pearl Smidt, Region III (2/22/83) - Subj: FOIA Request - 488 - Zimmer w/attachment (2/22/83)
143. Memo to Ben Hayes, Director, OI fr. S. Chilk (3/4/83) - Subj: OI Policies w/OI policy statements and Investigative Procedures Memoranda 82-01 through 015.
- 144.A. Painsville Telegraph news article titled "Private Eye Blasts NRC" (3/16/83)
 - B. Cleveland Plain Dealer news article titled "NRC Chief in hot seat on Zimmer documents" (12/16/82)
 - C. Cincinnati Post news article titled "Zimmer problems hidden" (12/10/82).
145. Draft Memo to Judge Hoyt and Sebastian Aloat fr. Chairman Palladino 4/13/82 - Subj: Thomas W. Applegate Allegations
146. Memo to Commissioners fr. James Cummings, OIA (4/15/83) - Subj: Response to T. Applegate Concerns w/attachment
147. Memo to file from Hoyt (6/30/83) re 6/30/83 Cummings telephone call
148. Transcript of 5/11/83 interview of Roger A. Fortuna, Jr.
149. Typed Miller notes of 5/11/83 interview of David Gamble (undated)
150. Transcript of 6/13/83 interview of David Gamble.
151. Memo to file fr. C. Aloat, OGC (5/19/83) re telephone conversation with David Gamble.
152. Transcript of 5/12/83 interview of John Sinclair.
153. Transcript of 5/24/83 interview of John Sinclair.

154. Transcript of 5/12/83 interview of Arthur Schneblen.
155. Transcript of 5/16/83 interview of Kavin D. Ward.
156. Transcript of 5/16/83 interview of Gerald Phillip.
157. Transcript of 5/17/83 interview of Charles F. Norelius.
158. Transcript of 5/17/83 interview of James Donahue.
159. Transcript of 5/17/83 interview of Daniel H. Danielson.
160. Transcript of 5/17/83 interview of James Keppler.
161. Transcript of 5/26/83 interview of James J. Cummings.
162. Memo to file fr. Hoyt (6/2/83) re Cummings telephone call.
163. Memo to file fr. Hoyt (6/30/83) re Cummings telephone call.
164. Memo to file fr. Miller re interview of Applegate landlord.
165. Transcript of 6/2/83 interview of Bert Davis
166. Memo to file fr. Miller re 6/3/83 telephone interview of James McCarten.
167. Transcript of 6/7/83 interview of James McCarten
168. Transcript of 6/6/83 interview of Dudley Thompson
169. Transcript of 6/8/83 interview of Thomas Devine.
170. Transcript of 6/8/83 interview of Ann Marie Tracey.
171. Transcript of 6/15/83 interview of Victor Stello, Jr.
172. Memo to files fr C. Alost (6/27/83) re telephone conversation with Ann Bowden.
173. Tape (1) of 5/24/83 Sinclair interview.
174. Tapes (2) of 5/11/83 Fortuna interview.
175. Tapes (3) of 5/12/83 Sinclair interview.

176. Court Reporter tapes (8) of 6/13/83 Gamble interview.
177. Tapes (5) of 5/26/83 Cummings interview.
178. Tapes (2) of 6/2/83 Davis interview.
179. Tape (1) of 5/17 Norelous interview.
180. Tapes (2) of 6/8/83 Devine interview.
181. Tapes (3) of 5/12/83 Schneblin interview.
182. Tape of Miller notes on 5/11/83 Gamble interview.
183. Tapes (2) of 5/17/83 Ward interview.
184. Tapes (2) of 5/17/83 Keppler interview.
185. Tape (1) of 6/6/83 Thompson interview.
186. Tape (1) of 6/8/83 Tracey interview.
187. Court Reporter tapes (4) of 6/15/83 Stello interview.
188. Tapes (2) of 5/16/83 Phillip interview.
189. Court Reporter tapes (6) and handwritten notes (4 pages) of 6/7/83 McCarten interview.
190. Court Reporter steno tape of 6/15/83 Bernabei interview.
191. Indexes of IBM diskettes (4) containing final Hoyt/Aloot Report w/diskettes.
192. Index of IBM diskette (1) containing Fortuna transcript w/diskette.
193. Index of IBM diskette (1) containing Gamble transcript w/diskette.
194. Indexes of IBM diskettes (3) containing Sinclair transcript with diskette.
195. Index of IBM diskette (1) containing Danielson transcript with diskette
196. Indexes of IBM diskettes (2) containing Cummings transcript with diskette.

197. Index of IBM diskette (1) containing Ward transcript w/diskette.
198. Index of IB diskette (1) containing Tracy transcript w/diskette
199. Index of IBM diskette (1) containing Devine transcript w/diskette.
200. Index of IBM diskette (1) containing Phillip transcript w/diskette.
201. Index of IBM diskette (1) containing Phillip transcript with diskette.
202. IBM diskette identified as Tracy interview.
203. IBM diskette identified as Schneblen #4, 5/12/83
204. IBM diskette identified as "TOMSO"/"Thopson", apparently containing Thompson transcript.
205. IBM diskette identified as "Schnebelen, Tape 1, side 1/2", apparently containing Schnebelen transcript.
206. Index of IBM diskette (1) containing Keppler transcript with diskette.
207. Index of IBM diskette (1) containing Davis transcript w/diskette.
208. Indexes of IB diskette (2) containing Cummings transcript w/diskettes.
209. IBM diskette identified as "Index", apparently containing indexes to final Hoyt/Aloot report.
210. Indexes to IBM diskettes (11) used during Hoyt/Aloot inquiry w/o diskettes.
211. Undated draft of Exhibit C to final Hoyt/Aloot report.
212. Undated draft of Exhibit C to final Hoyt/Aloot report.
213. Selected pages fr Bowden telephone log maintained for J. Cummings.
214. Transcript of 6/15/183 interview of Lynne Bernabei.

215. Undated Miller annotation of draft transcript of 5/12/83 Schebelen transcript.
216. Undated draft of Exhibit C to Hoyt/Aloot Report.
217. Memo of telephone message fr J. Cummings to Hoyt (6/13/83)
218. Memo of telephone message fr. J. Cummings to Hoyt (6/13/83).
219. Memo of telephone message fr J. Cummings to Hoyt (6/2/83) with handwritten draft of document 162 above.
220. Handwritten note to file (7/15/83) re telephone conversation between T. Conner and Hoyt concerning request for McCarten transcript.
221. Handwritten Miller notes of 5/12/83 Schnebelen interview.
222. Handwritten Miller notes of 5/11/83 Gamble interview.
223. Undated, annotated Hoyt notes prepared in anticipation of Cummings interview.
224. Memo to file fr C. Aloot (5/10/83) re Gamble interview.
225. Memo to file fr C. Aloot (5/10/83) re Fortuna interview.
226. Final draft memo to file fr C. Aloot (5/10/83) re Sinclair interview.
227. Final draft memo to file fr C. Aloot (5/10/83) re Schnebelen interview.
228. Handwritten Aloot notes of Schnebelen interview.
229. Draft investigation charter (undated) titled "Review of Allegations Against NRC Employee"
230. Memo to file fr C. Aloot (5/10/83) re Applegate Inquiry
231. Note fr S. Eilperin to C. Aloot (4/13/83) transmitting draft chronology w/chronology.
232. Draft of memo fr Chairman Palladino to S. Eilperin/C. Aloot (4/13/83) re Thomas W. Applegate Allegations.

233. Annotated copy of memo fr M. Malsch to Chm Palladino (11/16/82) re interview with Thomas Applegate w/attachments.
234. Ltr. to H. Hoyt fr. J. McCarten (6/29/83) requesting that transcript of McCarten interview be provided to Commission.
235. Undated draft of Exhibit C to Hoyt/Aloot Report.
236. Undated draft of Exhibit E to Hoyt/Aloot Report.
237. Memo fr. Chairman Palladino to H. Hoyt/C. Aloot (5/6/83) re Thomas W. Applegate Allegations.
238. Memo fr. Chm. Palladino to W. Dircks, J. Cummings, V. Stello, and J. Keppler (8/4/83) transmitting Hoyt/Aloot report
239. Telephone log of G. Phillip on "Zimmer-welding allegations"
240. Index to OIA file No. 81-39 (5/11/81-11/10/82).
241. Memo to file fr C. Aloot (7/13/83) re transmittal of investigative report to Commission.
242. Ltr. fr C. Aloot to S. Lewis, Region III (1/18/84) transmitting copies of interview transcripts.
243. Handwritten Aloot notes of Cummings interview.
244. Memo fr. C. Aloot to J. Keppler, Region III (8/23/83) transmitting Devine and McCarten transcripts.
245. Memo fr. C. Aloot to V. Stello, EDO, (8/5/83) transmitting Stello, McCarten and Norelius interviews.
246. A Memo fr. C. Aloot to F. Herr, OIA (8/9/83) transmitting Cummings interview.
B Memo fr. C. Aloot to F. Herr, OIA
247. Ltr. fr. C. Aloot to B. Davis, Region III (8/26/83) transmitting page 72 of McCarten transcript w/enclosure.
248. Draft of document 236, above.

249. Highlighted copy of document 35, above.
250. Memo fr. J. Cummings, OIA, to Chm. Palladino (9/8/83) commenting on Hoyt/Aloot report w/enclosures
 - A. clean copy
 - B. annotated version
251. Ltr. fr. L. Bernabei to Hoyt/Aloot, NRC (7/24/83) transmitting corrections to Bernabei transcript.
252. Ltr. fr. T. Devine, GAP to H. Hoyt 8/10/83) transmitting corrections to Devine transcript.
253. Memo fr. J. Cummings, OIA to H. Hoyt (8/26/83) requesting interview notes.
254. Memo fr. H. Hoyt to J. Cummings, OIA (8/29/83) transmitting selected inquiry documents.
255. Miscellaneous drafts of OIA report
256. Preliminary McCarten draft of 1981 Region III report
257. Unsigned final draft of 1981 Region III report.
258. Ltr. fr. R. DeYoung, IE, to W. Dickhoner (11/24/81) re results of IE Report 50-358/81-13 w/ Notice of Violation and Proposed Imposition of Civil Penalty
259. Ltr. fr. J. Keppler, Region III, to W. Dickhoner (11/24/81) transmitting IE Report 50-358/81-13 w/report
260. Deposition of James Cummings (3/8-9/83) taken in Applegate v. NRC, U.S.D.C., D.C. No. 82-1829 w/ errata sheet
261. OIA Report titled "Special Inquiry Re: Adequacy of IE Investigation 50-358/80-9 at the William H. Zimmer Nuclear Power Station (8/7/81) w/attachments.
262. Note fr. J. Sinclair, OIA, to J. Blaha (11/9/81) transmitting Zimmer inquiry documents
263. Record of telephone conversation between D. Gamble and P. Gwynn (7/10/81) re Zimmer
264. Memo to file fr. D. Gamble and A. Puglia, OIA (6/19/81)

- re etching of heat numbers on pipes at Zimmer
- 265 Memo fr. J. Cummings, OIA, to J. Fitzgerald, OI (8/2/82) re Zimmer investigation
- 266 Memo fr. J. Cummings, OIA, to W. Dircks EDO (10/30/81) re OIA survey of NRC's QA/QC programs
- 267 Undated, unsigned briefing package for 10/27/81 Commission mtg. on Zimmer
- 268 Misc. documents from personal Zimmer file maintained by G. Foster, Reg. III
- 269 Index to OIA file 81-18
- 270 Deposition of John Sinclair (3/9/83) taken in Applegate v. NRC, U.S.D.C., D.C. No. 82-1829
- 271 Deposition of Arthur Schebelen (3/7/83) taken in Applegate v. NRC, U.S.D.C., D.C. No. 82-1829 w/errata sheet
- 272 Deposition of Ron Smith (3/4/83) taken in Applegate v. NRC, U.S.D.C., D.C. No. 82 - 1829 w/errata sheet.
- 273 Deposition of David Gamble (3/3/83) taken in Applegate v. NRC, U.S.D.C., D.C. No. 82-1829
- 274 GAO Report EMO-81-72 (July 9, 1981) titled "Improvements Needed in the Nuclear Regulatory Commission's Office of Inspector and Auditor," pp. 24-35.
- 275 Memorandum to the Chairman and the Commissioners fr. V. Gilinsky, Commissioner (8/26/83) concerning "NRC Investigation"

FEB 01 379

Docket No. 50-358 -75-50

Cincinnati Gas and Electric
Company
ATTN: Mr. Earl A. Borgmann
Vice President
Engineering Services
and Electric Production
139 East 4th Street
Cincinnati, OH 45201

Gentlemen:

This refers to the inspection conducted by Mr. K. D. Ward of this office on November 8-9 and December 12-13, 1978, of activities at W. H. Zimmer Nuclear Power Plant authorized by NRC Construction Permit No. CFP-88 and to the discussion of our findings with Mr. W. W. Schwiers and others at the conclusion of the inspection.

The enclosed copy of our inspection report identifies areas examined during the inspection. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations, and interviews with personnel.

During this inspection, certain of your activities appeared to be in noncompliance with NRC requirements, as described in the enclosed Appendix A.

This notice is sent to you pursuant to the provisions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. Section 2.201 requires you to submit to this office within thirty days of your receipt of this notice a written statement or explanation in reply, including for each item of noncompliance: (1) corrective action taken and the results achieved; (2) corrective action to be taken to avoid further noncompliance; and (3) the date when full compliance will be achieved.

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Cincinnati Gas and
Electric Company

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FEB 01 379

In addition to the need for corrective action regarding these specific items of noncompliance, we are concerned about the implementation of your quality assurance program that permitted their occurrence. Consequently, in your reply, you should describe in particular, those actions taken or planned to improve the effectiveness of your quality assurance program.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter, the enclosures, and your response to this letter will be placed in the NRC's Public Document Room, except as follows. If the enclosures contain information that you or your contractors believe to be proprietary, you must apply in writing to this office, within twenty days of your receipt of this letter, to withhold such information from public disclosure. The application must include a full statement of the reasons for which the information is considered proprietary, and should be prepared so that proprietary information identified in the application is contained in an enclosure to the application.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

James G. Keppler
Director

Enclosures:

1. Appendix A, Notice of Violation
2. IE Inspection Rpt No. 50-358/78-30

cc w/encls:

J. R. Schott, Plant
Superintendent
Central Files
Reproduction Unit NRC 20b PDR
Local PDR
NSIC
TIC
U. Young Park, Power Siting
Commission

OFFICED	RIII <i>Ward</i>	RIII <i>Danielson</i>	RIII <i>Heishman</i>	RII <i>Notelius</i>	RIII <i>Keppler</i>	RIII <i>Vandell</i>
SURNAMES	Ward/sr	Danielson	Heishman	Notelius	Keppler	Vandell
DATED	1/29/79	1/29/79			1/29	

Appendix A

NOTICE OF VIOLATION

Cincinnati Gas and Electric Company

Docket No. 50-358

Based on the inspection conducted on November 8-9, December 12-13, 1978, it appears that certain of your activities were in noncompliance with NRC requirements, as noted below. These items are infractions.

1. Contrary to 10 CFR 50, Appendix B, Criterion XII and the Zimmer Nuclear Power Station FSAR Chapter 17, Paragraph 17.1.12, states in part that, "Measures shall be established to assure that . . . instruments and other measuring and testing devices used in activities affecting quality are properly . . . calibrated, and adjusted at specified periods to maintain accuracy within necessary limits.

On November 8, 1978, Kaiser Engineers, Incorporated and Peabody Magnaflux Corporation radiographic film densitometer readings were compared against each other and found to have a wide variance.

2. Contrary to 10 CFR 50, Appendix B, Criterion IX of the Zimmer Nuclear Power Station FSAR, Chapter 17, Paragraph 17.1.9.2, states in part that, "Measures shall be established to assure that special processes, including . . . nondestructive testing, are controlled, and accomplished by qualified personnel using qualified procedures in accordance with applicable codes . . . specifications, criteria and other special requirements.
 - a. On November 8, and December 12, 1978, forty radiographs were reviewed including reports. Sixteen discrepancies were observed in the reports or the films.
 - b. In reviewing the above forty radiographs, several of the welds were less than 0.25 inches thick and were radiographed with a Iridium 192 source without a separate procedure being performed and proven by actual demonstration as required by ASME Section III, 1971 Edition, 1972 Addenda.

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U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-358/78-30

Docket No. 50-358

License No. CPPR-88

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

Facility Name: William H. Zimmer Nuclear Power Plant

Inspection At: W. H. Zimmer Site, Moscow, Ohio

Inspection Conducted: November 8-9, December 12-13, 1978

Inspector: *D. H. Danielson*
K. D. Ward

1/26/79

Approved By: *D. H. Danielson*
D. H. Danielson, Chief
Engineering Support Section 2

1/26/79

Inspection Summary

Inspection on November 8-9 and December 12-13, 1978 (Report No. 50-358/78-30)

Areas Inspected: Observation of preservice inspection (PSI) of vessel and review of nondestructive examinations (NDE) reports. Review of radiographs and reports in the HP, LP, and Core Spray systems. The inspection involved 24 inspection-hours onsite by one NRC inspector.

Results: Of the four areas inspected, no apparent items of noncompliance were identified in three areas; two apparent items of noncompliance were identified in one area (infracation - failure to calibrate and maintain instruments within necessary limits - paragraph 5.a; infracation - failure to follow established procedures to comply with applicable Codes - paragraph 5.d).

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DETAILS

Persons Contacted

Cincinnati Gas and Electric Company (CG&E)

- *B. K. Culver, Project Manager
- *W. W. Schwiers, Principal QA and Standard Engineer
- *R. L. Wood, QA and Standard Engineer
- J. R. Weissenburg QA Engineer

Kaiser Engineers, Incorporated (KEI)

- *R. Turner, QA Manager
- W. Puckett, Lead Mechanical Inspector
- A. Pallon, Weld/NDE QA Engineer

Nuclear Energy Services, Incorporated (NES)

- J. Marinelli, Electronic Technician
- R. Trank, Mechanic Technician

The inspector also contacted and interviewed other licensee and contractor employees.

*Denotes those present at the exit interview.

Functional or Program Areas Inspected

1. Preservice Inspection - General Information

- a. Nuclear Energy Services, Incorporated (NES) developed the Preservice Inspection Program and is performing the preservice examination in accordance with ASME Section XI, 1974 Edition with no Addenda.
- b. Preservice inspection is being performed intermittently and is to be completed in the Summer of 1979.
- c. The automated ultrasonic examination will take approximately six to eight weeks to perform, working two shifts six days a week.

2. Observation of Work and Nondestructive Examination Activities

The inspector observed and had discussions with NES personnel during the set-up of the automated ultrasonic

instruments and equipment and during the nondestructive examinations. These observations included the setting up of the Reflectoscope ultrasonic instruments, the transponding ultrasonic calibration unit, the Computer X and Y tape recorder for the automated ultrasonic examination of the vessel, and the automated ultrasonic examination of nozzle welds in accordance with Procedure 80A1174, Revision 0, dated February 15, 1978.

No items of noncompliance or deviations were identified within the areas observed.

3. Data Review and Evaluation

The data review for the following system demonstrated that the QA/QC commitment had been complied with.

Feedwater to reactor
Recirculation
Jet pump nozzle safe end and instrument nozzle
RCIC to reactor
RCIC from Main Steam
Core Spray
Steam separator
Feedwater sprayer
Shroud head
RPV closure head nozzles, supports and pads

No items of noncompliance or deviations were identified within the areas reviewed.

4. NDE Personnel Certification Review

The inspector reviewed the following NDE personnel certifications in accordance with SNT-TC-1A, 1968 Edition. The personnel were certified by NES.

<u>Name</u>	<u>Level</u>	<u>Methods</u>
R. Barnes	II	UT, PT
J. Wolf	II	UT, PT
K. Dufel	II	UT

No items of noncompliance or deviations were identified within the areas reviewed.

5. Independent Inspection

Radiographs and reports were reviewed of the following welds in accordance with ASME Section III, 1971 Edition, with Summer 1972 Addenda and the applicable procedures that were used.

<u>Line</u>	<u>Weld</u>	<u>Diameter</u>	<u>Thickness</u>	<u>Date</u>
LHP03C10	HP32	10"	0.593"	9/22/76
LHP03C10	HP33	10"	0.593"	9/30/76
LHP06C4	HP34	4"	0.237"	9/30/76
LHP06C4	HP35	4"	0.237"	2/18/76
LHP04A8	HP41	8"	0.593"	9/2/76
LHP18A8	HP49	3"	0.438"	1/10/77
LLP17A3	LP47	3"	0.216"	4/20/77
LLP17A3	LP48	3"	0.216"	6/17/77
LLP04B4	LP49	4"	0.237"	8/12/76
LHP21A4	HPK1	3"	0.237"	4/28/77
LHP21A2	HPK2	4"	0.237"	3/11/77
LHP17A3	HPK10	3"	0.216"	2/6/78
LHP06B4	HP17	3"	0.237"	9/28/76
LHP08C3	HPK17	3"	0.438"	8/7/78
LHP03C10	HP27	10"	0.593"	8/16/76
LHP03C10	HP30	10"	0.593"	9/20/76
LHP06C4	36HP	4"	0.237"	1/27/76
LHP01A20	HP1B	20"	0.375"	2/17/77
LHP01A20	HP1	20"	0.375"	7/26/76
LHP01A20-1	HP1	20"	0.375"	7/26/76
LHP01B16	HP67B	16"	0.375"	5/2/77
LHP01A20	9HP	20"	0.375"	7/2/76
LHP03A14	HP20	14"	0.937"	9/3/76
LHP03C10	HP28	10"	0.775"	7/20/76
LHP01A20	HP2	20"	0.375"	8/9/76
LLP05A12	LP24	12"	0.375"	4/27/77
LLP22A6	LP62	6"	0.280"	9/28/76
LLP22A6	LP63	4"	0.237"	9/30/76
LLP04B4	LP51	4"	0.237"	10/5/76
LLP04B4	LP50	4"	0.237"	8/30/76
LLP14C4	LPK25	4"	0.237"	8/28/78
LLP14B3	LPK9	3"	0.226"	6/23/78
LLP02B10	LP7	10"	0.600"	4/30/76
LLP02B10	LP1	10"	0.593"	7/8/76
LLP02B10	LP2	10"	0.593"	6/23/76
LLP12A16	LPK4	16"	0.375"	10/3/77

1LPO2A12	LP10	10"	0.365"	5/14/77
1LPO2A12	LP11	12"	0.365"	7/12/77
1LPO2A12	LP23A	12"	0.375"	4/18/77
1LPO5A12-18	LP23B	12"	0.375"	4/18/77

- a. On November 8, 1978, the inspector requested to use Kaiser Engineers, Incorporated (KEI) densitometer in reviewing the above radiographs. The KEI personnel informed the inspector that the densitometer was not always accurate and that the Peabody Magnaflux Corporation (PMC) densitometer was more accurate and should be used when densities are to be taken of radiographs. A density reading was taken, by the inspector, from a designated radiographic area using the PMC densitometer and compared to a reading from that same area using the KEI densitometer. The readings were found to have a wide variance. The inspector was unable to determine which, if either, of the densitometers was correct.

Both densitometers have National Bureau of Standards (NBS) calibrated density radiographic step wedges. The KEI densitometer is a Macbeth TO-504, No. 34210 and the PMC densitometer is a Macbeth - Quanota Log No. 7859. When the inspector returned to the site December 12, 1978, it was determined that the densitometers were in the same condition as they were on November 8, 1978. This is identified as an item of noncompliance in Appendix A. (358/78-30-01)

- b. On November 8, 1978, the inspector reviewed the first nine radiographs listed in Paragraph 4 above. These radiographs had been reviewed by Peabody Magnaflux Corporation, Kaiser Engineers, Incorporated and the Authorized Inspector. The following discrepancies were found in reviewing the reports and radiographs.
- (1) Line No. 1HPO3C10, Weld No. HP33; two mistakes in the report. Area O-14 should be area 7-14 and the diameter is stated as 16" and is actually a 10" pipe weld.
 - (2) Line No. 1HPO6C4, Weld No. HP34; mistake in the report. One area of interest was 3 1/4" - 7" and the next area of interest was stated as 7 1/2" - 11". The report is incomplete since all of the weld must be interpreted.
 - (3) Line No. 1HPO6C4, Weld No. HP35; there is a missing report. The original radiograph showed an unacceptable

area in the weld. The weld was repaired. There was a report and radiograph stating a second repair was made. There was no record or radiograph of the first repair.

- (4) Line No. 1LP17A3, Weld No. LP47; the repair film did not have a R1 to show that it was repair one, and the technique was unacceptable because the penetrameters were not shimed to the total thickness being radiographed.
 - (5) Line No. 1HPO3C10, Weld No. HP32; the film density through three of the diagnostic areas varied by more than minus 15 percent from the density through the penetrameter.
- c. On December 12, 1978, the inspector requested to review radiographs and reports that had been final reviewed for turn-over prior to operation. The radiographs selected for examination had been reviewed by Peabody Magnaflux Corp., Kaiser Engineers, Inc., and the Authorized Inspector. In addition, several radiographs had been reviewed by CONAM. The following discrepancies were found in reviewing the reports and radiographs:
- (1) Line No. 1HP21A4, Weld No. HPK1; wrong diameters stated on reports. The original report states 3" diameter pipe size and the two repair reports R1 and R2 state 4" diameter pipe sizes.
 - (2) Line No. 1HP17A3, Weld No. HPK10; repair film does not have a R1 on the film. Records state a repair one was made.
 - (3) Line No. 1HPO6B4, Weld No. HP17; the technique was unacceptable because the penetrameters were not shimed to the total thickness being radiographed.
 - (4) Line No. 1HPO8C3, Weld No. HPK17; lead letter "F" was not placed adjacent to the penetrameter. The report stated that film-side penetrameters were used to radiograph the weld.
 - (5) Line No. 1HPO3C10, Weld No. HP30; mistake in the report. One area of interest was 3½" - 7" and the next area of interest was stated as 7½" - 11". The report is incomplete since all of the weld must be interpreted.

- (6) Line No. 1HP01A20, Weld No. HP1B; no original report, two extra reports, one stating R1 and another R2, and one extra film stating repair two (R2). The weld was first radiographed having one film with artifacts. The area with the film artifacts was radiographed twice, first without the R2, which was acceptable and then another of the same area with a R2. The weld did not show any defects on the original radiograph, therefore was not repaired.
- (7) Line No. 1HP01A20, Weld No. HP1; no repair film or report and penetrameters not shined. The film and report states unacceptable porosity in the weld. There is not a report or film indicating that the weld was repaired.
- (8) Line No. 1HP01A20-1, Weld No. HP1; the penetrameters are not shined, a black felt ink pen was used to mark the identification (ID) on one film and the line No. was incomplete leaving the -1 off.
- (9) Line No. 12P02B10, Weld No. LP1; mistake in the report. One area of interest was $3\frac{1}{2}$ " - 7" and the next area of interest was stated as $7\frac{1}{2}$ " - 11". The report is incomplete since all of the weld must be interpreted.
- (10) Line No. 1HP03C10 Weld No. HP28; the report states that this pipe weld is 10 inch diameter, but the radiograph shows that it is 71" around the pipe. Prior to leaving the site the inspector was informed that the weld was 22" in diameter.
- (11) Line No. 1LP02B10, Weld No. LP1; the ID was left off when radiographed, and then written with a black ink felt pen on the final radiograph. An acceptable area was reradiographed as a repair but there was no repair. This is a panoramic radiographic and in most of the areas where the film overlapped the density varies by more than minus 15 percent from the density through the penetrometer.
- d. The inspector observed that radiography was performed on several welds using an IR 192 source on material less than 0.25" without a separate procedure being prepared and proven by actual demonstration, as required by ASME Section III, 1971 Edition, with Summer 1972 Addenda. Peabody has technique radiographed shots of a 0.257" wall 4" diameter, a 0.280" wall 2 1/2" diameter and a 0.218" wall 2" diameter. The thinnest material reviewed was 0.216".

Items in Paragraphs b, c, and d, are noncompliances identified in Appendix A, (358/78-30-02).

Except as noted, no items of noncompliance or deviations were identified within the areas observed.

Exit Interviews

The inspector met with site representatives (denoted in the Persons Contacted Paragraph) at the conclusion of the inspection and summarized the scope and findings of the inspection.

WELDING

(2)

23
MAR 28 1979

Docket No. 50-358 ⁷⁸⁻³⁰

Cincinnati Gas and Electric
Company
ATTN: Mr. Earl A. Borgmann
Vice President
Engineering Services
and Electric Production
139 East 4th Street
Cincinnati, OH 45201

Gentlemen:

Thank you for your letter dated March 2, 1979, informing us of the steps you have taken to correct the noncompliance identified in our letter dated February 1, 1979.

During a telephone conversation, on March 14, 1979, between R. L. Wood of CG&ECo and K. D. Ward of this office, Mr. Wood stated that their original response to item 5b(4) was in error and that the weld would be re-radiographed using the appropriate shim thickness. We will examine your corrective action during a future inspection.

Your cooperation with us is appreciated.

Sincerely,

G. Fiorelli, Chief
Reactor Construction and
Engineering Support Branch

cc: J. R. Schott, Plant
Superintendent

cc w/ltr dtd 3/2/79:
Central Files
Reproduction Unit NRC 20b
PDR
Local PDR
NSIC
TIC
U. Young Park, Power
String Commission

OFFICE ▶	Citizens Against a Radioactive Environment	RIII <i>Ward</i>	RIII <i>Danielson</i>	RIII <i>Fiorelli</i>	RIII <i>Vandell</i>
SURNAME ▶		Ward/sr	Danielson	Fiorelli	Vandell
DATE ▶		3/20/79	3/20/79	8	3/21/79

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THE CINCINNATI GAS & ELECTRIC COMPANY



E. A. BORGMANN
VICE PRESIDENT-ENGINEERING

March 2, 1979
QA-1107

U. S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Attention: Mr. J. G. Keppler,
Director

RE: WM. H. ZIMMER NUCLEAR POWER STATION - UNIT I
IE INSPECTION REPORT 50-358/78-30, CONSTRUCTION
PERMIT NO. CPPR-88, DOCKET NO. 50-358,
W.O. #57300-957, JOB E-5590

Gentlemen:

This letter constitutes our formal reply to the subject Inspection Report. It is our opinion that nothing in the report or in this reply is proprietary in nature.

Our response to the items of noncompliance identified in Appendix "A" of the report follows. Please note that the item numbers are those used in the body of the report rather than those used in Appendix "A".

Corrective Action Taken and Results Achieved

Item 5a

The Henry J. Kaiser Company (HJK) densitometer, Macbeth T0-504, No. 34210, was removed from service on February 12, 1979, and returned to the manufacturer for rework and recalibration. Upon its return, it will be placed on regular recalibration schedule.

Item 5b

- (1) The report sheet for weld no. HP-33 has been corrected, initialed, and dated.
- (2) Review of film for weld no. HP-34 showed that the entire weld had been interpreted. The clerical mistake in the report has been corrected, initialed, and dated.
- (3) The record and film for the first repair of weld HP-35 has

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been located and added to the records.

- (4) The repair film for weld LP-47 has been so marked, initialed, and dated. The technique used for this radiograph has been reviewed and is felt to be acceptable.
- (5) It has been agreed that weld HP-32 will be re-radiographed to correct film density after the system is turned back to construction by the Electric Production Department.

Item 5c

- (1) The reports for weld HPK1 have been corrected, initialed, and dated.
- (2) Repair film for weld No. HPK10 has been noted as R1. Report has been annotated, initialed, and dated.
- (3) Weld HP-17 has been removed and replaced by weld HPK20.
- (4) It has been agreed that weld HPK17 is to be re-radiographed after the system is turned back to construction by the Electric Production Department.
- (5) A review of the film for weld No. HP-30 shows that the weld was completely interpreted. The report has been corrected, initialed, and dated.
- (6) The original film for weld HP1B, which showed that repair was required, has been lost. However, a copy of the report has been placed in the film pack. The repair was made, and re-radiographed as R1 and the weld was again rejected. The second repair was then re-radiographed as R2 and accepted.
- (7) & (8) Weld No. HP1 has been removed and replaced. This removal and replacement is otherwise documented.
- (9) Review of the film for weld No. LP1 shows that the film was completely interpreted. The report has been corrected, initialed, and dated.
- (10) The report for weld No. HP-28 has been corrected, initialed, and dated.
- (11) A portion of weld No. LP1 was re-radiographed for technical reasons, and it was determined that no repair was required. The film was mistakenly designated R1. The records have been corrected to identify this film as a "reshoot".

The density variations at the film overlaps are not within the areas of interpretation, and are a normal consequence of the

panoramic radiographic technique.

Item 5d

Peabody Magnaflux will prepare a radiographic inspection procedure based on IR-192 source for material less than 0.25" wall thickness. Although this procedure had not been prepared at the time of the inspection, the technique had been qualified, and documentation of the qualification was presented.

Because of the number of inspection findings, an audit of 20 additional radiographic packages was performed. This audit included various systems and covered the same radiographing time period as the inspected radiographs. The audit confirmed that the inspection findings were typical. As a result, it has been agreed that each radiograph package would be reviewed prior to system turnover, and that necessary corrections or clarifications would be made at that time.

Corrective Action to be Taken to Avoid Further Noncompliance

It should be noted that all findings from this inspection were clerical or technical mistakes, which would be expected to have a minimal effect on plant safety. Of the 40 radiographs reviewed, no rejectable welds were identified.

In order to minimize future noncompliances resulting from mistakes of this nature, a cognizant engineer from the licensee's Quality Assurance & Standards Section will be assigned to conduct an additional review of each radiograph package prior to filing with the quality assurance records.

As previously noted, existing radiograph packages will be reviewed critically prior to system turnover, and corrections or clarifications made at that time.

Date When Full Compliance will be Achieved

Clerical mistakes identified during the inspection have been corrected and are now in compliance. Welds HP-32, Item 5b (5) and weld HPK17, Item 5c(4), require re-radiography after the system is turned back to Construction. Full compliance is expected by May 1, 1979. The Peabody Magnaflux radiographic procedure for materials less than 0.25" wall thickness, Item 5d, is expected to be completed and qualified by May 1, 1979. The HJK densitometer is expected to be returned to service by June 1, 1979.

The responsibility for performance of special processes, including non-destructive examination, and associated quality assurance has been assigned to HJK, with licensee personnel performing an audit function. It is now our feeling that the effectiveness of this phase of our

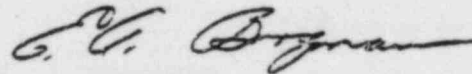
quality assurance program would be improved by direct participation of CG&E Quality Assurance personnel in the review process of HJK NDE activities.

We trust that this letter is an adequate response to your IE Inspection Report #78-30.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

By



E. A. BORGMANN
Vice President, Engineering
Services and Electric Production

RLW:pa

WELDING

YELLOW FILE COPY

3

JAN 7 1980

Docket No. 50-358

79-17

Cincinnati Gas and Electric
Company
ATTN: Mr. Earl A. Borgmann
Senior Vice President
Engineering Services
and Electric Production
139 East 4th Street
Cincinnati, OH 45201

Gentlemen:

This refers to the inspection conducted by K. D. Ward of this office on September 18-20 and December 11&12, 1979, of activities at W. H. Zimmer Nuclear Power Plant authorized by NRC Construction Permit No. CPPR-88 and to the discussion of our findings with Mr. W. W. Schwiers and others at the conclusion of the inspection.

The enclosed copy of our inspection report identifies areas examined during the inspection. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations, and interviews with personnel.

No items of noncompliance with NRC requirements were identified during the course of this inspection.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room, except as follows. If this report contains information that you or your contractors believe to be proprietary, you must apply in writing to this office, within twenty days of your receipt of this letter, to withhold such information from public disclosure. The application must include a full statement of the reasons for which the information is considered proprietary, and should be prepared so that proprietary information identified in the application is contained in an enclosure to the application.

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Cincinnati Gas and Electric
Company

- 2 -

JAN 7 1980

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

G. Fiorelli, Chief
Reactor Construction and
Engineering Support Branch

Enclosure: IE Inspection Rpt.
No. 50-358/79-17

cc w/encl:
J. R. Schott, Plant Superintendent
Central Files
Reproduction Unit NRC 20b
PDR
Local PDR
NSIC
TIC
Harold W. Kohn, Ohio Power
Siting Commission
Citizens Against a
Radioactive Environment
Helen W. Evans, Director,
Division of Power
Generation

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DTAH
Fiorelli
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U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-358/79-17

Docket No. 50-358

License No. CPPR-88

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

Facility Name: W. H. Zimmer Nuclear Power Station

Inspection At: W. H. Zimmer Site, Moscow, Ohio

Inspection Conducted: September 18 - 20, and December 11 - 12, 1979

Inspector: *K. D. Ward*
K. D. Ward

1/2/80

Approved By: *D. H. Danielson*
D. H. Danielson, Chief
Engineering Support Section 2

1/2/80

Inspection Summary

Inspection on September 18 - 21, and December 11 - 12, 1979 (Report No. 50-358/7)

Areas Inspected: Review of procedures, nondestructive examination (NDE) data reports, personnel certifications, and radiographs of various systems. The inspection involved a total of 25 inspection hours onsite by one NRC inspector.

Results: No items of noncompliance or deviations were identified.

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DETAILS

Persons Contacted

Cincinnati Gas & Electric Company (CG & E)

*W. Schwiers, Principal QA and Standards Engineer
*R. Woods, QA and Standards Engineer
W. Murray, Engineer
R. Ehas, Lead QA Engineer

Kaiser Engineers, Incorporated (KEI)

*K. Baumgarten, Acting QA Manager
A. Pallon, Welding/NDE QA Engineer

Peabody Testing Magnaflux Corporation (PTM)

A. Sellars, NDE Supervisor

Nuclear Energy Services, Incorporated (NES)

R. Bott, NDE Supervisor
R. Ziebar, Level II Radiographer

Hartford Steam Boiler Engineering and Insurance Company (HSB)

T. McCox, Authorized Nuclear Inservice Inspector (ANII)

The inspector also contracted and interviewed other licensee and contractor employees.

*Denotes those present at the last exit interview on December 12, 1979.

Licensee Action on Previous Inspection Findings

(Closed) Noncompliance (358/78-30-01): Densitometer calibration. The densitometer was returned to the manufacturer for rework and recalibration. It was returned to the site and is now in storage not being used.

(Open) Noncompliance (358/78-30-02): Of the seventeen discrepancies found on this one noncompliance, the following three items remain open.

Item 5b (5): The weld HP-32 has not been reradiographed. The film density is unacceptable.

Item 5c (4): The weld HPK-17 has not been reradiographed. The lead letter "F" was not on the film adjacent to the penetrometer.

Item 5c (8): The weld HP-1 has not been reradiographed. The penetrameters have not been shimed.

The licensee stated that they should be closed out the first part of 1980.

Functional or Program Areas Inspected

1. General Information

Reference a. NRC Report No. 50-358/78-19

b. NRC Report No. 50-358/78-23

c. NRC Report No. 50-358/78-30

d. Letter QA-1107, dated March 2, 1979, to Mr. J. G. Keppler from Mr. E. A. Borgmann. (Formal response to the items of noncompliance).

Preservice inspection (PSI) is to be completed approximately January, 1980.

2. Review of Revised and New Preservice Inspection Procedures

The inspector reviewed the following NES procedures.

a. Ultrasonic Examination Procedure for Closure Head Welds, No. 80A1171 Revision 0, January 19, 1979.

b. Ultrasonic Examination Procedure for Closure Head and Recirculation Pump and Valve Studs and Nuts, No. 80A1175, Revision 1, December 27 1978.

c. Automated Ultrasonic Examination Procedures for Reactor Vessel Nozzle Inner Radius No. 80A1176, Revision 0, December 27, 1978.

d. Manual Ultrasonic Examination Procedures for Nozzle Inner Radius Areas, No. 80A1177, Revision 0.

e. General Magnetic Particle Examination, No. 80A1591, Revision 1, January 12, 1979.

f. Ultrasonic Examination Procedures for Control Rod Drive Housing Welds, No. 80A1184, Revision 0, January 3, 1979.

No items of noncompliance or deviations were identified.

3. Review of Data and Audit Reports

The inspector reviewed the following:

- a. Information available for the PSI activities to date.
- b. Audit of NES by Sargent & Lundy (S & L)
- c. Audit of NES by CG & E.

No items of noncompliance or deviations were identified.

4. NDE Personnel Certificates

The following NES NDE personnel certifications were reviewed and found to be in accordance with SNT-TC-1A, 1975 Edition.

<u>NAME</u>	<u>UT</u>	<u>PT</u>	<u>VT</u>	<u>MT</u>
R. Barnes	II		II	
R. Bott	II		II	
D. Burrelli	II			
K. Defel	I			
J. Jensen	II		II	
S. Meeach	II	II		
J. Robinson	II	II		
G. Sechler	II	II		
J. Wolf	II	II		
K. Dew		II	II	II
M. Shallis		II		II

No items of noncompliance or deviations were identified.

5. Independent Inspection

The inspector interpreted the radiographs and reviewed the reports of the following welds in accordance with ASME Section III, 1971 Edition, Summer 1972 Addenda and the applicable procedures that were used. (Reference item of noncompliance identified as 358478-30-02)

<u>Line</u>	<u>Weld</u>	<u>Diameter</u>	<u>Thickness</u>	<u>Date RT</u>
1HP06C4	HP17A	4"	0.237"	10/10/77
1HP01A20	10HP	28"	0.625"	3/12/76
1WR44B6	WR-1	6"	0.280"	11/22/76
1WR52A6	WR-2	6"	0.280"	11/23/76
1WR52A6	WR-3	6"	0.280"	2/16/77
1WR44DA2	WR-19	4"	0.237"	11/23/76
1RT01AA4	RT-K-99	4"	0.337"	6/1/78

<u>Line</u>	<u>Weld</u>	<u>Diameter</u>	<u>Thickness</u>	<u>Date RT</u>
1RT08A4	RT-139A	4"	0.337"	1/13/77
1RT08A4	RT-140	4"	0.337"	1/12/77
1HP08C3	HP-19B	3"	0.438"	10/19/77
1HP08C3	HP-19C	3"	0.438"	10/11/77
1HP08C3	HP-19D	3"	0.438"	11/2/77
1HP08C3	HP-19E	3"	0.531"	10/7/77
1HP08CA14	HP-19F	3"	0.438"	10/21/77
1HP080C3	HP-19G	3"	0.438"	10/13/77
1HP08C3	HP-19H	3"	0.438"	10/31/77
1HP06AA	HP-19K	3"	0.438"	12/20/78
1LP02B-10	LP-6	10"	0.593"	8/12/78
1FC01B12	FC-9	12"	0.375"	3/28/77
1LP04B4	Lp49	4"	0.237"	8/12/76
1FC02ABB	FC23	8"	0.322"	12/17/76
1LP04B4	LP55	4"	0.237"	3/3/77
1LC19AA2	LC-26D-1	2"	0.218"	4/26/79
1LC05A-3	LC-7	3"	0.216"	7/21/78
1LP14C4	LP66	4"	0.237"	10/22/76
1LP09C3	LP41	3"	0.216"	4/7/77
1LP22A-6	LP-K1	6"	0.280"	3/11/77
1DG18AA8	DG-K-31	8"	0.322"	10/3/77
1CY50AA2 1/2	CYK-79	2 1/2"	0.203"	9/30/77
1DG18AA8	DG-K-33	8"	0.322"	10/17/77
1FC39CA6	FC34A	6"	0.280"	11/29/77
1FC32AB8	FCK-74	8"	0.322"	6/12/78
1FC14ABD	FCK101	8"	0.322"	3/10/78
1HP08C3	HP52	3"	0.438"	10/31/77
11N01A3	INK49	3"	0.216"	11/19/78
11N09B-3	INK50	3"	0.216"	11/19/78
1LP02A12	LP19	14"	0.375"	6/01/76
1HP21A4	HP53	4"	0.237"	9/21/76
1IP01A20-22	LP29B	20"	0.375"	2/11/77
1LP02B10	LP4	10"	0.593"	5/24/76
1HP21A4	HP-54	4"	0.237"	9/8/76
1HP17A3	HP-56C	3"	0.216"	9/12/77
1LC10A-4	LC-4	4"	0.237"	7/05/78
1FW02EA1843	FW52A	18.43"	1.351"	4/05/77
1LCOA-3	LC-5	3"	0.216"	7/13/78
1FW02GA18	FW-59	12"	1"	4/11/76
1MS26AB10	MS61	10"	0.594"	10/29/76
1MS24AB3	MSK5	3"	0.300"	6/28/77
1MS24AA3	MSK6	3"	0.300"	9/15/77
1MS24AC3	MSK8	3"	0.300"	10/3/77
1MS24F4	MSK10	3"	0.300"	9/8/77
1R12086	RI-9	6"	0.432"	2/28/77
1R101B4	RIK29	4"	0.438"	6/14/78
1RR02CK10	RRB21	10"	0.594"	6/2/76

<u>Line</u>	<u>Weld</u>	<u>Diameter</u>	<u>Thickness</u>	<u>Date RT</u>
1RR02AA20	RRA33	10"	0.594"	9/7/76
1RH11C4	RH228	4"	0.237"	1/6/77
1RR02AA20	RRA8	20"	1/030"	8/12/76
1RH12CB8	RH195	3"	0.438"	3/22/77
1RH12A8	RH196	3"	0.438"	3/25/77
1RH12A8	RH196A	8"	0.500"	3/24/77
1RH12A8	RH196B	8"	0.500"	4/4/77
1RH12A8	RH196C	8"	0.500"	4/14/77
1RH12A8	RH196D	8"	0.500"	4/13/77
1MS26AB10	MS60	10"	0.594"	11/1/76
1FC22A6	FC136	6"	0.280"	4/12/77
1LP22A-6	LP-K-26	6"	0.280"	3/28/79
1HP03A14	HP37	10"	0.718"	7/13/76
1HPOSA10	38HP	10"	0.718"	6/11/76
1HP03A14	HP-25	14"	0.938"	2/11/77
1DG-10AA-28	DG-6	28"	0.437"	6/17/77
1DG-09BB-24	DG-2	24"	0.375"	5/23/77
1FC034	FCK-24	12"	0.375"	11/9/77

The above welds were selected as being the final radiographic and report review for turnover prior to operation. As of September 1979, the following reviews had been made. The September 9, 1979, inspection by the NRC inspector still found discrepancies. The licensee then hired NES to re-review all reports for accuracy and radiographs for techniques only. As of December 9 1979, NES had reviewed 812 radiographic welds and found 509 unacceptable because of inaccurate reports or unacceptable radiographic techniques. There are approximately 60 welds to be radiographed because of unacceptable techniques. NES has approximately 2500 more radiographs to review and this will consist of interpreting the radiographs for weld quality and techniques and reviewing the reports for accuracy.

The radiographic film packages reviewed by the RIII inspector had been subjected to one or all of the following reviews:

a. Peabody Magnaflux Corporation

A Level I or Level II radiographer performed all the radiography and a Level II interpreted the radiographs for weld quality and techniques and completed the reports.

b. Kaiser Engineers, Inc.

A radiographic film interpreter Level II interpreted the radiographs for weld quality and techniques and reviewed the reports for accuracy.

c. The Authorized Nuclear Inspector

The ANII interpreted several radiographs for weld quality and technique and reviewed the reports for accuracy.

d. OCONAM

A Level II radiographer was contracted to interpret several radiographs for weld quality and techniques and review the reports for accuracy.

e. The Cincinnati Gas & Electric Company

As of a result of the NRC noncompliance in December 1978, a cognizant engineer from the licensee's Quality Assurance Standards Section received each radiograph package prior to filing with the quality assurance records in accordance with the CG & E letter QA-1107. This consisted of a unqualified radiographer checking the reports for completeness and verifying that there were radiographs in the packages.

f. Kaiser Engineers, Inc.

A radiographic film interpreter Level II, in some cases was the same individual that interpreted the radiographs months/years before, reviewed the radiograph packages critically prior to system turnover in accordance with the CG & E letter QA-1107. This consisted of checking accuracy of the report and verifying that there were radiographs in the packages.

No items of noncompliance or deviations were identified.

Exit Interview

The inspector met with site representatives at the conclusion of the inspection. The inspector summarized the scope and findings of the inspection noted in this report.

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APR 3 1980

MEMORANDUM FOR: Victor Stello, Director
Office of Inspection and Enforcement

FROM: William J. Ward, Senior Investigator
Office of Inspection and Enforcement

THROUGH: Dudley Thompson, Executive Officer for Operations Support
Office of Inspection and Enforcement

SUBJECT: DISCUSSION OF THE INTERRELATIONSHIP OF THE IE INVESTIGATIVE
PROGRAM WITH THAT OF THE OFFICE OF INSPECTOR & AUDITOR
(OIA)

Recent discussions between IE and OIA have tended to focus attention upon the IE Investigative Program in general, and its relationship to OIA investigative responsibilities in particular. During these discussions, OIA essentially has maintained that although IE has both the responsibility and authority to conduct "health and safety" investigations, any instances of criminality associated with these IE investigations become the investigative responsibility of OIA. The IE investigation staff asserts that the essential distinction between the responsibilities of the two offices does not involve the question of potential criminality; rather, the difference lies in whether a particular matter is internal or external. By internal, we mean an investigation involving an NRC employee or contractor; by external, we mean an investigation concerning the licensed industry or a matter of NRC regulatory interest. We feel that the issue of actual or potential criminality is at best a subset of the larger issue of internal versus external investigative authority.

The purpose of this memorandum is twofold. First we wish to acquaint you with what we believe the IE investigations program should encompass if it is to be of greatest benefit. Secondly, we hope to convince you that the apparent impasse between IE and OIA in this matter is no minor "turf fight". Rather, it is a major issue that must be resolved in view of its impact upon the future of the IE Investigation Program.

In support of their claim of external criminal investigative authority, OIA alludes to such factors as legislative intent, the Inspector General Bill, (Public Law 95-452 which does not apply to the NRC), and their belief that OIA is the lineal successor to the AEC Division of Inspection. They also note that the Commission has designated Mr. Cummings as the NRC point of contact for matters of fraud in response to a letter sent to all agencies by the

CONTACT: W. J. Ward, IE
49-27246

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President on December 13, 1978. (This letter, which is appended as Enclosure (1) clearly deals with program fraud, i.e. fraud involving public funds such as CETA or MEDICARE). Lastly, OIA believes that their criminal referral responsibility implies investigative authority, and that their charge to conduct investigations concerning, "... the integrity of all NRC operations" should be construed to confer external investigative authority because criminality by a licensee affects the integrity of our inspection and enforcement program.

Our rebuttal to OIA's claims rests upon two premises. The first is that the official expression of authority for either office is the current NRC Manual Chapter pertaining to that Office in concert with any Delegations of Authority issued subsequent to the publication of the Manual Chapter. Consequently, any discussion of current authority should be based upon the contents of the NRC Manual Chapters.

Manual Chapter 0113 sets forth the functions of OIA. To us, the clear thrust of the chapter is to establish OIA as an internal investigative and audit organization. We see no evidence in MC 0113 of OIA authority to conduct external investigations. A copy of MC 0113 (without appendix) is Enclosure (2).

In contrast, the IE Manual Chapter, Manual Chapter 0127, gives IE a broad external investigative mandate. We have responsibility to investigate licensees, their contractors and suppliers, applicants, persons, individuals, and any organization subject to NRC jurisdiction. MC 0127 describes the purpose of these investigations as being, "to ascertain the status of compliance with NRC requirements," and to, "identify conditions... that may adversely affect the public health and safety, the common defense and security, the environment, or the safeguarding of nuclear materials and facilities." Additionally, MC 0127 specifically charges IE to, "Investigate incidents, accidents, allegations, and other unusual circumstances involving matters in the nuclear industry which may be subject to NRC jurisdiction...."

No mention is made in either manual chapter of criminal investigations. A copy of MC 0127 (without appendix) is Enclosure (3).

The subsidiary issue of potential criminality has become unduly controversial, in our view, primarily because it is usually discussed in the abstract rather than in relation to the NRC's regulatory responsibilities. For instance, criminality, be it actual or suspected, can be considered as falling into two categories. The first would be that encountered during investigations or inspections (or being brought to the attention of the NRC in some other fashion) which is only peripheral to NRC's interest or responsibilities. Examples of this category would include evidence of larceny of private property, embezzlement of licensee funds, vandalism of construction equipment, or violations of federal laws such as smuggling, counterfeiting, or income tax evasion. Upon learning of such offenses, the NRC has a clear responsibility to make the information available to the appropriate federal, state, or local law enforcement agency; however, NRC would certainly have neither the authority nor the desire to investigate such matters.

The second category would be cases which are clearly interrelated with matters within the jurisdiction of the NRC. The vast majority of these would involve either violations of the Atomic Energy Act, or the General Fraud Against the Government Statutes. Examples of the former might involve willful violations of various NRC regulations made criminal by statute, unlicensed possession of nuclear material, or theft of SNM. Records falsification, lying to an inspector or investigator, or attempts to deceive NRC to obtain a license are violations which might involve fraud.

In each of these examples the elements of potential criminality and NRC's regulatory interest are inextricably intertwined. Although there may be a number of options open to the NRC when such a situation is encountered, it is our belief that the appropriate response would be to continue (or initiate) the IE investigation and to collect all information pertinent to NRC's interest. Such a course of action would not foreclose a future decision to pursue criminal prosecution. In those rare cases where prompt field response by the FBI might be warranted such as theft of SNM or sabotage, the NRC investigators could either assist the FBI or conduct a parallel investigation in coordination with the FBI as was done in the recent case of the misaligned ECCS valves at Quad Cities.

In this connection, it is interesting to note that MC 0113 (not 0127) explicitly notes IE's obligation to make prompt and direct referrals to the FBI (see MC 0113-026).

Such an approach would not affect the way in which the IE investigation should be conducted. Whether or not criminality is involved, IE investigators realize the need to collect sufficient information to support successful enforcement actions. They routinely identify and collect copies of all records that are pertinent to the matter being investigated. Persons who can provide substantive information are identified, interviewed, and when warranted by the nature of the case, signed and/or sworn statements are obtained from them. Such investigative interviews are conducted in the same manner regardless of whether criminality is involved. Thus, statements obtained by IE during these interviews could be used for prosecutive as well as civil enforcement purposes.

Each IE field investigation results in a report of investigation which can be referred, as appropriate, to the Department of Justice (or state or local authorities) through OIA, if desired, for prosecutive determination. A properly conducted, well documented IE report of investigation should be sufficient for determinations of either civil or criminal enforcement action.

We submit that this approach offers a reasonable and viable approach for the conduct of IE investigations. It allows the NRC to fulfill its regulatory responsibilities while ensuring that the Department of Justice receives sufficient information upon which to base a prosecutive decision. Note that inasmuch as most of the offenses in question are not "smoking gun" cases, prosecutions for cases involving potential fraud or willful violations of NRC regulations can be successfully prosecuted upon completion of IE field efforts as long as NRC enforcement action is held in abeyance.

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We are not proposing that IE or anyone else in NRC undertake criminal investigations, per se. We share the view of OELD that neither IE nor OIA possesses such authority and that legislative changes would be needed to obtain it. Rather, we submit that matters of NRC regulatory interest should be pursued by IE regardless of whether they also appear to involve criminality. Our focus is upon the relationship of the matter to our regulatory authority and the issue of any possible included criminality is subsidiary to it for purposes of the investigation. (We recognize that the role of criminal penalties in relation to the NRC enforcement program is a separate, albeit closely related issue.)

To summarize our first premise, we believe that IE currently has the authority and sole responsibility for all external investigations. By the same token, we believe that OIA presently lacks either the authority or responsibility for such investigations. Consequently, the IE Investigative Program should encompass all external investigations needed by the NRC without regard to whether they may additionally involve actual or suspected criminality.

Our second premise is that regardless of how one interprets the existing authorities, the conduct of external investigations is a function that logically belongs within IE in its role as the primary operational arm of the NRC. As a line office under the Executive Director for Operations, IE has assumed the predominant responsibility for operational matters involving field coordination with the nuclear industry. There appears to be a clear trend towards increasing this operational role. We suggest that the evolution of the Incident Response Program and the Rogovin recommendation regarding transfer of certain DOR functions to IE is evidence of this perception of the IE operational role. As the conduct of external investigations is clearly an operational activity, it is consistent to place responsibility for them within IE.

In recognition of this growing responsibility, we have increased investigator staffing levels both quantitatively and qualitatively. As reflected in Enclosure (4) which summarizes investigator staffing, we have a total of 21 investigators within the IE Investigations Program. Of these, 18 have prior investigative experience. More significantly, 11 of the 12 IE investigators hired over the past two years have at least five years of criminal investigative experience. Additionally, there are recruitment requests for three additional positions.

When we examine the foregoing evidence, the argument for IE conducting all external NRC investigations boils down to the following three points: (1) IE has the authority to conduct such investigations; (2) the conduct of such investigations is consistent with the operational role of IE; and (3) IE has the capability to conduct such investigations.

Conversely, there appear to be several cogent arguments against OIA assuming this function. The first is that it would involve a Commission Staff Office in a matter normally under the cognizance of the EDO. It has been the policy of the Commission to place operational activities under the EDO. This most assuredly would represent a deviation from that practice.

APR 3 1980

The second is that OIA simply lacks the resources to assume such a responsibility. OIA currently has only 6 investigators and 1 supervisor (not including the Assistant Director for Investigations), all of whom are located at HQ. (IE can barely cope with a burgeoning case load even with a dispersed staff of 21). Thus it would be necessary to expand OIA's staffing level by a significant factor at a time of government-wide austerity or to transfer some resources from IE. It is unlikely that either action could survive a rigorous cost-benefit analysis.

We believe that if OIA were to be given responsibility for external investigations, enforcement coordination would become a grave problem. To date, NRC has experienced difficulty in coordinating the actions of any two offices in any operational matter and this does not promise to be any easier. The problem would be exacerbated by the fact that potential criminality exists in most IE investigations. The specter of willful noncompliance is present in many investigations as is the possibility of violations of 18 USC 1001 in most investigations conducted in response to allegations of record falsification. OIA would need to be privy to virtually every IE investigation which in itself would place a heavy reporting burden upon both the Regions and IE:HQ.

There are other minor issues associated with the present conflict such as confusion among licensees and impact upon the morale of the IE investigators who feel quite capable of performing this important function. The bottom line, however, is that assumption of this responsibility by OIA not only would have a significant impact on the IE Investigations Program, but upon our entire inspection and enforcement effort. We feel that the result would be to delay enforcement proceedings and to create an additional drain upon IE resources. Note, for example, the current problems with NPI, Marble Hill, American X-Ray, STP and others.

Needless to say, it is our strong recommendation that the issue be resolved as soon as possible, hopefully by establishing clearly the authority of IE to conduct all external NRC investigations. It appears that your personal involvement is needed. As we indicated earlier, this is a vital issue which must be resolved so that we can get on with our business. As your senior investigator, I would appreciate the opportunity to participate in any staff negotiations pertaining to this matter in view of its obvious impact upon the program for which you hold me responsible.

William J. Ward
Senior Investigator
Office of Inspection and Enforcement

Enclosures:
As stated

WPU: DM/SH
4/1/80
Job C (2)

XOOS
MJWard
4/2/80

IE: XOOS:EO
DThompson
4/ /80



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION III
 789 ROOSEVELT ROAD
 GLEN ELLYN, ILLINOIS 60137

Phillips (5)

JUL 2 1980

Docket No. 50-358

Cincinnati Gas and Electric
 Company
 ATTN: Mr. Earl A. Borgmann
 Vice President, Engineering
 Services and Electric
 Production
 139 East 4th Street
 Cincinnati, OH 45201

Gentlemen:

This refers to the investigation conducted by Messrs. G. A. Phillip, K. D. Ward and T. E. Vandel of this office on April 7-9 and 30, May 1-2 and 20, 1980, of activities at the Wm. H. Zimmer Nuclear Power Station authorized by Construction Permit No. CPPR-88 and to the discussion of our findings with Mr. B. K. Culver and others at the conclusion of the onsite portion of the investigation on May 2, 1980.

This investigation related to allegations concerning installed safety-related piping. The enclosed copy of our investigation report identifies areas examined during the investigation. Within these areas, the investigation consisted of an examination of pertinent records and procedures, independent evaluations and interviews with personnel.

During this investigation, certain of your activities appeared to be in noncompliance with NRC requirements, as described in the attached Appendix A.

This notice is sent to you pursuant to the provisions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. Section 2.201 requires you to submit to this office within thirty days of your receipt of this notice a written statement or explanation in reply, including for each item of noncompliance: (1) corrective action taken and the results achieved; (2) corrective action to be taken to avoid further noncompliance; and (3) the date when full compliance will be achieved.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter, the enclosures, and your response to this letter will be placed in the NRC's Public Document Room, except as follows. If the enclosures contain information that you or your contractors believe to be proprietary, you must apply in writing to this office, within five days of your receipt of this letter, to withhold such information from public disclosure. The application must include a full statement of the reasons for which the information is considered proprietary, and should be prepared so that proprietary information identified in the application is contained in an enclosure to the application.

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Cincinnati Gas and Electric
Company

- 2 -

JUL 2 1980

We will gladly discuss any question you have concerning this
investigation.

Sincerely,

James G. Kappler
Director

Enclosures:

1. Appendix A, Notice
of Violation
2. IE Inspection
Report No. 50-358/80-09

cc w/encls:

Mr. J. E. Schott, Plant
Superintendent
Central Files
Reproduction Unit REC 20b
FDR
Local FDR
NSIC
TIC
Harold W. Kohn, Power Siting
Commission
Citizens Against a Radioactive
Environment
Helen W. Evans, State of Ohio

Appendix A

NOTICE OF VIOLATION

Cincinnati Gas and Electric
Company

Docket No. 50-358

Based on the results of the NRC Investigation conducted on April 7-9 and 14, May 1-2 and 20, 1980, it appears that certain of your activities were not conducted in full compliance with NRC requirements as noted below. This item is an infraction.

10 CFR Part 50, Appendix B Criterion XV, states in part that "Measures shall be established to control materials, parts, or components which do not conform to requirements in order to prevent their inadvertent use or installation."

- a. The Henry J. Kaiser Co. Zimmer Quality Assurance Manual in Quality Assurance Procedure (QAP) No. 16 requires in part that "All non-conforming items will be segregated, where possible, from acceptable items, clearly identified with the applicable Hold or Deficiency Tag and documented on the Nonconformance Report." It additionally requires that "Upon Verification that all work on the item is complete and acceptable, the nonconformance report (NR) is signed off in Section 13 by the Inspector."

Contrary to the above, 5 piping spools identified by NRE-1911 Rev. 2 were released from segregation even though the Inspector had signed off section 13 with a notation of specific exceptions to acceptability of the material by identifying another NR controlling the material. This release was achieved through unauthorized removal of the noted exceptions on the NR.

- b. The Henry J. Kaiser Co. Zimmer Quality Assurance Manual in Quality Assurance Procedure (QAP) No. 16 requires in part that ". . . material is clearly identified as nonconforming and is segregated, when possible. Due to size limitations physical segregation may be impractical. In such instances tagging, marking, or other means of identification is acceptable." Additionally QAP 15 requires that "A 'Hold' tag is placed on the item . . . It is used in conjunction with a 'Nonconformance Report'."

Contrary to the above, 3 piping spools identified in NR E-2020 as nonconforming and required to be cleared by additional tests, not only had been released from the warehouse, but in addition had been installed without any "hold" tag being placed on the material.

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U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-358/80-09

Docket No. 50-358

License No. CPFR-88

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

Facility: Wm. H. Zimmer Nuclear Power Station

Investigation At: Moscow, OH
Chicago, IL

Dates of Investigation: April 7-9 and 30, May 1-2 and 20, 1980

Investigators: *G. A. Phillip* 7/1/80
G. A. Phillip Date

K. D. Ward 7/2/80
K. D. Ward Date

T. E. Vandel 7-2-80
T. E. Vandel Date

Reviewed By: *Gen W. Roy* 7-2-80
E. Norelius Date
Assistant to the Director

R. C. Knop 7/3/80
R. C. Knop, Chief Date
Construction Projects Section 1

Investigation Summary: Investigation on April 7-9 and 30, May 1-2 and 20, 1980 (Report No. 50-358/80-09)

Areas Investigated: Because of allegations made primarily relating to the adequacy of piping welds, performed a review of records and procedures,

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made independent evaluations and conducted interviews of personnel. The investigation involved 94 investigation hours by three investigators. Results: Of four allegations, one, which related to the installation of pre-fabricated piping having defective welds, was partially substantiated in that the pipes were installed before questions regarding their acceptability were resolved. One item of noncompliance, an infraction, was identified: (1) 10 CFR 50, Appendix B, Criterion XV, release of material from segregation and failure to use hold tags.

REASON FOR INVESTIGATION

On February 28, 1980, an individual who contacted the NRC by telephone made allegations regarding the Wm. H. Zimmer Nuclear Power Station. One of these allegations was that piping having defective welds had been installed in a safety-related system.

SUMMARY OF FACTS

Following the receipt of allegations by telephone on February 28, 1980, arrangements were made to interview the alleger to obtain more detailed information. During an interview on March 3, 1980, the individual made several allegations, three of which involved matters under the jurisdiction of the NRC. By letter dated March 11, 1980, the alleger was advised that an investigation would be conducted regarding those allegations which were as follows:

1. Defective welds in safety-related systems have been accepted, among them were welds CY606, HR42 and K811.
2. Five defective welds were identified in prefabricated piping but the pipes were accepted and installed in a safety-related system.
3. The manner in which safety-related installed piping was flushed was inadequate and a scheduled six-week flush was reduced to two weeks.

Allegation No. 1 was not substantiated.

Allegation No. 2 was partially substantiated in that three of five identified pipes had been installed in the main steam relief system before questions as to their acceptability had been resolved. Two items of noncompliance were identified in this regard. It was also determined that at the time of the investigation a nonconforming report requiring disposition remained open concerning the acceptability of the three pipes. During the investigation additional examinations were made of the pipes and they were determined to be acceptable.

Regarding Allegation No. 3, it was determined through contact with the primary source of the information upon which the allegation was based, that he had left the site in November 1978 and problems in this area had been identified and resolved through NRC inspections conducted between November 1978 and the receipt of the allegations in March 1980.

Following completion of the investigation at the Zimmer site, the alleger contacted Region III and alleged he had evidence of a criminal

conspiracy and that the welds on the three above-mentioned pipes had been cut out and repaired during the course of the investigation and this information was withheld from the NRC. The basis for these allegations, which consisted of recordings of three telephone conversations, was obtained from the alleged during an interview on May 8, 1980. No information or evidence was obtained to confirm these allegations during the interview or during subsequent investigation.

One item of noncompliance, an infraction, was identified during this investigation.

DETAILS

1. Persons Contacted

Cincinnati Gas and Electric Company (CG&E)

- *B. K. Culver, Project Manager
- *W. W. Schwiers, QA Manager
- *R. L. Wood, QA Engineer
- *D. C. Kramer, QA and S Engineer
- S. Swain, Construction Manager
- *J. F. Weissenberg, QA and S Engineer

Kaiser Engineers, Inc. (KEI)

- *R. Marshall, Project Superintendent
- *E. V. Knox, QA Manager
- K. R. Baumgarten, QA Manager
- R. M. Dorr, Construction Engineer
- A. Pallon, Welding/NDE QA Engineer
- F. Oltz, Analysis and Procedures Supervisor, QA
- J. Deerwester, Supplier QA
- D. Haag, QA Inspector

Peabody Testing Services (Peabody)

- Ernest Aldredge, President
- Charles Wood, Manager, Cincinnati Office (via telephone)
- Wayne Draffon, Supervisor (via telephone)
- Alan Sellars, Field Supervisor
- D. Burdsal, Level II Inspector

Nuclear Energy Services, Inc. (NES)

- R. Bott, NDE Supervisor
- R. A. Zieber, NDE Inspector

2. Introduction

On February 28, 1980, the Office of Inspection and Enforcement NRC Headquarters advised Region III of a telephone conversation with an individual who made allegations concerning activities at the Wm. H. Zimmer Nuclear Power Plant Construction site, and requested that the individual be contacted. Later the same day during a telephone conversation with Region III, and during an interview on March 3, 1980, the individual made several allegations.

The individual stated that he had been employed by a private detective agency, and the licensee, CG&E, through his employer, had engaged him to work under cover at the Zimmer site to investigate time card padding by site personnel. His investigation effort began on December 10, 1979 and ended on January 4, 1980. In addition to information regarding worker time card padding, he obtained information regarding other activities which was the basis for several allegations, some of which related to matters under the jurisdiction of the NRC.

The individual stated he had earlier brought his information to the FBI. He indicated he was uncertain as to what action, if any, would be taken by that agency.

The individual stated he had documentation relating to his allegations in the form of weekly reports he had prepared and tapes of several of his conversations with site personnel. During the interview on March 3, 1980, the individual played those parts of the tapes which he said contained pertinent information and made available copies of his reports.

3. Allegations

Based on the information obtained through the interview with the allegor, a review of the taped conversations and his investigative reports, three allegations involving activities under NRC jurisdiction were developed. By letter dated March 11, 1980, the allegor was advised that an investigation of these allegations would be conducted. A copy of this letter with the allegor's identification deleted is attached to this report as Exhibit A. These allegations and information regarding them obtained during the investigation are set forth below.

Allegation 1: Defective welds in safety-related systems have been accepted, among them were welds CY606, HR42 and K811.

The identification of the specific welds in this allegation was obtained from a review of the tape the allegor had made surreptitiously of his conversations with site personnel. According to the information obtained by the allegor, weld CY606 was buried in concrete between the Radwaste Building and the Containment Building. He said it was his understanding that they dug it up to repair it, but he was uncertain whether this was done.

Regarding weld HR42, the allegor said that he had informed CG&E that this weld was defective. He said he had heard that another testing firm had been hired as a consultant, and this firm had confirmed the weld was defective. He also said it was his understanding that this defect was reported to the NRC.

Regarding weld K811, the allegor said he was informed that this weld had "an insert fault" and that KEI had ordered that it be accepted.

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The allegor stated that Peabody Testing Services (Peabody), also referred to as Magnaflux, personnel had informed him that some welds that Peabody, the nondestructive testing contractor, had rejected as faulty were subsequently accepted by KEI, the site construction management contractor. He said that a Peabody employee had records identifying the welds rejected by Peabody which were subsequently accepted by KEI. He indicated that by way of explanation, CG&E had informed him that the interpretation of the film obtained through radiographic examinations of welds is a judgment call. The appearance of an item on a radiographic film may be judged to be a defect by one individual and not by another and KEI could overrule Peabody.

Finding:

On April 7, 1980, the Peabody field supervisor was interviewed. He stated that he had no records showing the welds Peabody had initially rejected which were subsequently declared acceptable by KEI. He indicated that, although he was aware that this had occurred, he did not know how often and he could not provide any specific instances. He also stated that the results of radiographic examinations are recorded on reader sheets. The radiographic film and the original reader sheets are turned over to KEI. He said Peabody only had carbon copies of the reader sheets.

As a means of further evaluating whether KEI was accepting welds identified as defective by Peabody, a safety-related system, the High Pressure Core Spray System, was selected and all reader sheets pertaining to it were reviewed. Of 99 welds in the system which were radiographed, two instances were noted in which Peabody had checked the reject column and KEI had lined that check out and had checked the accept column. The radiographs of these two welds were reviewed by an NRC inspector who is a certified NDE Level III. He concurred that the welds were acceptable. Conversely, it was noted that in several instances, between five and ten, the original accept check mark entered by Peabody had been lined through and a reject check had been entered by KEI.

Regarding the subject of welds and radiographs of them, an NRC inspection conducted on November 8-9, and December 12-13, 1978 (Report No. 50-358/78-30) identified several discrepancies in radiographic techniques and reports. During a subsequent inspection on September 18-20, and December 11-12, 1979 (Report No. 50-358/79-17) several more discrepancies were identified. CG&E then hired NES to rereview radiographs and reports of all welds which had been accepted for turnover prior to operation. This review began in October 1979 and was completed in early April 1980. The review included 2,390 radiographed welds. Of those, 958 had report discrepancies, 543 had some technique problems and 14 welds were found to be unacceptable because of defects.

The KEI Project Superintendent advised on May 1, 1980, the 14 welds were being re-examined and resolution regarding them had not been completed. He stated that one of the 14 welds found to be unacceptable was the subject of a nonconformance report and, therefore, had not been accepted for turnover. This weld, he said, should not have been included in the NES review. Another weld had been cut out of the pipe for examination and it was determined that, although it appeared to have a defect on the radiographic film, it was, in fact, an acceptable weld.

Acceptable? { Regarding weld No. K811, a review of records showed it was welded on November 9, 1977, but because an Authorized Nuclear Inspector hold point was missed at the fitup, the weld was cut out and replaced by weld No. K916. The missed hold point was documented by Nonconformance Report (NR) No. E-2138R1. This NR indicates that the disposition was to cut out and replace the weld. It was determined that weld No. K916 had not yet received final acceptance.

Regarding weld No. RH42, records indicated this weld was first radiographed on August 9, 1976, and found to have unacceptable porosity and slag in the areas of 36-48. The areas were repaired and a reradiograph performed on August 10, 1976 found it to be acceptable. A review was made of the radiographs for weld quality, techniques, and report accuracy by an NES Level II radiographer on January 25, 1980 as part of the above-mentioned re-review initiated after the 1978-79 NRC inspections. The NES Level II radiographer found some discrepancies which have not been resolved, and the weld has not been given final acceptance.

Regarding weld No. CY606, a review of records showed this weld was first radiographed on July 15, 1976 and found to have incomplete fusion and penetration in the areas of 0-13 and 13-16. The areas were repaired and the weld re-radiographed on June 8, 1977 and found to be acceptable. A review was made of the radiographs for weld quality, techniques and report accuracy by an NES Level III radiographer on October 12, 1979 as a result of the NRC inspection conducted in 1978. The Level III found some discrepancies which have not been resolved and the weld has not received final acceptance.

Allegation 2: The manner in which safety-related installed piping was flushed was inadequate and a scheduled six-week flush was reduced to two weeks.

The allegor provided information that a site employee informed him on December 27, 1979, that another individual who had been employed as a general foreman at the site had objected to the flushing procedures used. He had also objected when a particular flush that should have taken six weeks was cut to two weeks. On one occasion the individual had demonstrated the flushing was inadequate by pounding on a pipe which released sediment and slag during the flush. The identity of the former general foreman was provided by the allegor.

Finding: On April 7, 1980, the former general foreman was contacted and interviewed. This individual said he had worked at the Zimmer site from June 1973 until November 1978. In 1978 he was the general foreman of the flush group.

Regarding the six-week versus two-week flush, the individual indicated it had been anticipated six weeks would be needed to prepare for and flush one of the systems. He, however, was able to accomplish a satisfactory flush in two weeks. He indicated that the shorter time did not mean the flush was not done according to the requirements. Rather, it was a case of he and his men being able to accomplish a job in less time than expected.

This individual stated that in his opinion the welding done on the critical systems, such as the main steam lines and in the reactor building, was good. He said, however, that several problems were encountered in the flushing activities while he was at the site but he was unable to provide information regarding any specific requirements that were not met.

NRC inspections conducted subsequent to the departure of this individual from the site included an examination of flushing activities and some specific problems were identified. On the basis of one of these inspections, conducted January 3-6 and 8, 1979 (Report No. 50-358/79-01), one item of noncompliance and one deviation were identified. The noncompliance related to a failure to close a valve during a flush and an inadequate procedure to assure boundary valves are closed. The deviation was that the procedure did not require tagging of boundary valves. A second inspection conducted February 27-28, March 1-2, 19-23, and April 9-11, 1979 (Report No. 50-358/79-06) resulted in one item of noncompliance regarding flushing activities. This related to a failure to maintain control of flushing waters resulting in the flooding of equipment in a system which had been turned over for preoperational testing.

The individual indicated a matter of concern to him was that a hydrotest of the reactor containment was successfully performed, but after the test some instrument lines were cut out which invalidated the hydrotest. He indicated he was uncertain as to whether CG&E would attempt to use this test as meeting test requirements or whether the NRC was aware the test had been invalidated by the subsequent modifications.

On April 8, 1980, the NRC Resident Inspector advised that he as well as CG&E were aware that the initial hydrotest was not valid because of the subsequent modification of the instrument lines. He stated that another hydrotest was tentatively scheduled to be performed during the summer of 1980.

In view of the above, further investigation at the site in the area of flushing activities was not pursued.

Allegation 3: Five defective welds were identified in prefabricated piping, but the pipe was accepted and installed in a safety-related system.

Through a review of reports written by the allegor and the tapes of conversations with site personnel as well as information supplied through interview on March 3, 1980, the following information was obtained regarding this allegation.

During the NRC hearings in November 1979, a question was raised concerning an accident which involved the dropping of fuel rods. A former site employee had provided information to attorneys who were opposed to the licensing of the plant which was the basis for raising this question. A miscommunication between the former employee and the attorneys occurred, however. The question about an accident should have referred to piping being dropped from a tractor trailer rather than fuel being dropped.

The allegor advised that in about October 1979, a trailer load of pipes fabricated at the Kellogg Company, located in Pennsylvania, arrived at the site in the middle of the night. Since personnel and proper equipment were not available to unload it properly a member of CG&E management issued instructions to push the pipe from the truck onto the ground.

When the pipes were found on the ground the following day, it was decided that the pipes would have to be inspected by x-ray to determine whether they had been damaged. Peabody was instructed to x-ray (radiograph) the pipes and 5 to 8 faulty welds were identified. Since Peabody had been instructed to check the pipes but not the welds, and since the welds had been tested and found to be acceptable before shipment by Kellogg, the pipes were approved by KEI Quality Assurance. These pipes were installed in the Main Steam Relief System, a safety-related system.

Finding: A bill of lading dated June 29, 1979 showed that Pullman Power Products, a division of Pullman, Inc., Williamsport, Pennsylvania, formerly known as M. W. Kellogg Company, released to the Daily Express Company five pieces of pipe assembly I/S, weighing 8,700 pounds, for delivery to the CG&E Zimmer site on Monday, July 2, 1979. A packing slip accompanying the shipment listed the following pieces:

IMS08BB12-6B
IMS09BA12-1AH
IMS08BA12-5BH
IMS11B12-7BH
IMS10BA12-ICH

A KEI receiving stamp shows it was received on July 3, 1979. Copies of the bill of lading and the packing slip were obtained and are attached to the report as Exhibits B and C, respectively.

Each of these pipes (spool pieces) were for the Main Steam Safety Relief Valve discharge and were carbon steel pipe assemblies approximately 15' 7 5/8" long, 12 3/4" in diameter and having a wall thickness of .687".

On hand at the Zimmer site were QA documentation packages for each of these 5 spool pieces received from Pullman. A copy of one package was obtained and is attached to this report as Exhibit D.

On July 5, 1979, Nonconformance Report (NR) No. E-1911 was prepared indicating "Spools were rolled off of truck onto ground and striking other spools" and listing the above identification numbers. The issuance of this NR had the effect of placing these pipe spools in a hold status in the KEI warehouse. On July 10, 1979, the KEI Construction Engineer entered the following disposition on this NR "Rework. (1) Perform liquid penetrant test on all welds; (2) perform visual inspection of weld and preps. Accept on basis of inspection (1) and (2). Should any pipe spool fail due to inspections (1) and (2) a separate Nonconformance will be issued." A KEI QA engineer concurred in this disposition on the same date. A copy of NR E-1911 is attached to this report as Exhibit E.

NR E-1911 was voided and superseded by NR E-1911 Rev. 1 on the same date, July 10, 1979. KEI and CG&E personnel advised that the disposition shown on NR E-1911 was reconsidered because they wished to avoid removing the paint from the welds which would be necessary before a liquid penetrant examination could be performed. NR E-1911 Rev. 1 changed the first item of the disposition to: "Perform RT examination of all welds." A copy of NR E-1911 Rev. 1 is attached to this report as Exhibit F.

A QA Surveillance Report dated July 23, 1979, addressed to a CG&E QA engineer signed by the KEI NDE QA engineer, showed that on three spool pieces, weld X4 had rejectable indications, and requested to be advised concerning the dispositioning of these rejections. The CG&E QA engineer stated that to the best of his recollection, he did nothing in response to this request and could not recall having discussed the matter with anyone. A copy of this Surveillance Report is attached to this report as Exhibit G.

CG&E and KEI personnel stated all five spool pieces were radiographed on an "information only" basis but only the films for those three referred to in the Surveillance Report were retained. The X4 weld is a weld which joins a solid cap to one end of the spool piece. Radiography is not the appropriate technique employed to examine a weld of this kind since the gamma rays must pass through the cap (about 12' of metal) as well as the weld. The KEI Construction Engineer said the radiographs were done with the thought that they might show surface damage, even though it was recognized the quality of the film would not be good and it was recognized that the film would not meet any code standards.

NR E-1911 Rev. 1 was voided and superseded by NR E-1911 Rev. 2 on July 31, 1979. The disposition shown on the latter was to perform RT examinations of all "butt-welds" and to perform visual examinations of all "fillet-welds."

A QA Surveillance Report dated August 8, 1979 showed that all five spool pieces were visually examined and were found acceptable. A copy of this Surveillance Report is attached to this report as Exhibit H.

Since two spool pieces had shown no indication of damage through radiographic examination and visual examination another NR, No. E-1997, dated August 9, 1979, was prepared as a mechanism to remove those two spool pieces from a hold condition but to retain an open NR on the other three. NR E-1911 Rev. 2 was closed by KEI QA on August 9, 1979, with the notation "Exceptions on → See NR E-1997." A copy of the NR E-1911 Rev. 2 is attached as Exhibit I.

NR E-1997 showed that the spool pieces IMS09BA12-1AH and IMS08BA12-5BH were acceptable. On August 13, 1979 the KEI Construction Engineer placed a notation on NR E-1997 "CG&E to disposition." The KEI Construction Engineer stated that this was appropriate since CG&E has responsibility for off-site vendor supplied items. On August 19, 1979 the CG&E Construction Engineer added the disposition "Accept-As-Is" and described the reasons for this disposition. A copy of NR E-1997 is attached to this report as Exhibit J.

Quality Assurance Instruction, QACMI No. G-4, Nonconforming Material Control, requires that NRs dispositioned "Accept-As-Is" be signed by the Material Review Board before they are closed out. NR E-1977 was closed out on October 17, 1979 with a comment added by the Sargent & Lundy (S&L) board member to the effect that "Welds rejected by radiograph are covered by NCR E-2020." A copy of the closed NR E-1997 is attached to this report as Exhibit K.

NR E-2020 showed the same information as NR E-1997, but at the time of the investigation, E-2020 had not been closed out. A copy of NR E-2020 is attached to this report as Exhibit L.

A review of records at the warehouse showed that the three spool pieces, which were the subject of the open NR had been released to construction for installation as follows:

<u>Item</u>	<u>Issue Date</u>
IMS11B12-7BH	9/18/79
IMS10EA12-ICH	9/24/79
IMS08BB12-6B	9/28/79

On April 8, 1980, it was established that these spool pieces had been installed and no "Hold" tag or "Deficiency" tag had been placed on them. This is in noncompliance 10 CFR 50, Appendix B, Criterion XV, and KEI Quality Assurance Procedure No. 15.

It was ascertained that the spool pieces had been released from the warehouse on the basis of a later version of NR E-1911 Rev. 2 on which the above-mentioned notation referencing NR E-1997 had been lined through on September 14, 1979. A copy of this version of NR E-1911 Rev. 2 is attached to this report as Exhibit M.

It was determined that the QA Document Control Supervisor had lined out the notation. He indicated that he had heard that NR E-1997 was being voided so he felt there was no point in it being cross-referenced any longer on NR E-1911 Rev. 2. The supplier QA man in the warehouse indicated to him that some pressure was being felt from construction to get the spool pieces released. The Document Control Supervisor informed the warehouse that NR E-1911 Rev. 2 had been closed out and it was all right to release the spool pieces. He said this was done on the assumption that what was considered to be a paper problem would be cleared up. The Document Control Supervisor as well as other site personnel indicated the acceptability of the spool pieces was regarded as a paper problem rather than a real problem. It was indicated that the probability of actual damage to pipes of that size and wall thickness due to mishandling upon delivery was extremely remote.

The supplier QA man advised that the spool pieces were released from the warehouse on the basis of the version of NR E-1911 Rev. 2 which had the reference to NR E-1977 lined through (Exhibit M). He indicated that the Document Control Supervisor was instructed to line through the notation by a CG&E official. The latter individual, however, denied any recollection of having given that instruction. The improper close out of NR E-1911 Rev. 2, which resulted in the release of spool pieces for installation before their acceptability had been established is in noncompliance with 10 CFR 50, Appendix B, Criterion XV, and KEI Quality Assurance Procedure No. 16.

On April 23, 1980, Deficiency Tags were placed on the spool pieces and during the period April 25-28, 1980, Peabody personnel performed magnetic particle and ultrasonic inspections of the welds in question. The reports of these inspections were reviewed and the Peabody inspectors performing these examinations were interviewed on May 1, 1980. The Peabody personnel stated that they had concluded on the basis of these examinations that the spool pieces were acceptable. It was also ascertained that on April 28, 1980, Pullman personnel visited the Zimmer site and also performed ultrasonic inspections of the welds. On the basis of these examinations, Pullman provided a statement to CG&E that these welds were acceptable. Peabody personnel advised that they had observed the examinations performed by Pullman and they agreed with the results.

4. Additional Allegations

During telephone contacts with the NRC on May 5 and 7, 1980, the allegor stated that he had evidence of criminal actions relating to the spool pieces which were the subject of Allegation No. 3 above. He stated that he had evidence that between the two visits to the Zimmer site by the NRC investigations team on April 7-9 and April 30-May 1-2, the welds had been cut out and/or repaired. This he alleged, was the reason that the welds were judged to be acceptable during the second visit. He also stated he had evidence that pressure was exerted upon Peabody personnel to withhold information from the NRC in connection with the investigation.

On May 8, 1980, the allegor was interviewed jointly by NRC and FBI personnel. During this interview the allegor provided for review a tape recording of three telephone conversations he had had with Peabody personnel. After listening to the three conversations, the FBI representative indicated that they did not appear to him to be evidence of criminality. The tape was furnished to the NRC for further review and follow up.

The first conversation, according to the allegor, took place on May 5, 1980 with a supervisor in the Peabody, Cincinnati office. At one point during this conversation the supervisor said: "They cut some of those welds out." The allegor responded: "You mean since the NRC had begun their investigation?" The supervisor then said: "Oh, yes, they did that the next Monday." Later in the conversation, the supervisor said: "I do know they started repairing some welds."

On May 20, 1980, the supervisor who had made the above statements, was interviewed by telephone. He stated that he had no first-hand knowledge of activities at the Zimmer site and that his comments to the allegor were based upon his conversations with another Peabody employee. This second individual visits the Zimmer site and may have acquired the information himself, or through conversations with another Peabody individual who does work at the site. He stated he did not know whether the information he received concerning the repairs of welds related to the three spool pieces or to some other pipes.

The second Peabody employee was also interviewed by telephone on May 20, 1980. He advised that the welds that were repaired were some which had been identified as bad during the NES audit. He said to his knowledge no repairs had been made on any 12" pipe welds. He added that he had reviewed the results of the ultrasonic examinations performed on the 12" pipes and he had concluded the welds are acceptable.

The third Peabody individual, who is employed at the Zimmer site, was also interviewed by telephone on May 20. This individual stated that the paint had been removed from the welds on the 12" pipes so that the tests could be made of them. He said this was done with wire wheels and there were no repairs or even grinding done on the welds.

The second taped conversation took place on May 5, 1980 between the allegor and a radiographer employed by Peabody. This radiographer had been identified by the allegor as being one of the individuals who had been involved in performing the radiography on the spool pieces in July 1979. During the conversation the allegor asked the radiographer whether the pipes were bad. The radiographer responded: "I can't really say." The allegor then stated he had been informed the welds were cut out and repaired. The radiographer responded: "I don't know." The allegor again raised the question as to whether the welds were defective and the radiographer responded: "I didn't read the film. I was a Level I and not qualified to interpret the film." The radiographer then identified the Peabody employee who had read the film. The latter individual had been interviewed on May 2, 1980. He had stated that all five spool pieces that had been dropped from the truck had been examined and no indications of defects had been found except the three which were documented by an NR.

The third taped conversation took place on May 6, 1980 between the allegor and the president of Peabody. The primary topic of conversation was the action taken by CG&E in early April 1980 in transferring the radiography work from Peabody to another contractor, NES. The President stated that he did not dispute the action taken because it would have a detrimental effect on his firm's position in the industry, and adversely affect their efforts to obtain future contracts.

On May 20, 1980, the President of Peabody was interviewed concerning this conversation. He stated that the action taken by CG&E, and his posture regarding it, had nothing to do with the quality of work at the Zimmer site. He said that, to his knowledge, no Peabody employees had been pressured to accept or approve defective welds. He stated that Peabody's contract provides for their performing the radiography and that the acceptance or rejection of a weld rested with KEI. Peabody had no responsibility in this regard and, therefore, an allegation that they were forced or pressured to approve bad work was meaningless. All film and original records relating to radiography examinations were turned over to KEI according to the terms of the contract. He indicated that it was his understanding the NRC required that these materials be retained at the site and available for inspection.

5. Management Discussion

On May 2, 1980, the results of the investigation were discussed with CG&E and KEI personnel identified by an asterisk (*) in the Persons Contacted section of this report.

Attachments: Exhibits A through M

List of Exhibits

- A - Ltr dtd 3/11/80 NRC to Allegor
- B - Bill of Lading
- C - Packing List
- D - QA Documentation Package
- E - NR E-1911
- F - NR E-1911 Rev. 1
- G - Surveillance Report dtd 7/23/79
- H - Surveillance Report dtd 8/8/79
- I - NR E-1911 Rev. 2
- J - NR E-1997
- K - NR E-1997 (closed)
- L - NR E-2020
- M - NR E-1911 Rev. 2 (closed)

MAR 11 1980

Dear

This refers to the meeting between you, Mr. L. Williamson of the NRC Headquarters Office, and me on March 3, 1980.

On the basis of the information you provided we plan to conduct an investigation at the Wm. H. Zimmer Nuclear Power Plant regarding the following alleged matters:

1. Defective welds in safety-related systems have been accepted, among them were welds CT 606, ER 42 and K 811.
2. Five defective welds were identified in pre-fabricated piping but the pipe was accepted and installed in a safety-related system.
3. The manner in which safety-related installed piping was flushed was inadequate and a scheduled 6-week flush was reduced to 2 weeks.

You will be informed of our findings following completion of our investigation.

Sincerely,

C. A. Phillip
Investigation Specialist

CONSIGNEE TO:

PACKING SLIP

P O Box 3308 Reach Road
Williamsport Pennsylvania 17701

CRUCIACI GAS AND ELECTRIC COMPANY
COLUMBUS AND SOUTHERN OHIO ELECTRIC COMPANY
THE DAYTON POWER AND LIGHT COMPANY
ATTN: MR. E. A. BORGMANN
ZIMMER POWER STATION
ROUTE 52, NEAR MOSCOW, OH 45153

OUR JOB NO. 7935	OUR ORDER NO.
CUSTOMER'S ORDER NO. 2171	REQUISITION NO.
SHIPMENT NO. 236-W	PAGE NO.

71-29-84

DATE ISSUED	DATE SHIPPED 6-29-79	SHIPPED BY Pullman Power Products	SHIPPED FROM WILLIAMSPORT, PA 17701
CHARGES PREPAID	VIA Daily Express (To Be Delivered Monday 7/1/79)	CONSIGNEE AS 5 PIECES C/S PIPE ASSEMBLY	

TOTAL NET. MARKS . TOTAL WTS 6,700 LBS

PIECE NUMBER	'F' NO.	PIECE NUMBER	'F' NO.
1-MSOPEP 12-6P	3874		
1-MSO92A12-1AH	3878		
1-MSI 12-5EH	3886		
1-M 2-7EH	3888		
1-MSDBA 12-1EM	3889		

717-323-9991
~~WILLIAMSPORT~~
JOHN COLLEMAN
~~JOHN COLLEMAN~~

CONTACTED JOHN COLLEMAN 8:20 A.
HE WILL CALL BACK WITH ONLY AM
NUMBER

RECEIVED
KNISER ENGINEERS INC.
DATE 7-5-79
JOB NO. 55-938
P.O. NO. 2171
CHK'D. BY [Signature]

PIPING QA DOCUMENTATION CHECKLIST

Subassembly Packages

9.118

1. Spool No. MS080812-LB Sheet No. F- 3874 Rev. 1 Class 3 Sheet 1 of 2
 2. System MS C.G.&E. System No. N/A

3. Document Identification	Pipe or Fitting Mark No.				Weld No.			
	SA	L	T		A			
4. CNTR		<u>OK</u>	<u>OK</u>		<u>OK</u>			
5. Weld History Record	<u>OK</u>							
6. RT Inspection Report		<u>N</u> →			<u>OK</u>			
7. LP Examination Record		<u>N</u> →			<u>N</u>			
8. MT Examination Record		<u>N</u> →			<u>OK</u>			
9. Nameplate Rubbing	<u>OK</u>							
10. Code Data Report	<u>OK</u>	<u>N</u> →			<u>N</u>			
11. Inspection Report	<u>OK</u>							
12. Radiographs Reviewed		<u>N</u> →			<u>see mailgram</u>			
13. <u>HEAT TREAT</u>	<u>OK</u>	<u>N</u> →			<u>N</u>			
14.								
15. Doc. review	<u>R. L. Wood</u>				<u>GG&E</u>		<u>Date 8/14/79</u>	
16. Rad. review	<u>J. STARHAM</u>				<u>NES</u>		<u>Date 6/29/79</u>	

PIPING QA DOCUMENTATION CHECKLIST

Subassembly Packages

1. Spool No. 1M3080812-6B Sheet No. F-3912 Rev. 4 Class 3 Sheet 2 of 2
 2. System MS C.G.&E. System No. N/A

3. Document Identification	Pipe or Fitting Mark No.					Weld No.							
	SA	1	2	3	4	5	U	V	W	X	Y	Z	
4. CNTR		<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	
5. Weld History Record	<u>OK</u>												
6. RT Inspection Report	<u>N</u>	----->					<u>OK</u>	<u>N</u>	----->				
7. LP Examination Record	<u>N</u>	----->									<u>OK</u>	<u>OK</u>	
8. MT Examination Record	<u>N</u>	----->						<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>
9. Nameplate Rubbing	<u>N</u>												
10. Code Data Report	<u>N</u>	----->											
11. Inspection Report	<u>N</u>												
12. Radiographs Reviewed		<u>N</u>	----->					<u>see mailgram</u>					
13. <u>UT REPORT</u>	<u>N</u>	----->									<u>OK</u>	<u>OK</u>	<u>OK</u>

14. _____
 15. Doc. review R. J. Wood Co. GG&E Date 8/14/79
 16. Rad. review J. STATHAM Co. NES Date 6/29/79

1AY... SERVICE CENT...
41DI... VA. 22645



1-011101A180002 06/29/79 TL PUL POW WIP CINA
004 PU WILLIAMSPORT PA JUNE 29 1979

CINCINNATI GAS AND ELECTRIC COMPANY
ATTENTION MR W W SCHWIERS - PRINCIPLE Q A ENGINEER
POST OFFICE BOX 962
CINCINNATI OHIO 45201

DOCUMENTATION PACKAGES AND RADIOGRAPH PACKAGES HAVE BEEN REVIEWED
AND ARE COMPLETE FOR PHASE 2 PIPING SUBASSEMBLY

JOB NO 7935 CLASS 3

MARK NO	F-SHEET	REVISION NO
1MS08BB12-6B	3874	1
1MS09BA12-1AH	3878	1
1MS08BA12-5BH	3886	1
1MS011B12-7BH	3889	1
1MS10BA12-1CH	3889	2

J STATHAM NES

11:48 EST

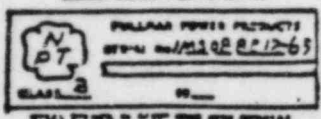
MGMCOMP MGM

QUALITY ASSURANCE & STANDARDS SECTION	
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RPE	
JWH	
DCK	
JFW	
<input checked="" type="checkbox"/>	RW
Q.P.	

CR

—NOTES—

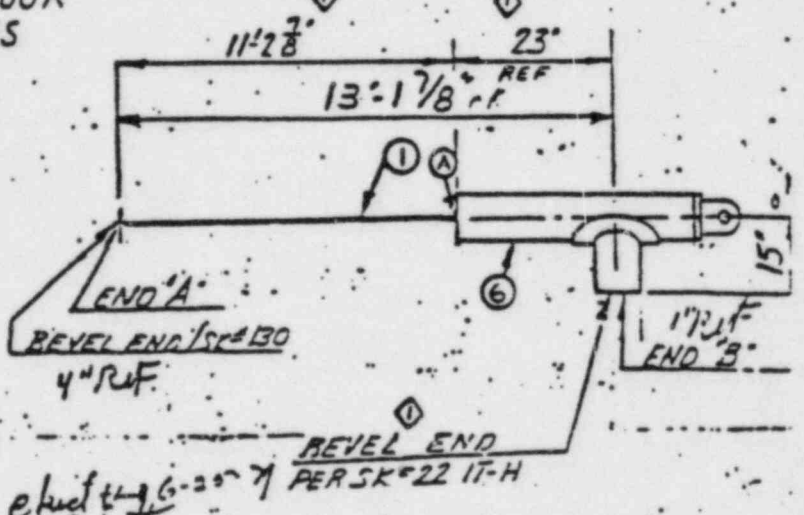
ASME CODE PLATE DATA

1.  WILLIAM POWER PRODUCTS
 SERIAL NO. 110102801263
 CLASS 2

BASE NO.	INSOBER12-68414	7935	F-3874
SYSTEM	INSOBER12-68414	7935	F-3874
REF. DESG.	M-400	SHEET 12 A-L	
INSPECTION	EST. WT.	BEVEL ENDS	CLEAN
TEST	(1) 100% RT	NOTED. I.D.	

2. QUALITY ASSURANCE REQ'D - LEVEL I.
3. PREHEAT 50° F. MIN.
4. RADIOGRAPH ALL BUTT WELDS
5. SHOP TO MEASURE I.D. OF FIELD ENDS A & B AT FOUR (4) LOCATIONS 45 DEGREES APART AND RECORD.
6. FIELD END BEVELS TO BE PROTECTED WITH DEOXY-ALUMINITE
7. O.D. TO BE CLEANED AND PAINTED WITH CARBO-ZINC NO. 11 P.O. 57-CHANGE "J"
8. All Shop Butt Welds to be X-Insert Welds

William Power Products
Miller



STATUS
 MAT'L HOLD NOTHING DONE

WILLIAM POWER PRODUCTS
 THE SINGRAM GAS & ELECTRIC COMPANY
 WILLAMETTE & SOUTHERN OREGON ELECTRIC COMPANY
 THE BAYTON POWER AND LIGHT COMPANY
 CONTRACT NO. W-1233 PURCHASE ORDER NO.

REV.	DATE	BY	DESCRIPTION	QTY	UNIT	TOTAL	DIS'G.	REMARKS
1	5-2-77	JS	THIS REV LISTS CHANGES DELETED FROM PREVIOUS REV'S					
			12" PIPE ASSEMBLY					
			COLOR CODE: _____					
			SPOTS: 5239					
			DESCRIPTION					
			CARB STEEL ASSY.					
			MATERIAL					
			DESCRIPTION					
			SPEC.					
			SOURCE					
			UNIT					
			TOTAL					
			DIS'G.					
			REMARKS					
			1	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			W-31857
			2	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			3	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			4	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			5	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			6	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			7	1	11' 9 1/2" OD CONS. R-INSERT			
			8	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
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			48	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			49	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			50	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
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			66	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			67	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			68	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			69	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			70	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			71	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			72	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			73	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			74	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			75	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			76	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			77	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			78	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			79	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			80	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			81	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			82	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			83	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			84	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			85	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			86	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			87	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			88	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			89	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			90	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			91	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			92	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			93	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			94	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			95	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			96	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			97	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			98	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			99	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			
			100	1	12" 3/80 SMLS. PIPE E-E= 11'-2 7/8"			

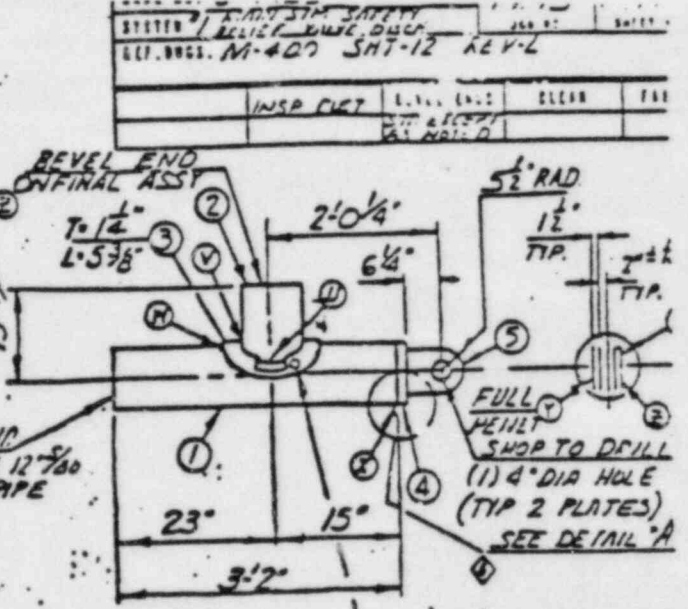
NOTES
 1 ASME SECT III CLASS 3
 2 QUALITY ASSURANCE REQ'D LEVEL

- 3. RADIOGRAPH WELD ①
- 4. MAGNAFLUX ALL WELDS
- 5. ULTRASONIC TEST WELDS

SIZES	1150 1300
HEAT	28 0/100
WELD	7/8 1015
FURNACE CODE TO	
WELD	of THIS IN
STILL AIR	
MIN PREHEAT	900°F

Miller
 Products
 O.A.

* TO 600°F THEN 175°F/H C'ORE END TO STRESS TEMP.
 TO MATCH 12" PIPE
 ** 220°F/HR TO 600° THEN IN STILL AIR.



SUB-ASSY NO.	QUAN	DISPOSITION
INSP00012-68-1	1	F-2575 17-G
INSP00012-4011-1	1	F-3665 17-G

4	5/16"	JR	10 1/2"	10 1/2" x 3" x 3/8" REIN. PAD
5	5/16"	JS	11 1/4"	11 1/4" x 11 1/4" x 1/2" THK PLATE
2	5/16"	JS	12"	12" DIA SMLS PIPE
1	17 1/2"	JS	17 1/2"	17 1/2" DIA SMLS PIPE

17" PIPE ASSEMBLY			
COLOR CODE:			
SPOTS-8888	3-77	11-1	6-17

ITEM		DESCRIPTION	SPEC.	SOURCE	QTY	TOTAL	DIST.
1	1	17 1/2" DIA SMLS PIPE E.E. = 3'-7" EA	SA-208-12	PO-201	1	HT-192560	
2	1	10 1/2" DIA SMLS PIPE C.E. = 15" EA	SA-208-12	76-39-13	1	HT-2636	
3	1	REIN. PAD (MAKE FROM 10 1/2" DIA PIPE) E.E. = 21 1/2"	SA-208-12	11-N1894	1	HT-21925	
4	1	17 1/2" DIA X 3" THK PLATE (MIS)	SA-315-70	PO-201	1	HT-151	
5	2	11 1/4" X 11 1/4" X 1/2" THK PLATE (MAKE IN SHOP)	SA-503	PO-201	2	HT-1064	

1. Fabricated by PULLMAN POWER PRODUCTS, MILLERSBURG, PA. JOB No. 7925
 2. Fabricated for Cinn. G. & E. Co. (Agent) Cincinnati Order No. 2171
 3. Owner Wm. H. Zimmer Nuclear Unit #1
 4. Location of Plant Rt. 52 near Moscow, Ohio

5. Piping System Identification #1 MAIN STEAM SAFETY RELIEF VALVE DISCH.
 (Brief description of inclosed part, main coolant, etc.)
 (a) Drawing No. F-3874 Prepared by PULLMAN POWER PRODUCTS
 (b) National Board No.

6. The material, design, construction, and workmanship complies with ASME Code Section III, Class 3
 Edition 1971, Addenda Date 1972 Winter, Case No. N/A
 Remarks: Manufacturers' Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of this report NONE
 (Name of Part - Item number, Manufacturer's name, and identifying stamp)

7. Shop Hydrostatic Test None psi.
 8. Description of piping inspected 12" PIPE ASSEMBLY MK # 1MSORBB12-6B
 (Include - mark no., material spec., nom. pipe size - schedule or thickness - length)

- CONSISTING OF:
- ONE (1) 12" 5/80 SMLS PIPE SA106B
 - ONE (1) 12" 3/100 SMLS PIPE SA106B
 - ONE (1) 10" 5/40 SMLS PIPE SA106B
 - ONE (1) RELIEF PTD SA106B
 - ONE (1) 12 3/4" DIA X 3" THK PLATE SA575-70
 - TWO (2) 11 3/4" X 11" X 1 1/2" THK PLATE SA588 GRA
- APPROX. LENGTH: 15' 5 5/8"

We certify that the statements made in this report are correct and that the fabrication of the described piping conforms with the requirements of SECTION III of the ASME BOILER AND PRESSURE VESSEL CODE.
 Date 6/27/79 Signed PULLMAN POWER PRODUCTS by George McKay
 (Fabricator)
 Certificate of Authorization Expires October 27, 1981 Certificate of Authorization No. N1251

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of PA and employed by HISBY & Ins. Co., Hartford, CT have inspected the piping described in this Data Report on 6-27-79, and state that to the best of my knowledge and belief, the Manufacturer has constructed this piping in accordance with the applicable Subsections of ASME Code, Section III.
 By signing this certificate, neither the Inspector nor his employer make any warranty, expressed or implied, concerning the piping in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
 Date 6-27-79 No. 79 Hartford Steam Boiler Insp. & Ins. Co.
George McKay Commission 2264
 Inspector National Board, State, Pressure and No.

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) also in 8 1/2" x 11", (2) information in items 1, 2 and 5 on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 6. "Remarks".
 ASME Code Rules are available from the ASME, 345 E. 47th St., New York, N.Y. 10017

OWNER: The Cincinnati Gas & Electric Company
 Columbus & Southern Ohio Electric Company
 The Dayton Power and Light Company
 (Cincinnati is Agent for Columbus and Dayton)

PULLMAN KELLOGG
WILLIAMSON, PA.

F-3874

WELD HISTORY RECORD

12 5/80
SIZE - SCHEDULE - MIN. WALL
9/5 SA-106-B
BASE MATERIAL - TYPE - IDENT.

JOB NO. N - 7935/7936
ASSEMBLY MARK NO. 117508B312-E
PREPARED BY C. Rosato

CUSTOMER APPROVED -- KELLOGG WELD PROCEDURES/CODE

- (Code 42) P1-K1-F4-SMAW-29-2G (Note A)
- (Code 52) P1-K1-F4-SMAW-29-5G (Note A)
- (Code 62) P1-K1-F6-SAW-29-1G (Note A)
- (Code 126Z) P1-OB-ATTACHMENTS-6G (Note A & B)
- (Code 19Z) P1-OB-F6-SAW-32-1G (Note A & B)
- (Code 7Z) P1-BR-F4-SMAW-12-2G
- (Code 8Z) P1-BR-F4-SMAW-12-5G
- (Code 9Z) P1-BR-F6-SAW-7-1G

Note A: Mechanical Test includes Charpy V-Notch Test at (minus) -20° F.
Note B: Open Butt Procedure permitted for nozzles, fillets, and non-pressure attachment welds only (unless otherwise noted on the spool detail sheet).

WELD IDENT.	WELD PROC'D. CODE NO.	WELDER SYMBOL	CONS. INSERT		FILLER METAL				PRE-HEAT °F.	MAX. INTER. PASS TEMP. °F.	VISUAL	ROOT PASS		FINAL WELD		FURN. CHART NO.
			TYPE	HEAT NUMBER	TYPE	SIZE	HEAT OR LOT NO.	CODE				LP	MP	RT	LP	
X	126Z + 6Z	AV CE			E706 7018 RACO 126 FLUX	1/6 3/32 3/32 3/60	F5257 026078 E5709 Lot 64J	144 165 146	126Z 6Z	126Z 6Z	CX QC					7 3 4 5
A	6Z	LT CE	12" dia	37890131 77-28	E706 7018 L61 FLUX	1/6 3/32 3/32 3/60	F5757 026078 64H 64J	144 165 162	6Z	6Z	QC			✓	✓	↓
T/A	126Z	cm			7018	3/32	026078	165								✓

I CERTIFY THAT THIS RECORD AND THE FINAL RADIOGRAPHIC REPORTS HAVE BEEN REVIEWED BY Pullman Kellogg QUALITY ASSURANCE DEPARTMENT, AND FOUND TO BE ACCEPTABLE IN ACCORDANCE WITH THE GOVERNING SPECIFICATIONS.

Revision 1: Deleted Code 22, 25, and 26
Added Code 19Z
Added Suffix "Z"

S.C. MANAGER A. Bain
DATE 6/22/79

Pullman Power Products

WILLIAMSFORD, VA.

WELD HISTORY RECORD

F-3906
FOR F-3874

12" / 100
SIZE - SCHEDULE - MIN. WALL
CS
SA106-B
BASE MATERIAL - TYPE - IDLNT.

JOB NO. N - 7935/7936
ASSEMBLY MARK NO. J-7935
PREPARED BY Routs G.

CUSTOMER APPROVED - KELLOGG WELD PROCEDURES/CODE

- (Code 4Z) P1-K1-F4-SMAW-29-2G (Note A)
- (Code 5Z) P1-K1-F4-SMAW-29-5G (Note A)
- (Code 6Z) P1-K1-F6-SAW-29-1G (Note A)
- (Code 126Z) P1-OB-ATTACHMENTS-6G (Note A & B)
- (Code 19Z) P1-OB-F6-SAW-32-1G (Note A)
- (Code 7Z) P1-BR-F4-SMAW-12-2G
- (Code 8Z) P1-BR-F4-SMAW-12-5G
- (Code 9Z) P1-BR-F6-SAW-7-1G

Note A: Mechanical Test includes Charpy V-Notch Test at (minus) -20° F.
 Note B: Open Butt Procedure permitted for nozzles, fillets, and non-pressure attachment welds only (unless otherwise noted on the spool detail sheet).

WELD IDENT.	WELD PROC. CODE NO.	WELDER SYMBOL	CONS. INSERT		FILLER METAL				PRE-HEAT °F.	MAX. INTER. PASS TEMP. °F.	VISUAL	ROOT PASS		FINAL WELD		FURN. CHART NO.
			TYPE	HEAT NUMBER	TYPE	SIZE	HEAT OR LOT NO.	CODE				LP	MP	RT	LP	
U	126Z	CS BY			E7056 7018 7018	1/16 3/32 1/8	F5757 026678 026679	144 165 161	126Z	126Z	QC QC					73 4 5
Y	126Z	CS BY			E7056 7018 7018 7018	1/16 3/32 1/8 5/16	F5757 026678 026674 026667	144 165 161 163	126Z	126Z	AMK					73 4 5
Z	176Z	BY OT			E7056 7018 7018 7018	1/16 3/32 1/8 5/16	F5757 026678 026674 026667	144 165 161 163	126Z	126Z	AMK					73 4 5
V	8Z	AI BC HM			7018 7018 7018 7018	3/32 3/32 3/32 3/16	026078 026074 026017 026022	165 161 163 152	8Z	8Z	AMK					73 4 5
W	8Z	AI BC HM			7018 7018 7018 7018	3/32 3/32 3/32 3/16	026078 026074 026017 026022	165 161 163 152	8Z	8Z	AMK					73 4 5

I CERTIFY THAT THIS RECORD AND THE FINAL RADIOGRAPHIC REPORTS HAVE BEEN REVIEWED BY Pullman Kellogg ... QUALITY ASSURANCE DEPARTMENT, AND FOUND TO BE ACCEPTABLE IN ACCORDANCE WITH THE GOVERNING SPECIFICATIONS.

Revision 1: Deleted Code 22, 25, and 26
 Added Code 19Z
 Added Suffix "Z"

S.C. MANAGER A. Bais Igm
 DATE 6/27/79



WELD HISTORY RECORD

HANDED LUGS 1 1/2"

SIZE - SCHEDULE - MIN. WALL

C/S

BASE MATERIAL - TYPE - IDENT.

JOB NO. N-1234

ASSEMBLY MARK NO. 1-032812-65-

PREPARED BY [Signature]

CUSTOMER APPROVED - PULLMAN POWER PRODUCTS WELD PROCEDURES/CODE

Rep Y-2 R-1 PER U.T REPORT 6-6-79

1262 P1-OB-ATTACHMENTS-6G
6-6-79

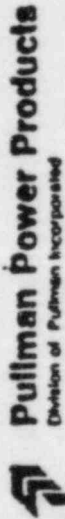
Rep Y-R-2 6-8-79

WELD IDENT.	WELD PROCED. CODE NO.	WELDER SYMBOL	CONS. INSERT		FILLER METAL				PROC. FOR PRE-HEAT °F.	PROC. FOR MAX. INTER. PASS TEMP. °F.	VISUAL	SS STEEL FERRITE CONTROL	W S
			TYPE	HEAT NUMBER	TYPE	SIZE	HEAT OR LOT NO.	CODE					
Y R-1	1262	TY			7011	3/32	026078	U62	1262	1262	O.M.S.C.		U.T.
					7012	3/32	026074	U61					
					7013	3/32	026067	U63					
E P-1	1262	TY			7014	3/32	026078		1262	1262	O.M.S.C.		70
					7015	3/32	026074						
					7016	3/32	026067						
Y R-2	1262	SG			7017	3/32	026078		1262	1262	C.P.C.		Y
					7018	3/32	026074						
					7019	3/32	026067						

I CERTIFY THAT THIS RECORD AND THE FINAL RADIOGRAPHIC REPORTS HAVE BEEN REVIEWED BY PULLMAN POWER PRODUCTS - QUALITY ASSURANCE DEPARTMENT, AND FOUND TO BE ACCEPTABLE IN ACCORDANCE WITH THE GOVERNING SPECIFICATIONS.

Q.A. MANAGER A. Bainhorn

DATE 6/22/79



Pullman Power Products
Division of Pullman Incorporated

JOB NO. 7735 SHOP FIELD

MARK NO. 1-MS-088B12-68-1

P-NO. 3874

RADIOGRAPHIC INSPECTION REPORT

DATE 6/19/77

MATERIAL SPEC. CS

DESCRIPTION		WELDED PIPE ASSEMBLY	
ACCEPTANCE CRITERIA		GOVERNING SPECIFICATION	
MATERIAL THK. <u>1.718"</u>	MATERIAL DIM. <u>12 3/4"</u>	<u>ES-4/4</u>	TYPE SEAM <u>CIRCUMFERENTIAL LONGITUDINAL</u>
SOURCE <u>1R-192</u>	SOURCE SIZE <u>33</u>	FILM TYPE <u>AA</u>	FILM SIZE <u>4 1/2 X 17</u>
S-REV	FOCAL DIST. <u>12 7/8"</u>	FILM PROCESSING <u>1010</u>	VIEWING <input type="checkbox"/> SINGLE <input checked="" type="checkbox"/> DOUBLE
	TIME <u>3 1/4 MIN.</u>	AUTOMATIC	
		RADIOGRAPHER <u>HOSTETTER</u>	
		LEVEL <u>I</u>	

WELD IDENTIFICATION	FILM INTERVAL NUMBER	PENETRATOR	SNIFF THICK	ACCEPT.	REJECT	SLAB	POROSITY	CRACK	LAC OR PER.	LAC FUSION	UNDERCUT	SURFACE	OTHER	FILM ARTIFACT	PROCESSING	W/C	RAD. INTERP.	REMARKS
A	1-2	12 1/2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	JKE	PROJECTOR NO. 18 POP-1 FILM O.D. SOURCE I.D.
	2-3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	JKE	POP-2 FILM O.D. SOURCE O.D.
	3-4	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	JKE	POP-3 FILM O.D. SOURCE I.D.
	4-1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	JKE	FILM O.D. SOURCE I.D.

923

JOB NO. 7935 SHOP FIELD

Pullman Power Products
Division of Pullman Incorporated

MARK NO. 1-MS-088812-4B-1

RADIOGRAPHIC INSPECTION REPORT

F-NO. 3906

DATE 6/2/79

CUSTOMER CINN. GAS & ELEC.		DESCRIPTION WELDED PIPE ASSEMBLY		MATERIAL SPEC. C/S	
MATERIAL THK. WELD THK. 3/8" .490"	MATERIAL DIAM. 10 3/4"	ACCEPTANCE CRITERIA ES-416	GOVERNING SPECIFICATION ES-416	TYPE SEAM CIRCUMFERENTIAL	ORIENTATION LONGITUDINAL
SOURCE SIZE CURIES 100X040	FOCAL DIST. 12 1/2"	TIME 3 1/3 MIN.	FILM TYPE YM	FILM SIZE 4 1/2 X 10	VIEWING SINGLE <input type="checkbox"/> DOUBLE <input checked="" type="checkbox"/>
S-NOV 1A-192	NO. 37	FOCAL DIST.	FILM PROCESSING AUTOMATIC	RADIOGRAPHER BRESA2	LEVEL Z

WELD IDENTIFICATION	FILM NUMBER INTERVAL	PENETRATOR	SHIM THICK	ACCEPT.	REJECT	SLAG	POROSITY	CRACK	LACK OF PEN.	LACK FUSION	UNDERCUT	SURFACE	OTHER	FILM ARTIFACT	PROCESSING	R/O. INTERP.	REMARKS
U	1-2	10	1/8	/	/	/	/	/	/	/	/	/	/	/	/	LEVEL II	PROJECTOR NO. 18 PDP-1
	2-3	12		/	/	/	/	/	/	/	/	/	/	/	/	JRE	FILM O.D. SOURCE I.D.
	3-4			/	/	/	/	/	/	/	/	/	/	/	/		FILM O.D. SOURCE O.D.
	4-5			/	/	/	/	/	/	/	/	/	/	/	/		FILM O.D. SOURCE I.D.
	5-6			/	/	/	/	/	/	/	/	/	/	/	/		FILM O.D. SOURCE I.D.
	6-7			/	/	/	/	/	/	/	/	/	/	/	/		FILM O.D. SOURCE I.D.
	7-8			/	/	/	/	/	/	/	/	/	/	/	/		FILM O.D. SOURCE I.D.
	8-9			/	/	/	/	/	/	/	/	/	/	/	/		FILM O.D. SOURCE I.D.
	9-10			/	/	/	/	/	/	/	/	/	/	/	/		FILM O.D. SOURCE I.D.
	10-11			/	/	/	/	/	/	/	/	/	/	/	/		FILM O.D. SOURCE I.D.
	11-12			/	/	/	/	/	/	/	/	/	/	/	/		FILM O.D. SOURCE I.D.
	12-1			/	/	/	/	/	/	/	/	/	/	/	/		FILM O.D. SOURCE I.D.

MAGNETIC PARTICLE INSPECTION RECORD

JOB NO. 7935

DATE 6/26/79

PIECE NO. 1-MS-OF AB 12-6B

"F" NO. 3874

MATERIAL C/S

EXAMINATION PROCEDURE ES 405 REV 4

ACCEPTANCE CRITERIA ES 405 REV 4

EQUIPMENT MANUFACTURER MAGNAFLUX

EQUIPMENT MODEL NO. KRH-2B

PARTICLE COLOR GRAY

AMPERAGE 625

PROD. SPACING 6"

RECORD OF EXAMINATION RESULTS

*Welds A, V, W, X, Y, Z and 1" adjacent base material
and attachment areas on hangers.
accept*

NAME OF INSPECTOR Gary D. La
SNT-TC-1A LEVEL II

RECORD OF RE-EXAMINATION

NAME OF INSPECTOR _____
SNT-TC-1A LEVEL _____



ULTRASONIC FLAW DETECTION RECORD

JOB NO. 7935

DATE 6/6/79

PIECE NO. 1MS08BB12-66-1

"F" NO. 3906

MATERIAL CSL

EXAMINATION PROCEDURE NO. IX-37

ACCEPTANCE CRITERIA IX-37

EQUIPMENT MODEL NO. KRAUTKRANER-USIP-11

TRANSDUCER 2.25 MHz - STRAIGHT BEAM

COUPLANT #20 oil

CALIBRATION DATA Drilled oil - TEST PLATE

DESCRIPTION OF INSPECTION TECHNIQUE MANUAL SEARCH - 100% COVERAGE - STRAIGHT BEAM

RECORD OF EXAMINATION RESULTS

R-1

Weld Ⓢ & Ⓣ REJECT.

No fusion along length of weld.

NAME OF INSPECTOR Ronald R. Delker
SNT-TC-1A LEVEL II

RECORD OF RE-EXAMINATION

6/7/79

REPAIRS made by Back gouging. - RE-welding. Re-U.T.

welds Y & Z COMPLETE.

weld Z: OK - ACCEPT

weld - Y - REJECT.

SLAG, POROSITY, ETC. ENTIRE WELD

NAME OF INSPECTOR Ronald R. Delker
SNT-TC-1A LEVEL II

LIQUID PENETRANT INSPECTION RECORD

JOB NO. 7935

DATE 6/6/79

PIECE NO. 1-M5-08 BB-12-6B-1

"F" NO. 3906

MATERIAL C/S

EXAMINATION PROCEDURE ES 404 REVS

ACCEPTANCE CRITERIA ES 404 REVS

BRAND NAME AND TYPE OF:
PENETRANT TURCO Dy CHECK #2
CLEANER TURCO Dy CHECK #3
DEVELOPER TURCO Dy CHECK NAD

BATCH NO. OF:
PENETRANT 21227R
CLEANER 8088
DEVELOPER I 198

CHEMICAL ANALYSIS CERTIFICATION OF TEST COMPONENTS AVAILABLE.

RECORD OF EXAMINATION RESULTS

REPAIR Cavity ON WELDS $\frac{1}{2}$ AND ADJACENT BASE
MATERIAL ACCEPT

NAME OF INSPECTOR Larry D. Larson
SNT-TC-1A LEVEL II

RECORD OF RE-EXAMINATION

NAME OF INSPECTOR _____
SNT-TC-1A LEVEL _____

LIQUID PENETRANT INSPECTION RECORD

JOB NO. 7935

DATE 6/8/79

PIECE NO. 1-MS-08B312-68-1

"F" NO. 3906

MATERIAL C/S

EXAMINATION PROCEDURE ES 403 Rev. 5

ACCEPTANCE CRITERIA ES 403 Rev. 5

BRAND NAME AND TYPE OF:
PENETRANT Dy chek #2
CLEANER Dy chek #3
DEVELOPER Dy chek NAD

BATCH NO. OF:
PENETRANT X1287R
CLEANER B088
DEVELOPER F198

CHEMICAL ANALYSIS CERTIFICATION OF TEST COMPONENTS AVAILABLE.

RECORD OF EXAMINATION RESULTS

(back side)
Weld Y, cavity. - Accept.

NAME OF INSPECTOR Charles Smith
SNT-TC-1A LEVEL II

RECORD OF RE-EXAMINATION

NAME OF INSPECTOR _____
SNT-TC-1A LEVEL _____

85-82-37

ULTRASONIC FLAW DETECTION RECORD

JOB NO. 7935 DATE 6/9/79
 PIECE NO. 1MS088872-6B-1 "F" NO. 3906
 MATERIAL C/S L
 EXAMINATION PROCEDURE NO. IX-37
 ACCEPTANCE CRITERIA IX-37
 EQUIPMENT MODEL NO. KRAUT KRAMER - USIP-11
 TRANSDUCER 2.25 MHz - STRAIGHT BEAM
 COUPLANT #20 oil
 CALIBRATION DATA Drilled hole - TSC RATE
 DESCRIPTION OF INSPECTION TECHNIQUE MANUAL SEARCH - 100% COVERAGE

RECORD OF EXAMINATION RESULTS

R-2.

WELD Y - ENTIRE WELD REPAIRED by BACK gouging,
RE-WELDED. - RE-UT. ENTIRE WELD.

ACCEPT.

NAME OF INSPECTOR Ronald R. Miller
 BNT-TC-1A LEVEL II

RECORD OF RE-EXAMINATION

NAME OF INSPECTOR _____
 BNT-TC-1A LEVEL _____

AS-82-37



Pullman Power Products
DIVERSIFIED CORPORATION

ULTRASONIC FLAW DETECTION RECORD

JOB NO. 7935

DATE 6/9/79

PIECE NO. 1MS08BB12-68-1

"F" NO. 3906

MATERIAL 9/STL

EXAMINATION PROCEDURE NO. IX-37

ACCEPTANCE CRITERIA IX-37

EQUIPMENT MODEL NO. KRAUTKRAMER - USIP-11

TRANSDUCER 45° - 2.25 MHz - 1/2" x 1/2"

COUPLANT #20 oil

CALIBRATION DATA DRILLED HOLE - TEST PLATE

DESCRIPTION OF INSPECTION TECHNIQUE MANUAL SEARCH - 100% COVERAGE

RECORD OF EXAMINATION RESULTS

HANGER ASSY.

WELDS (D) & (E) - COMPLETE.

ACCEPT.

NAME OF INSPECTOR Ronald R. Della
SNT-TC-1A LEVEL II

RECORD OF RE-EXAMINATION

NAME OF INSPECTOR _____
SNT-TC-1A LEVEL _____



ULTRASONIC FLAW DETECTION RECORD

JOB NO. 7935

DATE 6/14/79

PIECE NO. 1-M508BB12-66-1

"F" NO. 3906 LR

MATERIAL 45L

F-3874

EXAMINATION PROCEDURE NO. IX-37

ACCEPTANCE CRITERIA IX-37

EQUIPMENT MODEL NO. USIP-11 KRAUTKRAMER

TRANSDUCER 2.25 MHz - STRAIGHT BEAM

COUPLANT #20 oil

CALIBRATION DATA TEST Pc.

DESCRIPTION OF INSPECTION TECHNIQUE MANUAL SEARCH - 100% COVERAGE.

RECORD OF EXAMINATION RESULTS

MANUAL SEARCH WITH STRAIGHT BEAM ON IT #1 FROM WELD (X) TO 4" ADJACENT BASE MATERIAL.

ACCEPT

NAME OF INSPECTOR Ronald R. Dalke

SNT-TC-1A LEVEL II

RECORD OF RE-EXAMINATION

NAME OF INSPECTOR _____

SNT-TC-1A LEVEL _____

65-82-37



ULTRASONIC FLAW DETECTION RECORD

JOB NO. 7935

DATE 6/14/79

PIECE NO. 1-MS08BB12-6B-1

"F" NO. 3906 FR

MATERIAL CSL

F-3874

EXAMINATION PROCEDURE NO. IX-37

ACCEPTANCE CRITERIA IX-37

EQUIPMENT MODEL NO. USIP-11 - KRAUTKRAMER

TRANSDUCER 45° 60° - 1/2" x 1/2" - 2.25 MHz

COUPLANT #20 oil

CALIBRATION DATA Drilled hole - TEST PLATE

DESCRIPTION OF INSPECTION TECHNIQUE MANUAL SEARCH - 100% COVERAGE ON PIPE SIDE

RECORD OF EXAMINATION RESULTS

WELD (X), 45° & 60° SEARCH FROM PIPE SIDE (IT#1) ONLY -

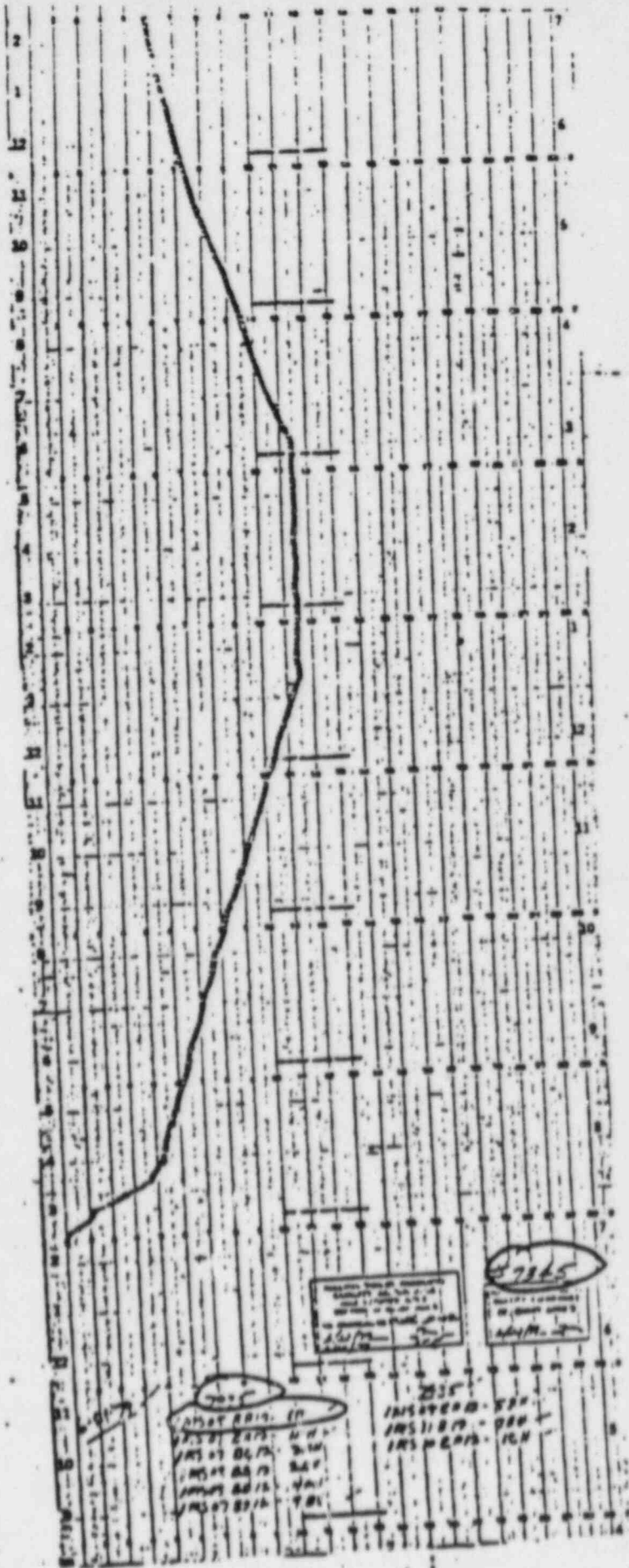
ACCEPT.

NAME OF INSPECTOR Ronald R. Della
SNT-TC-1A LEVEL II

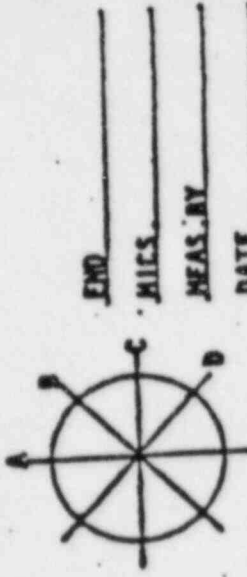
RECORD OF RE-EXAMINATION

NAME OF INSPECTOR _____
SNT-TC-1A LEVEL _____

Top

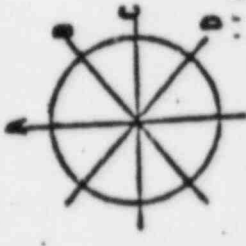


7935 JOB NO. SK. 12-2414 SHEET NO. 130



LOC.	BORE	WALL THK.	LIP THK.
A			
B			
C			
D			

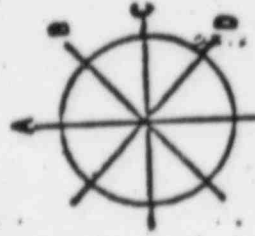
END _____
MICS. _____
MEAS. BY _____
DATE _____



LOC.	BORE	WALL THK.	LIP THK.
A			
B			
C			
D			

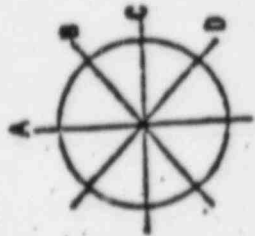
END _____
MICS. _____
MEAS. BY _____
DATE _____

*Normal surf
Ning in place*



LOC.	BORE	WALL THK.	LIP THK.
A	10.072	348	115
B	10.073	380	117
C	10.072	355	110
D	10.076	342	105

END _____
MICS. O.M. 2 I.M. 19
MEAS. BY B.H.H.
DATE 6-25-79



LOC.	BORE	WALL THK.	LIP THK.
A			
B			
C			
D			

END _____
MICS. _____
MEAS. BY _____
DATE _____

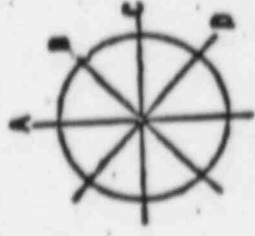
1M5080012-60 MARK NO. 7935 JOB NO. 7-3874 SHEET NO.

601 110
11.50 A



LOC.	BORE	WALL THK.	LIP THK.
A	11.510	636	120
B	11.508	621	119
C	11.509	676	120
D	11.509	643	120

END _____
MICS. A
MEAS. BY B.H.H.
DATE 6-25-79



LOC.	BORE	WALL THK.	LIP THK.
A			
B			
C			
D			

END _____
MICS. _____
MEAS. BY _____
DATE _____

7935 F-3874

JOB 7935 PC SMS088B12-68
PULLMAN POWER PRODUCTS
CLASS 3

VISUAL INSPECTION
FINAL INSPECT ON CHECKLIST

85-83-30

JOB NO. <u>7935</u>	COMMENTS
PIECE NO. <u>1M50803/4-63</u>	
F-SHEET NO. <u>3874</u>	

CHECK POINTS	YES	NO	N.A.
ALL PRIOR OPERATIONS HAVE BEEN PERFORMED AND APPROVED AND SIGNED OFF ON THE TRAVELER.	<input checked="" type="checkbox"/>		
SPECIFIED MATERIALS HAVE BEEN INSTALLED IN THE PIPING SUB-ASSEMBLY.	<input checked="" type="checkbox"/>		
ALL STAMPING DISPLAYED ON THE PIPING SUB-ASSEMBLY IS ACCURATE AND CORRESPONDS WITH THE INFORMATION PRESENTED ON THE FABRICATION SHEET.	<input checked="" type="checkbox"/>		
FINAL DIMENSIONAL EXAMINATION HAS BEEN PERFORMED AND THE DIMENSIONAL INFORMATION HAS BEEN RECORDED ON THE FABRICATION SHEET.	<input checked="" type="checkbox"/>		
CLEANING HAS BEEN PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNING SPECIFICATION.	<input checked="" type="checkbox"/>		
WELDER SYMBOLS AND RADIOGRAPHIC POINT LOCATIONS HAVE BEEN ACCURATELY APPLIED AND ARE COMPLETE.	<input checked="" type="checkbox"/>		
CONTOUR, FINISH, AND HEIGHT OF WELD CROWN COMPLIES WITH THE REQUIREMENTS OF THE GOVERNING SPECIFICATION.	<input checked="" type="checkbox"/>		
ALL ACCESSIBLE INSIDE WELD BEADS HAVE COMPLETE JOINT PENETRATION AND ARE FREE FROM UNDERCUTTING.	<input checked="" type="checkbox"/>		
FIELD WELD END PREPS ARE MACHINED TO THE CONFIGURATION AND TOLERANCES DICTATED ON THE MACHINING SKETCH.	<input checked="" type="checkbox"/>		
PIPING SUB-ASSEMBLY IS FREE FROM DAMAGE, EXCESSIVE FITTING, AND UNACCEPTABLE SURFACE DEFECTS.	<input checked="" type="checkbox"/>		
ASSEMBLY HAS BEEN INSPECTED AND APPROVED BY THE AUTHORIZED INSPECTOR AND/OR THE CUSTOMERS SURVEILLANCE REPRESENTATIVE.	<input checked="" type="checkbox"/>		
THE APPROPRIATE CODE STAMP HAS BEEN APPLIED.	<input checked="" type="checkbox"/>		
ASSEMBLY HAS BEEN CAPPED, PAINTED, AND IDENTIFIED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNING SPECIFICATION.	<input checked="" type="checkbox"/>		

6-26-79
INSPECTED BY Donald F. Neely
APPROVED Donald F. Neely
DATE 6-29-79

11853 158

NONCONFORMANCE REPORT

NO. E-1911

PAGE _____ OF _____

5. PROJECT NO. 118
6. REPORT NO. 118

2. INSTALLATION NAME: PIPE SPOOLS
3. PO/CONTRACT NO. CG 10 2171
4. SUPPLIER/CONTRACTOR NAME: PULLMAN POWER.
5. INSPECTOR: J. DEERHESTER
7. DATE: 7-5-79

8. SPECIFICATION NO. 14-2255
ASME YES NO

9. DESCRIPTION OF NONCONFORMANCE	10. DISPOSITION	11. DISPOSITION INSTRUCTIONS JUSTIFICATION
REQUIREMENTS MATERIAL TO BE UNLOADED WITH APPROVED EQUIPMENT		
FAULT: SPOOLS WERE RIPPED OFF OF TRUCK ON TO GROUND AND STRIKING OTHER SPOOLS.		PERFORM LIQUID PENETRA TEST ON ALL WELDS.
SPOOL #3	REMARK:	PERFORM VISUAL INSPECT OF WELD END JOINTS.
IMS 08 BB 12-6B		Accept on basis of inspection items ① & ②
IMS 09 BA 12-1AH		Should any pipe spool fail due to inspection:
IMS 08 BA 12-5BH		① & ② A separate non-conformance will
IMS 11 B 12 - 7BH		
IMS 10 BA 12 - 1CH		

~~SEE REV 1 7-6-79~~

VOID

12. REVIEW BOARD (REQUIRED ON ALL CORRECTIVE REPAIR DISPOSITIONS)

S&L _____ DATE _____ CG&E SPONSOR ENGR DATE _____ CG&E Q.A.S. DATE _____

13. REPAIR/REWORK COMPLETE AND ACCEPTABLE

INSPECTOR/ENGINEER _____ DATE _____

14. CAUSE
pipe spools were dropped from carriers truck back to ground. This occurred after regular working hours and as the result of a misinterpretation of instructions given to truck driver.

15. CORRECTIVE ACTION
no corrections into log'd.

Exhibit E Page 1 of 1

NON-CONFORMANCE REPORT

NO. E-1011 Page 3 PAGE _____ OF _____

1. INSTALLATION NO. See Below	2. END INSTALLATION NAME: Pipe Spools	3. PO/CONTRACT NO. CG&E 2171	4. SUPPLIER/CONTRACTOR NAME: Pullman Tower
5. PROJECT OR PLAN NO. CAW 176	6. INSPECTOR: J. Forrester	7. DATE: 7/5/79	8. SPECIFICATION NO. ASME H-2255
		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	

9. DESCRIPTION OF NON-CONFORMANCE	10. DISPOSITION	11. DISPOSITION INSTRUCTIONS/JUSTIFICATION
Material to be unloaded with approved equipment		(1) Perform RT EXAMINAT OF ALL WELDS.
Faults: Spools were rolled off of truck on to ground and striking other spools.	Re-work.	(2) Perform VISUAL EXAMIN OF WELD END JOINTS.
Spool Numbers: 1MS 05LB12-6B 1MS 09BA12-1AB 1MS 08BA12-5BB 1MS 11B12-7BB		Accept on BASIS OF 10% SECTION ITEMS (1) & (2) SHOULD Any pipe spool FAIL DUE to the inspection (1) & (2) a separate non-conformance will be issued.

VOID

REVIEW BOARD (REQUIRED ON ALL ACCEPTED REPAIR DISPOSITIONS)
SEE REV. 2 7-31-79

R. Turner 7-10-79
EI CONSTRUCTION ENGR. DI
R. Turner 7-

S&L	DATE	CG&E SPONSOR ENGR DATE	CG&E Q.A.S.S. DATE	KEI QAE

13. REPAIR/REWORK COMPLETE AND ACCEPTABLE

INSPECTOR/ENGINEER _____ DATE _____

14. CAUSE
Pipe spools were dropped from carriers truck to ground. This occurred after regular working hours and as the result of a mis-interpretation of instructions given to truck drivers

15. CORRECTIVE ACTION
no corrective action rec'd.

___ Deficiency/Deviation ___ Clarification ___ Calibration/Test Record
 ___ Audit/Follow-up ___ Subcontractor Surveillance ___ Surveillance Information

GENERAL OBSERVATIONS/DESCRIPTION:

SYSTEM MAIN STEAM

NR E-1911^{R-2} Required RT
 of Kellogg Spool Pieces.
 Spool piece MS-08-BB-12-6B WELD No X.
 had rejectable surface indications.
 MS-10-BB-12-CH-X-4
 Spool piece MS-11-B-12-7BH had a
 crack of Fusion Rejectable Indication.
 Please advise us about Dispositioning
 those rejections.

Report Prepared By: ACPALLOV ✓ Date 7/23/79

If Deficiency is Nonconforming in Nature, List:

1. Reference Drawing, Spec. or Std. _____
2. Specific Location _____

CORRECTIVE ACTION STATEMENT

Corrective Action Verified By: _____ Date _____

Organization: CG&E 2-1

Reference: QACM1-0

Deficiency/Deviation Clarification Calibration/Test Record
 Audit/Follow-up Subcontractor Surveillance Surveillance Information

GENERAL OBSERVATIONS/DESCRIPTION:

SYSTEM: NIS

VISUAL INSPECTED ALL FILLET WELDS ON SP. PIECES NUMBERED 1MS08BB12-UB, 1MS09BA12, 1MS08BA12-SBM, 1MS11B12-7BH AND 1MS10BA12-1CH AS PER NRE-1911 REV 2 AND FOUND VISUALLY ACCEPTABLE WITH NO APPARENT CRACKS

Report Prepared By: G. Mc Cann

Date: 8-8-79

If Deficiency is Nonconforming in Nature, List:

1. Reference Drawing, Spec. or Std: NRE-1911
2. Specific Location: HAND BLAST & PAINT SHOP

CORRECTIVE ACTION STATEMENT

No Corrective Action Required

Corrective Action Verified By: N/A

Date: 8-8-79

1. DWG/INSTALLATION NO. <i>See Below</i>	2. DWG/INSTALLATION NAME: Pipe Spools	3. PO/CONTRACT NO. CG&E 2171	4. SUPPLIER/CONTRACTOR NAME: Pullman Power
5. INSPECTION PLAN NO.:	6. INSPECTOR: A. Pallou <i>R</i>	7. DATE: 8-9-79	8. SPECIFICATION NO. ASME H2255 YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

9. DESCRIPTION OF NONCONFORMANCE	10. DISPOSITION	11. DISPOSITION INSTRUCTIONS/JUSTIFICATION
Requirement: Material unloaded with proved equipment.		CG&E in Disposition Rm. Doc 8-13-79
Ult: Spools were rolled off truck to ground and striking other spools per E-1911 Rev.2	Accept-as-is	Welds rejected by radiograph were not required to be radiographed but were required to be 100% Ultrasonic tested and 100% Magnetic Particle tested per MS09BA-12 Rev. M
Disposition 2 all fillet welds usually inspected accepted as per 2251 Class C	<div style="border: 2px solid black; padding: 10px; display: inline-block;"> <p style="font-size: 2em; margin: 0;">CLOSED</p> <p style="font-size: 1.5em; margin: 0;">DATE 10-17-79</p> </div>	Accept on basis of acceptance of welds by Pullman Power Products Authority. Note: Temp for all NCR's.
Disposition 1 completed all not radiographed (MS 08BB 12-6B had rejectable surface indication-open)		<p>Welds rejected by radiograph are covered by NCR E-2020. The disposition of welds MS09BA-12-1AH and MS08BA-12-5BH is acceptable.</p>
Disposition 11B12 7BH had rejectable lack of fusion-open) (MS 10BA12 1CH had rejectable lack of fusion-open) (MS09BA-12 1- Acceptable Butt & Filets-Closed)		
Disposition 10SBA-12 5BH-Acceptable Butt & Fillet-welded)		

REVIEW BOARD (REQUIRED ON ALL ACCEPT/REPAIR DISPOSITIONS) *approved with comment*

<i>J.M. Claus</i>	<i>10/9/79</i>	<i>10-12-79</i>	<i>R.F. Wood</i>	<i>10/10/79</i>	<i>R. Tam</i>	<i>10/12/79</i>
IBL	DATE	CG&E SPONSOR ENGR DATE	CG&E Q.A.&S.	DATE	KEI QAE	DATE

REPAIR/REWORK COMPLETE AND ACCEPTABLE

12. CAUSE <i>Suppliers confusion misunderstood instructions concerning bonding of pipe spools.</i>	13. CORRECTIVE ACTION <i>Corrective action has been taken by carrier concerning this incident.</i>
INSPECTOR/ENGINEER _____ DATE _____ Submit X - Page 1 of 1	

1. INSTALLATION NO. *see below*

2. DWG/INSTALLATION NAME: Pipe Spools

3. PO/CONTRACT NO. CG&E 2171

4. SUPPLIER/CONTRACTOR NAME: Pullman Power

5. INSPECTION PLAN NO.:

6. INSPECTOR: A. Pallon

7. DATE: 8-9-79

8. SPECIFICATION NO. H2255

ASME YES NO

9. DESCRIPTION OF NONCONFORMANCE	10. DISPOSITION	11. DISPOSITION INSTRUCTIONS/JUSTIFICATION
REQUIREMENT: Material unloaded with approved equipment.		CG & E IN DISPOSITION Rm. Dur 8-13-79
Fault: Spools were rolled off truck on to ground and striking other spools as per E-1911 Rev.2	Accept-as-is	Welds rejected by radiographs were not required to be radiographed, but were required to be 100% Ultrasonic tested and 100% Magnetic Particle tested per M400 Sh. 12 Rev. 1
Disposition 2 all fillet welds visually inspected accepted as per SR 2251		Accept on basis of acceptance of welds by Pullman Power Products, Authorized Nuclear Inspector and NES Personnel
Disposition 1 completed all butt radiographed (LMS 08BB 12-6B had rejectable surface indication-open)		<div style="border: 2px solid black; padding: 10px; display: inline-block;"> <p>NR CLOSED</p> <p>DATE 10-17-79</p> </div>
(LMS 11B12 7BH had rejectable lack of fusion-open) (LMS 10BA12 1CH had rejectable lack of fusion-open) (LMS09BA-12		
LAH- Acceptable Butt & Filets-Closed)		
(LMS08BA-12 5BH-Acceptable Butt & Filets-Closed)		

Signature 8/19

12. REVIEW BOARD (REQUIRED ON ALL ACCEPT/REPAIR DISPOSITIONS)

Signature 8-14-79
KEI CONSTRUCTION ENGR. DATE

S&L	DATE	CG&E SPONSOR ENGR DATE	CG&E Q.A.&S. DATE	KEI QAE
-----	------	------------------------	-------------------	---------

13. REPAIR/REWORK COMPLETE AND ACCEPTABLE

INSPECTOR/ENGINEER _____ DATE _____

14. CAUSE
Suppliers error or misunderstanding instructions concerning off loading of pipe spools.

15. CORRECTIVE ACTION
Corrective action has been taken by carrier concerning this incident.

1. DWG INSTALLATION NO.	2. DWG/INSTALLATION NAME:	3. PO/CONTRACT NO.	4. SUPPLIER/CONTRACTOR NAME.	
	Weld Spools	1000 2171	Tullahoma Tower	
5. INSPECTION PLAN NO.:	6. INSPECTOR:	7. DATE:	8. SPECIFICATION NO.	ASME YES <input type="checkbox"/> NO <input type="checkbox"/>
	A.G. [Signature]	6-2-75	W-2155	

9. DESCRIPTION OF NONCONFORMANCE	10. DISPOSITION	11. DISPOSITION INSTRUCTIONS/JUSTIFICATION
Welds: Weld Spools		
REMARKS: All welds to be acceptable for ASME Section 3		
REFERENCE: NR E-1911 P.2 requires RT all Butt Weld (Step 1), VT all Tillet Welds, SR [Signature]		
NOTE: Spools were rolled off truck on to ground and striking other spools.		
1000-2171-12 12F	Accept as is.	
1000-2171-12 12H		
1000-2171-12 12I		
1000-2171-12 12J		
1000-2171-12 12K		
1000-2171-12 12L		
1000-2171-12 12M		
1000-2171-12 12N		
1000-2171-12 12O		
1000-2171-12 12P		
1000-2171-12 12Q		
1000-2171-12 12R		
1000-2171-12 12S		
1000-2171-12 12T		
1000-2171-12 12U		
1000-2171-12 12V		
1000-2171-12 12W		
1000-2171-12 12X		
1000-2171-12 12Y		
1000-2171-12 12Z		
(See attached RT Reports & SR.)		

12. REVIEW BOARD (REQUIRED ON ALL ACCEPT/REPAIR DISPOSITIONS)

[Signature]
 KEI CONSTRUCTION ENGR. DATE

S&L	DATE	CG&E SPONSOR ENGR DATE	CG&E Q.A.&S. DATE	KEI QAE

13. REPAIR/REWORK COMPLETE AND ACCEPTABLE

INSPECTOR/ENGINEER _____ DATE _____

14. CAUSE

Suppliers (Carrier) mis-understood instructions concerning off loading of spools.

15. CORRECTIVE ACTION

Corrective action has been taken by carrier concerning their misinterpretation.

Exhibit L - Page 1 of 1

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

6

REGION III

13-110

Report No. 50-358/80-09

Docket No. 50-358

License No. CPPR-88

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

Facility: Wm. H. Zimmer Nuclear Power Station

Investigation At: Moscow, OH
Chicago, IL

Dates of Investigation: April 7-9 and 30, May 1-2 and 20, 1980

Investigators:

G. A. Phillip 7/1/80
G. A. Phillip Date

K. D. Ward 7/2/80
K. D. Ward Date

T. E. Vandell 7-2-80
T. E. Vandell Date

Reviewed By:

Gen W. Roy 7-2-80
for E. Norelius Date
Assistant to the Director

R. C. Knop 7/3/80
R. C. Knop, Chief Date
Construction Projects Section 1

Investigation Summary: Investigation on April 7-9 and 30, May 1-2 and 20, 1980 (Report No. 50-358/80-09)

Areas Investigated: Because of allegations made primarily relating to the adequacy of piping welds, performed a review of records and procedures,

16pp.

844814468

made independent evaluations and conducted interviews of personnel. The investigation involved 94 investigation hours by three investigators. Results: Of four allegations, one, which related to the installation of pre-fabricated piping having defective welds, was partially substantiated in that the pipes were installed before questions regarding their acceptability were resolved. One item of noncompliance, an infraction, was identified: (1) 10 CFR 50, Appendix B, Criterion XV, release of material from segregation and failure to use hold tags.

REASON FOR INVESTIGATION

On February 28, 1980, an individual who contacted the NRC by telephone made allegations regarding the Wm. H. Zimmer Nuclear Power Station. One of these allegations was that piping having defective welds had been installed in a safety-related system.

SUMMARY OF FACTS

Following the receipt of allegations by telephone on February 28, 1980, arrangements were made to interview the allexer to obtain more detailed information. During an interview on March 3, 1980, the individual made several allegations, three of which involved matters under the jurisdiction of the NRC. By letter dated March 11, 1980, the allexer was advised that an investigation would be conducted regarding those allegations which were as follows:

1. Defective welds in safety-related systems have been accepted, among them were welds CY506, HR42 and K811.
2. Five defective welds were identified in prefabricated piping but the pipes were accepted and installed in a safety-related system.
3. The manner in which safety-related installed piping was flushed was inadequate and a scheduled six-week flush was reduced to two weeks.

Allegation No. 1 was not substantiated.

Allegation No. 2 was partially substantiated in that three of five identified pipes had been installed in the main steam relief system before questions as to their acceptability had been resolved. Two items of noncompliance were identified in this regard. It was also determined that at the time of the investigation a nonconforming report requiring disposition remained open concerning the acceptability of the three pipes. During the investigation additional examinations were made of the pipes and they were determined to be acceptable.

Regarding Allegation No. 3, it was determined through contact with the primary source of the information upon which the allegation was based, that he had left the site in November 1978 and problems in this area had been identified and resolved through NRC inspections conducted between November 1978 and the receipt of the allegations in March 1980.

Following completion of the investigation at the Zimmer site, the allexer contacted Region III and alleged he had evidence of a criminal

*check on case -
on radiograph*

conspiracy and that the welds on the three above-mentioned pipes had been cut out and repaired during the course of the investigation and this information was withheld from the NRC. The basis for these allegations, which consisted of recordings of three telephone conversations, was obtained from the alleged during an interview on May 8, 1980. *we have tape* No information or evidence was obtained to confirm these allegations during the interview or during subsequent investigation.

131 (b)

One item of noncompliance, an infraction, was identified during this investigation.

DETAILS

1. Persons Contacted

Cincinnati Gas and Electric Company (CG&E)

*B. K. Culver, Project Manager
*W. W. Schwieters, QA Manager
*R. L. Wood, QA Engineer
*D. C. Kramer, QA and S Engineer
S. Swain, Construction Manager
*J. F. Weissenberg, QA and S Engineer

Kaiser Engineers, Inc. (KEI)

*R. Marshall, Project Superintendent
*E. V. Knox, QA Manager
K. R. Baumgarten, QA Manager
R. M. Dorr, Construction Engineer
A. Pallon, Welding/NDE QA Engineer
F. Oltz, Analysis and Procedures Supervisor, QA
J. Deerwester, Supplier QA
D. Haag, QA Inspector

Peabody Testing Services (Peabody)

Ernest Aldredge, President
Charles Wood, Manager, Cincinnati Office (via telephone)
Wayne Draffon, Supervisor (via telephone)
Alan Sellars, Field Supervisor
D. Burdsal, Level II Inspector

Nuclear Energy Services, Inc. (NES)

R. Bott, NDE Supervisor
R. A. Zieber, NDE Inspector

2. Introduction

On February 28, 1980, the Office of Inspection and Enforcement NRC Headquarters advised Region III of a telephone conversation with an individual who made allegations concerning activities at the Wm. H. Zimmer Nuclear Power Plant Construction site, and requested that the individual be contacted. Later the same day during a telephone conversation with Region III, and during an interview on March 3, 1980, the individual made several allegations.

The individual stated that he had been employed by a private detective agency, and the licensee, CG&E, through his employer, had engaged him to work under cover at the Zimmer site to investigate time card padding by site personnel. His investigation effort began on December 10, 1979 and ended on January 4, 1980. In addition to information regarding worker time card padding, he obtained information regarding other activities which was the basis for several allegations, some of which related to matters under the jurisdiction of the NRC.

The individual stated he had earlier brought his information to the FBI. He indicated he was uncertain as to what action, if any, would be taken by that agency.

The individual stated he had documentation relating to his allegations in the form of weekly reports he had prepared and tapes of several of his conversations with site personnel. During the interview on March 3, 1980, the individual played those parts of the tapes which he said contained pertinent information and made available copies of his reports.

3. Allegations

Based on the information obtained through the interview with the alleged, a review of the taped conversations and his investigative reports, three allegations involving activities under NRC jurisdiction were developed. By letter dated March 11, 1980, the alleged was advised that an investigation of these allegations would be conducted. A copy of this letter with the alleged's identification deleted is attached to this report as Exhibit A. These allegations and information regarding them obtained during the investigation are set forth below.

Allegation 1: Defective welds in safety-related systems have been accepted, among them were welds CY606, HR42 and K811.

The identification of the specific welds in this allegation was obtained from a review of the tape the alleged had made surreptitiously of his conversations with site personnel. According to the information obtained by the alleged, weld CY606 was buried in concrete between the Radwaste Building and the Containment Building. He said it was his understanding that they dug it up to repair it, but he was uncertain whether this was done.

Regarding weld HR42, the alleged said that he had informed CG&E that this weld was defective. He said he had heard that another testing firm had been hired as a consultant, and this firm had confirmed the weld was defective. He also said it was his understanding that this defect was reported to the NRC.

Regarding weld K811, the alleged said he was informed that this weld had "an insert fault" and that KEI had ordered that it be accepted.

The allegor stated that Peabody Testing Services (Peabody), also referred to as Magnaflux, personnel had informed him that some welds that Peabody, the nondestructive testing contractor, had rejected as faulty were subsequently accepted by KEI, the site construction management contractor. He said that a Peabody employee had records identifying the welds rejected by Peabody which were subsequently accepted by KEI. He indicated that by way of explanation, CG&E had informed him that the interpretation of the film obtained through radiographic examinations of welds is a judgment call. The appearance of an item on a radiographic film may be judged to be a defect by one individual and not by another and KEI could overrule Peabody.

Finding:

also see OK

On April 7, 1980, the Peabody field supervisor was interviewed. He stated that he had no records showing the welds Peabody had initially rejected which were subsequently declared acceptable by KEI. He indicated that, although he was aware that this had occurred, he did not know how often and he could not provide any specific instances. He also stated that the results of radiographic examinations are recorded on reader sheets. The radiographic film and the original reader sheets are turned over to KEI. He said Peabody only had carbon copies of the reader sheets.

*Peabody report
Kamin
Ward
Whom?*

As a means of further evaluating whether KEI was accepting welds identified as defective by Peabody, a safety-related system, the High Pressure Core Spray System, was selected and all reader sheets pertaining to it were reviewed. Of 99 welds in the system which were radiographed, two instances were noted in which Peabody had checked the reject column and KEI had lined that check out and had checked the accept column. The radiographs of these two welds were reviewed by an NRC inspector who is a certified NDE Level III. He concurred that the welds were acceptable. Conversely, it was noted that in several instances, between five and ten, the original accept check mark entered by Peabody had been lined through and a reject check had been entered by KEI.

*Paul
Barnes
Eng - 10/81*

Regarding the subject of welds and radiographs of them, an NRC inspection conducted on November 8-9, and December 12-13, 1978 (Report No. 50-358/78-30) identified several discrepancies in radiographic techniques and reports. During a subsequent inspection on September 18-20, and December 11-12, 1979 (Report No. 50-358/79-17) several more discrepancies were identified. CG&E then hired NES to rereview radiographs and reports of all welds which had been accepted for turnover prior to operation. This review began in October 1979 and was completed in early April 1980. [The review included 2,390 radiographed welds. Of those, 958 had report discrepancies, 543 had some technique problems and 14 welds were found to be unacceptable because of defects.]

40-9+31

*2350
958 - Report Disc
543 - Tech Problems
14 - unaccept
1515*

81 - 5/20 rejects

2390

The KEI Project Superintendent advised on May 1, 1980, the 14 welds were being re-examined and resolution regarding them had not been completed. He stated that one of the 14 welds found to be unacceptable was the subject of a nonconformance report and, therefore, had not been accepted for turnover. This weld, he said, should not have been included in the NES review. Another weld had been cut out of the pipe for examination and it was determined that, although it appeared to have a defect on the radiographic film, it was, in fact, an acceptable weld. K811
A 811

Regarding weld No. K811, a review of records showed it was welded on November 9, 1977, but because an Authorized Nuclear Inspector hold point was missed at the fitup, the weld was cut out and replaced by weld No. K916. The missed hold point was documented by Nonconformance Report (NR) No. E-2138R1. This NR indicates that the disposition was to cut out and replace the weld. It was determined that weld No. K916 had not yet received final acceptance.

Regarding weld No. RH42, records indicated this weld was first radiographed on August 9, 1976, and found to have unacceptable porosity and slag in the areas of 36-48. The areas were repaired and a reradiograph performed on August 10, 1976 found it to be acceptable. A review was made of the radiographs for weld quality, techniques, and report accuracy by an NES Level II radiographer on January 25, 1980 as part of the above-mentioned re-review initiated after the 1978-79 NRC inspections. The NES Level II radiographer found some discrepancies which have not been resolved, and the weld has not been given final acceptance.

Regarding weld No. CY606, a review of records showed this weld was first radiographed on July 15, 1976 and found to have incomplete fusion and penetration in the areas of 0-13 and 13-16. The areas were repaired and the weld re-radiographed on June 8, 1977 and found to be acceptable. A review was made of the radiographs for weld quality, techniques and report accuracy by an NES Level III radiographer on October 12, 1979 as a result of the NRC inspection conducted in 1978. The Level III found some discrepancies which have not been resolved and the weld has not received final acceptance.

Allegation 2: The manner in which safety-related installed piping was flushed was inadequate and a scheduled six-week flush was reduced to two weeks.

The allegor provided information that a site employee informed him on December 27, 1979, that another individual who had been employed as a general foreman at the site had objected to the flushing procedures used. He had also objected when a particular flush that should have taken six weeks was cut to two weeks. On one occasion the individual had demonstrated the flushing was inadequate by pounding on a pipe which released sediment and slag during the flush. The identity of the former general foreman was provided by the allegor.

Finding: On April 7, 1980, the former general foreman was contacted and interviewed. This individual said he had worked at the Zimmer site from June 1973 until November 1978. In 1978 he was the general foreman of the flush group.

Regarding the six-week versus two-week flush, the individual indicated it had been anticipated six weeks would be needed to prepare for and flush one of the systems. He, however, was able to accomplish a satisfactory flush in two weeks. He indicated that the shorter time did not mean the flush was not done according to the requirements. Rather, it was a case of he and his men being able to accomplish a job in less time than expected. *OK*

This individual stated that in his opinion the welding done on the critical systems, such as the main steam lines and in the reactor building, was good. He said, however, that several problems were encountered in the flushing activities while he was at the site but he was unable to provide information regarding any specific requirements that were not met. *What were the problems? Don't remember*

NRC inspections conducted subsequent to the departure of this individual from the site included an examination of flushing activities and some specific problems were identified. On the basis of one of these inspections, conducted January 3-6 and 8, 1979 (Report No. 50-358/79-01), one item of noncompliance and one deviation were identified. The noncompliance related to a failure to close a valve during a flush and an inadequate procedure to assure boundary valves are closed. The deviation was that the procedure did not require tagging of boundary valves. A second inspection conducted February 27-28, March 1-2, 19-23, and April 9-11, 1979 (Report No. 50-358/79-06) resulted in one item of noncompliance regarding flushing activities. This related to a failure to maintain control of flushing waters resulting in the flooding of equipment in a system which had been turned over for preoperational testing. *flush design #215 Perryman*

The individual indicated a matter of concern to him was that a hydrotest of the reactor containment was successfully performed, but after the test some instrument lines were cut out which invalidated the hydrotest. He indicated he was uncertain as to whether CG&E would attempt to use this test as meeting test requirements or whether the NRC was aware the test had been invalidated by the subsequent modifications.

On April 8, 1980, the NRC Resident Inspector advised that he as well as CG&E were aware that the initial hydrotest was not valid because of the subsequent modification of the instrument lines. He stated that another hydrotest was tentatively scheduled to be performed during the summer of 1980.

In view of the above, further investigation at the site in the area of flushing activities was not pursued.

Allegation 3: Five defective welds were identified in prefabricated piping, but the pipe was accepted and installed in a safety-related system.

Through a review of reports written by the alleger and the tapes of conversations with site personnel as well as information supplied through interview on March 3, 1980; the following information was obtained regarding this allegation.

During the NRC hearings in November 1979, a question was raised concerning an accident which involved the dropping of fuel rods. A former site employee had provided information to attorneys who were opposed to the licensing of the plant which was the basis for raising this question. A miscommunication between the former employee and the attorneys occurred, however. The question about an accident should have referred to piping being dropped from a tractor trailer rather than fuel being dropped.

The alleger advised that in about October 1979, a trailer load of pipes fabricated at the Kellogg Company, located in Pennsylvania, arrived at the site in the middle of the night. Since personnel and proper equipment were not available to unload it properly a member of CG&E management issued instructions to push the pipe from the truck onto the ground.

When the pipes were found on the ground the following day, it was decided that the pipes would have to be inspected by x-ray to determine whether they had been damaged. Peabody was instructed to x-ray (radiograph) the pipes and 5 to 8 faulty welds were identified. Since Peabody had been instructed to check the pipes but not the welds, and since the welds had been tested and found to be acceptable before shipment by Kellogg, the pipes were approved by KEI Quality Assurance. These pipes were installed in the Main Steam Relief System, a safety-related system.

Finding: A bill of lading dated June 29, 1979 showed that Pullman Power Products, a division of Pullman, Inc., Williamsport, Pennsylvania, formerly known as M. W. Kellogg Company, released to the Daily Express Company five pieces of pipe assembly L/S, weighing 6,700 pounds, for delivery to the CG&E Zimmer site on Monday, July 2, 1979. A packing slip accompanying the shipment listed the following pieces:

IMS08BB12-6B
IMS09BA12-1AH
IMS08BA12-5BH
IMS11B12-7BH
IMS10BA12-ICH

A KEI receiving stamp shows it was received on July 3, 1979. Copies of the bill of lading and the packing slip were obtained and are attached to the report as Exhibits B and C, respectively.

Each of these pipes (spool pieces) were for the Main Steam Safety Relief Valve discharge and were carbon steel pipe assemblies approximately 15' 7 5/8" long, 12 3/4" in diameter and having a wall thickness of .687".

On hand at the Zimmer site were QA documentation packages for each of these 5 spool pieces received from Pullman. A copy of one package was obtained and is attached to this report as Exhibit D.

On July 5, 1979, Nonconformance Report (NR) No. E-1911 was prepared indicating "Spools were rolled off of truck onto ground and striking other spools" and listing the above identification numbers. The issuance of this NR had the effect of placing these pipe spools in a hold status in the KEI warehouse. On July 10, 1979, the KEI Construction Engineer entered the following disposition on this NR "Rework. (1) Perform liquid penetrant test on all welds; (2) perform visual inspection of weld and preps. Accept on basis of inspection (1) and (2). Should any pipe spool fail due to inspections (1) and (2) a separate Nonconformance will be issued." A KEI QA engineer concurred in this disposition on the same date. A copy of NR E-1911 is attached to this report as Exhibit E.

NR E-1911 was voided and superseded by NR E-1911 Rev. 1 on the same date, July 10, 1979. KEI and CG&E personnel advised that the disposition shown on NR E-1911 was reconsidered because they wished to avoid removing the paint from the welds which would be necessary before a liquid penetrant examination could be performed. NR E-1911 Rev. 1 changed the first item of the disposition to: "Perform RT examination of all welds." A copy of NR E-1911 Rev. 1 is attached to this report as Exhibit F.

A QA Surveillance Report dated July 23, 1979, addressed to a CG&E QA engineer signed by the KEI NDE QA engineer, showed that on three spool pieces, weld X4 had rejectable indications, and requested to be advised concerning the dispositioning of these rejections. The CG&E QA engineer stated that to the best of his recollection, he did nothing in response to this request and could not recall having discussed the matter with anyone. A copy of this Surveillance Report is attached to this report as Exhibit G.

CG&E and KEI personnel stated all five spool pieces were radiographed on an "information only" basis but only the films for those three referred to in the Surveillance Report were retained. The X4 weld is a weld which joins a solid cap to one end of the spool piece. Radiography is not the appropriate technique employed to examine a weld of this kind since the gamma rays must pass through the cap (about 12' of metal) as well as the weld. The KEI Construction Engineer said the radiographs were done with the thought that they might show surface damage, even though it was recognized the quality of the film would not be good and it was recognized that the film would not meet any code standards.

NR E-1911 Rev. 1 was voided and superseded by NR E-1911 Rev. 2 on July 31, 1979. The disposition shown on the latter was to perform RT examinations of all "butt-welds" and to perform visual examinations of all "fillet-welds."

A QA Surveillance Report dated August 8, 1979 showed that all five spool pieces were visually examined and were found acceptable. A copy of this Surveillance Report is attached to this report as Exhibit H.

Since two spool pieces had shown no indication of damage through radiographic examination and visual examination another NR, No. E-1997, dated August 9, 1979, was prepared as a mechanism to remove those two spool pieces from a hold condition but to retain an open NR on the other three. NR E-1911 Rev. 2 was closed by KEI QA on August 9, 1979, with the notation "Exceptions on → See NR E-1997." A copy of the NR E-1911 Rev. 2 is attached as Exhibit I.

NR E-1997 showed that the spool pieces IMS09BA12-1AH and IMS08BA12-5BH were acceptable. On August 13, 1979 the KEI Construction Engineer placed a notation on NR E-1997 "CG&E to disposition." The KEI Construction Engineer stated that this was appropriate since CG&E has responsibility for off-site vendor supplied items. On August 19, 1979 the CG&E Construction Engineer added the disposition "Accept-As-Is" and described the reasons for this disposition. A copy of NR E-1997 is attached to this report as Exhibit J.

Quality Assurance Instruction, QACMI No. G-4, Nonconforming Material Control, requires that NRs dispositioned "Accept-As-Is" be signed by the Material Review Board before they are closed out. NR E-1977 was closed out on October 17, 1979 with a comment added by the Sargent & Lundy (S&L) board member to the effect that "Welds rejected by radiograph are covered by NCR E-2020." A copy of the closed NR E-1997 is attached to this report as Exhibit K.

NR E-2020 showed the same information as NR E-1997, but at the time of the investigation, E-2020 had not been closed out. A copy of NR E-2020 is attached to this report as Exhibit L.

A review of records at the warehouse showed that the three spool pieces, which were the subject of the open NR had been released to construction for installation as follows:

<u>Item</u>	<u>Issue Date</u>
IMS11B12-7BH	9/18/79
IMS10BA12-ICH	9/24/79
IMS08BB12-6B	9/28/79

On April 8, 1980, it was established that these spool pieces had been installed, and no "Hold" tag or "Deficiency" tag had been placed on them. This is in noncompliance 10 CFR 50, Appendix B, Criterion XV, and KEI Quality Assurance Procedure No. 15.

It was ascertained that the spool pieces had been released from the warehouse on the basis of a later version of NR E-1911 Rev. 2 on which the above-mentioned notation referencing NR E-1997 had been lined through on September 14, 1979. A copy of this version of NR E-1911 Rev. 2 is attached to this report as Exhibit M.

It was determined that the QA Document Control Supervisor had lined out the notation. He indicated that he had heard that NR E-1997 was being voided so he felt there was no point in it being cross-referenced any longer on NR E-1911 Rev. 2. The supplier QA man in the warehouse indicated to him that some pressure was being felt from construction to get the spool pieces released. The Document Control Supervisor informed the warehouse that NR E-1911 Rev. 2 had been closed out and it was all right to release the spool pieces. He said this was done on the assumption that what was considered to be a paper problem would be cleared up. The Document Control Supervisor as well as other site personnel indicated the acceptability of the spool pieces was regarded as a paper problem rather than a real problem. It was indicated that the probability of actual damage to pipes of that size and wall thickness due to mishandling upon delivery was extremely remote.

The supplier QA man advised that the spool pieces were released from the warehouse on the basis of the version of NR E-1911 Rev. 2 which had the reference to NR E-1977 lined through (Exhibit M). He indicated that the Document Control Supervisor was instructed to line through the notation by a CG&E official. The latter individual, however, denied any recollection of having given that instruction. The improper close out of NR E-1911 Rev. 2, which resulted in the release of spool pieces for installation before their acceptability had been established is in noncompliance with 10 CFR 50, Appendix B, Criterion XV, and KEI Quality Assurance Procedure No. 16.

On April 23, 1980, Deficiency Tags were placed on the spool pieces and during the period April 25-28, 1980, Peabody personnel performed magnetic particle and ultrasonic inspections of the welds in question. The reports of these inspections were reviewed and the Peabody inspectors performing these examinations were interviewed on May 1, 1980. The Peabody personnel stated that they had concluded on the basis of these examinations that the spool pieces were acceptable. It was also ascertained that on April 28, 1980, Pullman personnel visited the Zimmer site and also performed ultrasonic inspections of the welds. On the basis of these examinations, Pullman provided a statement to CG&E that these welds were acceptable. Peabody personnel advised that they had observed the examinations performed by Pullman and they agreed with the results.

4. Additional Allegations

During telephone contacts with the NRC on May 5 and 7, 1980, the allegor stated that he had evidence of criminal actions relating to the spool pieces which were the subject of Allegation No. 3 above. He stated that he had evidence that between the two visits to the Zimmer site by the NRC investigations team on April 7-9 and April 30-May 1-2, the welds had been cut out and/or repaired. This he alleged, was the reason that the welds were judged to be acceptable during the second visit. He also stated he had evidence that pressure was exerted upon Peabody personnel to withhold information from the NRC in connection with the investigation.

On May 8, 1980, the allegor was interviewed jointly by NRC and FBI personnel. During this interview the allegor provided for review a tape recording of three telephone conversations he had had with Peabody personnel. After listening to the three conversations, the FBI representative indicated that they did not appear to him to be evidence of criminality. The tape was furnished to the NRC for further review and follow up.

The first conversation, according to the allegor, took place on May 5, 1980 with a supervisor in the Peabody, Cincinnati office. At one point during this conversation the supervisor said: "They cut some of those welds out." The allegor responded: "You mean since the NRC had begun their investigation?" The supervisor then said: "Oh, yes, they did that the next Monday." Later in the conversation, the supervisor said: "I do know they started repairing some welds."

On May 20, 1980, the supervisor who had made the above statements, was interviewed by telephone. He stated that he had no first-hand knowledge of activities at the Zimmer site and that his comments to the allegor were based upon his conversations with another Peabody employee. This second individual visits the Zimmer site and may have acquired the information himself, or through conversations with another Peabody individual who does work at the site. He stated he did not know whether the information he received concerning the repairs of welds related to the three spool pieces or to some other pipes.

The second Peabody employee was also interviewed by telephone on May 20, 1980. He advised that the welds that were repaired were some which had been identified as bad during the NES audit. He said to his knowledge no repairs had been made on any 12" pipe welds. He added that he had reviewed the results of the ultrasonic examinations performed on the 12" pipes and he had concluded the welds are acceptable.

The third Peabody individual, who is employed at the Zimmer site, was also interviewed by telephone on May 20. This individual stated that the paint had been removed from the welds on the 12" pipes so that the tests could be made of them. He said this was done with wire wheels and there were no repairs or even grinding done on the welds.

1.3 (10)
The second taped conversation took place on May 5, 1980 between the allegor and a radiographer employed by Peabody. This radiographer had been identified by the allegor as being one of the individuals who had been involved in performing the radiography on the spool pieces in July 1979. During the conversation the allegor asked the radiographer whether the pipes were bad. The radiographer responded: "I can't really say." The allegor then stated he had been informed the welds were cut out and repaired. The radiographer responded: "I don't know." The allegor again raised the question as to whether the welds were defective and the radiographer responded: "I didn't read the film. I was a Level I and not qualified to interpret the film." The radiographer then identified the Peabody employee who had read the film. The latter individual had been interviewed on May 2, 1980. He had stated that all five spool pieces that had been dropped from the truck had been examined and no indications of defects had been found except the three which were documented by an NR.

The third taped conversation took place on May 6, 1980 between the allegor and the president of Peabody. The primary topic of conversation was the action taken by CG&E in early April 1980 in transferring the radiography work from Peabody to another contractor, NES. The President stated that he did not dispute the action taken because it would have a detrimental effect on his firm's position in the industry, and adversely affect their efforts to obtain future contracts.

On May 20, 1980, the President of Peabody was interviewed concerning this conversation. He stated that the action taken by CG&E, and his posture regarding it, had nothing to do with the quality of work at the Zimmer site. He said that, to his knowledge, no Peabody employees had been pressured to accept or approve defective welds. He stated that Peabody's contract provides for their performing the radiography and that the acceptance or rejection of a weld rested with KEI. Peabody had no responsibility in this regard and, therefore, an allegation that they were forced or pressured to approve bad work was meaningless. All film and original records relating to radiography examinations were turned over to KEI according to the terms of the contract. He indicated that it was his understanding the NRC required that these materials be retained at the site and available for inspection.

5. Management Discussion

On May 2, 1980, the results of the investigation were discussed with CG&E and KEI personnel identified by an asterisk (*) in the Persons Contacted section of this report.

Attachments: Exhibits A through M

List of Exhibits

- 13/1/1980
- A - Ltr dtd 3/11/80 NRC to Alleger
 - B - Bill of Lading
 - C - Packing List
 - D - QA Documentation Package
 - E - NR E-1911
 - F - NR E-1911 Rev. 1
 - G - Surveillance Report dtd 7/23/79
 - H - Surveillance Report dtd 8/8/79
 - I - NR E-1911 Rev. 2
 - J - NR E-1997
 - K - NR E-1997 (closed)
 - L - NR E-2020
 - M - NR E-1911 Rev. 2 (closed)

7



THE CINCINNATI GAS & ELECTRIC COMPANY

E. A. BORGMANN
VICE PRESIDENT

August 4, 1980
QA-1325

U. S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Attention: Mr. James G. Keppler,
Director

RE: WM. H. ZIMMER NUCLEAR POWER STATION - UNIT I
NRC INSPECTION REPORT NO. 80-09 - DOCKET NO.
50-358, CONSTRUCTION PERMIT CPPR-88, W.O. #
57300-957, JOB E-5590

Gentlemen:

This letter constitutes our formal reply to the subject inspection report. It is our opinion that nothing in the report or in this reply is proprietary in nature.

Our responses to the items of noncompliance cited in Appendix "A" of the report are as follows:

Item 1 - Release of Material with Open NR

(a) Corrective Action Taken and Results Achieved

All materials delivered to the Zimmer Site pass through a receiving inspection process to determine if the item meets procurement requirements. Nonconforming items are documented, tagged and quarantined pending disposition of the nonconforming condition. Henry J. Kaiser Company had not developed a procedure which allowed release from the warehouse in a controlled manner of material with nonconforming conditions. A random review of those nonconformance reports prepared and applicable to receiving inspection, indicates that release of the five (5) spool pieces for installation was a unique and unusual circumstance which occurred as the result of a communication breakdown and subsequent misunderstanding as to the status of the outstanding nonconformance. The review of these receiving nonconformances indicates that present procedures have been adequate and that each open nonconformance serves as a supplemental means of control of nonconforming material.

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Mr. James G. Keppler, Director
U.S. Nuclear Regulatory Commission
Region III
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Page 2

(b) Corrective Action Taken to Avoid Further Noncompliance

Henry J. Kaiser Procedure QAP-16, "Control of Nonconforming Materials", shall be revised to provide for release of material from a nonconforming or hold status only with the approval of both the Cincinnati Gas & Electric Company and Henry J. Kaiser Company Quality Assurance Managers or their designated alternates.

(c) Date When Full Compliance Will Be Achieved

The issue of a revision to QAP-16 will be completed by August 29, 1980.

Item 2 - Open NR Material Installed Without Hold Tag Placed on Items

(a) Corrective Action and Results Achieved

Henry J. Kaiser Procedure QACMI G-4 requires that nonconforming components be identified with an appropriate hold tag. When it became apparent that the five (5) spools, which were covered by an unresolved nonconformance report, no longer had hold tags attached, new tags were prepared and attached to the components. This action assured compliance with the appropriate requirements of QACMI G-4.

(b) Corrective Action to be Taken to Avoid Further Noncompliance

Training sessions were conducted on April 9, 1980 and June 16, 1980 for personnel responsible for preparing nonconformance reports, emphasizing the necessity for attachment of hold tags to nonconforming components. In addition, a review of a random sample of open nonconformance reports will be conducted to assure that hold tags are in place in accordance with procedures.

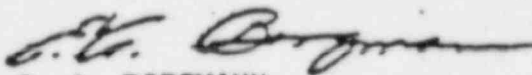
(c) Date When Full Compliance Will Be Achieved

We expect to be in full compliance by August 29, 1980.

We trust that the above will constitute an acceptable response to the subject inspection report.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

By 
E. A. BORGMANN
SENIOR VICE PRESIDENT

Appendix A

NOTICE OF VIOLATION

Cincinnati Gas and Electric
Company

Docket No. 50-358

Based on the results of the NRC Investigation conducted on April 7-9 and 30, May 1-2 and 20, 1980, it appears that certain of your activities were not conducted in full compliance with NRC requirements as noted below. This item is an infraction.

10 CFR Part 50, Appendix B Criterion XV, states in part that "Measures shall be established to control materials, parts, or components which do not conform to requirements in order to prevent their inadvertent use or installation."

- a. The Henry J. Kaiser Co. Zimmer Quality Assurance Manual in Quality Assurance Procedure (QAP) No. 16 requires in part that "All non-conforming items will be segregated, where possible, from acceptable items, clearly identified with the applicable Hold or Deficiency Tag and documented on the Nonconformance Report." It additionally requires that "Upon Verification that all work on the item is complete and acceptable, the nonconformance report (NR) is signed off in Section 13 by the Inspector."

Contrary to the above, 5 piping spools identified by NRE-1911 Rev. 2 were released from segregation even though the Inspector had signed off section 13 with a notation of specific exceptions to acceptability of the material by identifying another NR controlling the material. This release was achieved through unauthorized removal of the noted exceptions on the NR.

- b. The Henry J. Kaiser Co. Zimmer Quality Assurance Manual in Quality Assurance Procedure (QAP) No. 16 requires in part that "... material is clearly identified as nonconforming and is segregated, when possible. Due to size limitations physical segregation may be impractical. In such instances tagging, marking, or other means of identification is acceptable." Additionally QAP 15 requires that "A 'Hold' tag is placed on the item . . . It is used in conjunction with a 'Nonconformance Report'."

Contrary to the above, 3 piping spools identified in NR E-2020 as nonconforming and required to be cleared by additional tests, not only had been released from the warehouse, but in addition had been installed without any "hold" tag being placed on the material.

OFFICE					
SURNAME	8008140465				
DATE					



December 15, 1980

8

MEMORANDUM FOR: James J. Cummings, Director, OIA
 FROM: John F. Ahearn *JFA*
 SUBJECT: THOMAS W. APPELATE ALLEGATIONS

I request that OIA conduct an investigation into whether the Office of Inspection and Enforcement conducted an adequate investigation of the allegations presented to it by Thomas W. Applegate regarding activities at the William H. Zimmer Nuclear Power Station. The I&E findings are set forth in I&E Report No. 50-358/80/9 (July 2, 1980).

I also wish to advise you that I&E has commenced an investigation of the safety issues raised at pages 13 and 14 of the pleading which the Government Accountability Project of the Institute for Policies Studies recently filed with the NRC Systems Protection Board.

cc: Victor Stello, IE

ATTACHMENT 1

EXHIBIT 1

8112480249

ip

Office of the Special Counsel1717 H Street, N.W.
Washington, D.C. 20419

DEC 29 1980

Honorable John Ahearne
Chairman
Nuclear Regulatory Commission
1717 H Street, N.W.
Washington, D.C. 20419

Dear Mr. Ahearne:

The enclosed information is transmitted pursuant to the provisions of 5 U.S.C. 1206(b)(2). As you are aware, that provision of law requires the Special Counsel to transmit to the appropriate agency head information received by the Office which the discloser reasonably believes evidences a violation of law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety.

It is alleged by the original source of the information, Mr. Thomas W. Applegate, and his representative, the Government Accountability Project, that the information concerning the conduct and results of an investigation by the Nuclear Regulatory Commission at the Zimmer Nuclear Power Facility at Mbscow, Ohio in May and June 1980 and other information concerning activities and incidents at the Facility construction site disclosed to this Office constitute all of the types of information required to be transmitted under 5 U.S.C. 1206(b)(2). Specifically, it is alleged that: (1) the NRC chose to exclude from the scope of the investigation serious issues brought to its attention which the NRC had a statutory responsibility to investigate; (2) the issues accepted for investigation were not investigated thoroughly or in keeping with sound investigative procedures or techniques; and (3) the investigative conclusions were inaccurate and incomplete. It is further alleged that, because the investigation was conducted in a shallow and limited manner, it allowed the continuation of numerous wrongful situations and activities at the Zimmer facility, including, among others: (1) serious faults in key safety systems; (2) an ineffective quality assurance program, due in part to malfeasance by the utility company and its contractor; (3) inadequate fire detection and extinguishing systems; (4) poor security measures; (5) presence of illegal firearms; (6) drunkenness among employees; and (7) theft of materials; which taken together may pose a substantial danger to public health or safety.

We recognize that all of the matters disclosed to this Office may not be within the jurisdiction of the NRC. Nevertheless, we are transmitting all of the information received in order to provide the full context of the allegations which appear to be within the purview of the NRC.

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I request that your report be transmitted to this Office pursuant to 5 U.S.C. 1206(b)(7) no later than sixty days from the date of your receipt of this letter. Please cite control number 10-1-70041. We note, it is our procedure to maintain a public file of agency reports received under 5 U.S.C. 1206(b)(7). Therefore, unless you provide some reason why your report or parts thereof should not be released, we will include the report in full in the public file. For further information concerning this matter, please call me or James Sugiyama of my staff. My telephone number is 653-7107, and Mr. Sugiyama's is 653-7140.

Sincerely,

Mary Eastwood by J.P.S.
Mary Eastwood
Acting Special Counsel

Enclosure