



**TORREY PINES TECHNOLOGY**

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A Division of **GA Technologies Inc.**

Project 2474  
September 12, 1983

Mr. J. G. Keppler  
Regional Administrator  
Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

Subject: **Independent Review of Zimmer Project Management  
Report No. GA-C17173**

Reference: Letter, J. G. Kepper to A. J. Neylan, 9/1/83.

Dear Mr. Keppler:

The following is in response to your request in the referenced letter.

Attachment No. 1 is a list of references utilized by Torrey Pines Technology in reaching the conclusions concerning the case studies in Volume 2, Section 8 (Task H).

Attachment No. 2 is a copy of all the documents that support TPT's statements and conclusions concerning the welder performance qualifications and the availability of information at the July 8 and 9, 1982 meetings (Ref. Volume 2 Section 8, pages 8-21 and 8-22).

It should be noted that at the time of our review, TPT was not allowed to review NRC-OI's ongoing investigation nor were we aware of the NRC Region III correspondence attached to the referenced letter. Therefore, we have not performed any work to identify where the TPT statements differ from the Region III position. Additionally, we must emphasize that TPT's objective in conducting the case studies was to assess the role and behavior of CG&E management as a cross-check on the observations and conclusions reached separately in other tasks in the reviews. Our objective was not to investigate the behavior of organizations other than CG&E nor to investigate the technical content of related documentation, the veracity of particular statements, or individual actions at particular meetings. As noted in the final report, we relied on the statements of individuals, cross-checked by interviews with others and, where possible, by documentation, to establish the broad aspects and characteristics of Zimmer project management.

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Jorney  
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Since receipt of your questions on the July 8 and 9 meetings, we have examined our records and find that they substantially support our observations and conclusions. Specifically,

- 1) Based on the information provided to TPT, NRC site representatives were aware of the welder qualification data prior to the July 8 or 9 meetings.
- 2) Numerous statements, prepared under oath, were made available to TPT confirming that no documents other than those already made available to NRC were prepared for the July 8 or 9 meetings.
- 3) The complete package of "welder status" sheets and summary index was not presented to NRC at the July 9 meeting but was provided at the July 12 meeting (the next working day). Two separate TPT interviews with the NRC site representative and the interview with G. Fones, the former HJK QA employee indicate that the information was known by NRC, and was available at the July 9 meeting but was not presented as NRC did not require that level of detail. A more recent telephone conversation with Fones indicated that the detailed 167-page report was not specifically refused by NRC at the July 9 meeting, but confirmed there was no attempt to withhold the detailed information.
- 4) Based on TPT interviews, there is a general perception by NRC representatives that CG&E was straightforward in its dealings with NRC.

The important conclusion, from a project management viewpoint, that TPT drew from this case study in comparison to other tasks in the review is stated on pages 8-25 and 8-26. Specifically, the welder qualification study indicated a similar management attitude: that is, one in which lack of experience and cost pressures kept the CG&E staff at such a minimal level that they were unable to detect and recognize the significance of the welder record qualification deficiencies in a timely manner. In addition, records were inadequately maintained.

The CG&E organization which should have detected, recognized the significance of, and followed up on ensuring the correction of the HJK welder qualification deficiencies was the QA organization. Task C and D pointed out that CG&E had an extremely small and relatively inexperienced QA staff that were not free generally from cost and schedule pressures. As organized and staffed, the QA organization was not well equipped to detect the problems early, then follow up to assure satisfactory resolution. Instead, CG&E relied upon HJK to a great extent and

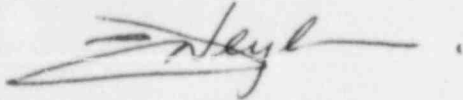
Mr. J. G. Keppler

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were somewhat unaware of the consequences of the irregularities in welder qualification. These same management characteristics and attitude were also shown in other tasks in this overall evaluation.

Sincerely,



A. J. Neylan  
Project Manager

Enclosures

Copy w/Encls: W. H. Dickhoner - CG&E

Copy w/o Encls: G. L. Wessman - TPT

ATTACHMENT NO. 1

LIST OF REFERENCES UTILIZED  
BY TPT CONCERNING CASE STUDIES

1. REFERENCES - ATTITUDE TOWARD WHISTLE-BLOWERS

- AC-6666-1808 Testimony of David Jones concerning ZNPS before Subcommittee on Energy and the Environment, Committee on the Interior and Insular Affairs, June 10, 1982 (GAP Attachment 43).
- AC-6666-3625 Personnel file of David W. Jones, CG&E QAD records, including among tothers, the following items:
- Memorandum from D.W. Jones to Ron Strozier, dated May 27, 1982, subject - certification.
  - W. Hedzik response to Mr. Jones dated June 3, 1982, Subject - Personal Concerns Dave Jones, Reference - Meeting held Friday, May 28, 1982.
  - Memorandum from Dave W. Jones to W.A. Hedzik dated June 2, 1982, Subject - Harassments & Intimidation (approximately 20 pages).
  - Reference file notes regarding salary actions of Dave Jones (2 pages) regarding error in salary decrease from \$2500/mo. to \$2475/mo.
  - IR-1 Form Employee Information and Change Record, D.W. Jones. Approval for restoration of salary from \$2475 to \$2500.
  - Hand-pointed memo regarding process of review of HJK documents by CG&E QA, D. Jones to H. Sager, 8/13/81.
- AC-6666-3798 Record of Telephone Conversation with Gregg Fones by J.E. Chafey, 6/21/83.
- AC-6666-3799 Record of Telephone Conversation with Norman Vitale by J.E. Chafey, 6/22/83.
- AC-6666-3800 Record of Telephone Conversation with John Watkins by J.E. Chafey, 6/22/83.
- AC-6666-3801 Record of Telephone Conversation with Phil Gittings by J.E. Chafey, 6/22/83.
- AC-6666-2367 Affidavit of Donald Blanch, dated 6/26/79.
- AC-6666-2368 Letter, E. Hofstadter to J. Foster, NRC, dated 9/30/78.
- AC-6666-2370 Letter, E. Hofstadter to J. Foster, NRC, dated 10/19/78.
- AC-6666-2371 Letter, E. Hofstadter to J. Foster, NRC, dated 10/20/78.
- AC-6666-2369 Letter, E. Hofstadter to J. Foster, NRC, dated 10/31/78.
- AC-6666-2373 Letter, E. Hofstadter to N. Palladino, NRC, dated 12/11/81.
- AC-6666-2372 Letter, E. Hofstadter to J. Keppler, NRC, dated 12/12/78.
- AC-6666-2374 Handwritten notes by E. Hofstadter regarding the "Reasons and Causes of Present Situation" with respect to Zimmer, undated.

AC-6666-0957 Report No. 50-358/78-21, USNRC, Office of Inspection and Enforcement, Region III and transmittal letter, R. Heishman, NRC, to E. Borgmann, CG&E dated 12/21/78.

AC-6666-2366 Affidavit E. Hofstadter, dated 8/7/81.

AC-6666-0341 NRC Inspection Report 81-13.

AC-6666-0203 CG&E Letter to NRC re. IR 81-13.

AC-6666-3869 Notice to all personnel at ZNPS from W.H. Dickhoner, dated 8/10/79.

AC-6666-3819 Interview Transcript, Tom Applegate, by S.J. Brown on 6/27/83.

AC-6666-3876 Record of Inquiry by J.E. Chafey re. Handling of Allegations of Quality or Safety Problems, 6/10/83.

AC-6666-3844 Record of Telecon Interview of Mr. "Q" and Mr. "R", 6/23/83.

AC-6666-3830 Record of Telecon Interview of Dale Stringer, 6/28/83.

AC-6666-3843 Record of Telecon Interview of Virgil Dent, 7/13/83.

AC-6666-3855 Record of Telecon Interview of Dick Spence, 7/13/83.

AC-6666-3796 Info. re. Nathan Dycus, NES, incl. interview of Jerry Nolting, NES, by F.D. Carpenter, 6/29/83.

AC-6666-3867 Letter from H. Sager, CG&E, to J.E. Chafey, TPT, Letter No. QA-2410, dated 7/20/83, w/attachments providing info. on handling by CG&E of complaints by P.M. Moore, D. Williams, M. Indino, S. Sikorsky, F. McKelvey, J. Greatorex, and L. Hendley.

AC-6666-2422 Letter B. Sylvia, CG&E, to H. Meyers, (Udall Staff) re. Testimony by D. Jones, dated 7/21/82.

AC-6666-3847 Handwritten memo, M. Indino to H. Sager, 2/19/82.

AC-6666-3848 Handwritten memo, D. Williams to H. Sager, 12/14/81.

AC-6666-3849 Memo, F.C. McKelvey to H. Sager and D. Kramer, 9/25/82.

AC-6666-3850 Handwritten memo, S.F. Sikorski, unaddressed, 2/19/82.

AC-6666-3851 Handwritten memo, D. McLaughlin to C. Ashworth, 3/10/82.

AC-6666-3852 Letter, J. Greatorex to B.R. Sylvia, 4/30/82, and CG&E letter, B.R. Sylvia to J. Greatorex, 5/21/82.

AC-6666-3853 Handwritten memo, L.Q. Hendley, unaddressed, 12/2/82.

AC-6666-3854 Memo, P.M. Moore to H. Sager, 12/1/81.

AC-6666-1736 BJK Analysis Report, May 24, 1982.

AC-6666-1783 Affidavit, Victor Griffin.

AC-6666-3966 Record of Telecon Interview - Chuck Weaver.

AC-6666-3967 Telecon Record - C. Bauman, Butler Services.

AC-6666-3968 Telecon Record - F. Ciampi, Butler Services.



2. REFERENCES - STRUCTURAL STEEL IN THE CONTROL ROOM

AC-6666-2155 HJK Purchase Order No. 7070-23115 for various lengths of carbon steel pipe.

Attachments

- o Material Received Reports
- o Procurement Specifications
- o Certified Test Reports
- o Receiving Inspection Plans
- o Supplier Invoices

AC-6666-3235 HJK Nonconformance Report E-4337

Attachments

- o Kaiser Warehouse Issue Cards
- o E-4337 Rev. 1
- o E-4337 Rev. 2

AC-6666-3236 10CFR50.55(e) Report No. M40

Subject: Heat treatments not reported on CMTR's for 2400 feet of pipe as required by NA 3766.4 of ASME Section III Code.

AC-6666-1822 S&L Design Specification H-2256 (refers to S&L Spec H2938 for Section III Piping system Design)

AC-6666-3237 Zimmer FSAR Table 3.2-2a, ASME Section III Code Applicability for Piping Systems

AC-6666-3238 HJK Corrective Action Report CAR #083, to correct erroneous reference to paragraph NA 3766.4 of the ASME Code on related HJK Purchase Orders



AC-6666-3239 CG&E Interim Reports to NRC Region III on  
10CFR50.55(e) Report M40.

E.A. Borgmann to NRC, Report Dated 5/19/82

▪	▪	▪	▪	▪	▪	7/8/82
▪	▪	▪	▪	▪	▪	10/25/82
▪	▪	▪	▪	▪	▪	2/8/83
▪	▪	▪	▪	▪	▪	4/12/83

AC-6666-3240 CG&E internal memorandum, Report M40 Status, R.P.  
Ehas to H. R. Sager 10/26/82

AC-6666-3241 E.A. Borgmann to NRC Region III 4/14/83  
Construction Work Approval Requests (CWAR's)

Attachments: CWAR Number 86

▪	▪	87
▪	▪	88
▪	▪	89

AC-6666-3242 Interview with T. R. Bietsch, HJK 6/1/83  
Piping Construction Manager

AC-6666-3486 Interview with Mark Albertin, HJK 6/2/83  
Project Manager

AC-6666-3245 Interview with H. R. Sager, CG&E 6/3/83  
QA Manager

AC-6666-3315 Interview with S. Hoover, HJK 6/10/83  
Construction Supervisor

AC-6666-3246 Interview with Gene McVae, CG&E 6/6/83  
QCP Task III Leader

AC-6666-3248 Interview with F. K. Pfeifer, CG&E 6/10/83  
Quality Control Inspector

AC-6666-3323 HJK Pipe Traceability Program Report 2/17/83

3.

REFERENCES - 2400 FT OF SMALL BORE PIPE

- AC-6666-3489 CAR 82-102 (CG&E to JHK) 12/13/82  
Attachments: CER 82-286  
PO #7070-16321 and Issue Slips  
PO #7070-11550 and Issue Slips  
PO #7070-11626 and Issue Slips
- AC-6666-3490 ASME Section III Part A 1971  
SA-6 Paragraph 10.2
- AC-6666-2126 QACMI #G-3, Rev 2 5/22/74  
Material Receiving and Warehousing  
Operations.
- AC-6666-3493 CAR 82-102 (JHK to CG&E) 1/28/83  
Attachments: CER 82-286  
PO #7070-16321 and Issue Slips  
PO #7070-11550 and Issue Slips  
PO #7070-11626 and Issue Slips

Letter (JHK Ref. KC-9085-Q), W. J. Friedrich  
(Kaiser Quality Assurance Manager) to W. W.  
Schwiers (CG&E Principal Quality Assurance  
and Standards Engineer). Subject - Approved  
Supplier List 2/2/77

- AC-6666-3648 Two letters are filed under this reference number as  
follows:

(a) Kaiser letter QA-782 dated 3/15/77 W. J.  
Friedrich (JHK Site Quality Assurance Manager) to W.  
W. Schwiers (Principal Engineer CG&E), Subject: re-  
quest for CG&E approval for Kaiser to perform a QA  
survey on a supplier.

(b) CG&E letter KEQ-116 dated 3/18/77 W. W. Schwiers to W. J. Friedrich, Subject: disapproval of Kaiser's request to perform a QA survey on supplier.

AC-6666-3491 Interview with W. Ferree, HJK Materials Management Department.

Attachments: PO's #7070-11481, 16321, 11550 and 11626, all PO's for structural steel materials. Field Work Orders (FWO's) and Warehouse Issue Slips.

Issue Slip #25875 was for material purchased by PO #11626 (a more legible copy of Slip #25875 is attached to Reference AC-6666-3489).

AC-6666-3480 Interview with D. Stringer, CG&E task leader for QCP Task I.

AC-6666-3484 Interview with M. Kapp, CG&E Sub-task leader for QCP Task IX Subtask 3.

Attachments:

(a) S&L Drawing E-189, Sheet 10 Detail 4, showing I-beam hanger application.

(b) S&L Drawing STD-EB-117.1, showing structural hanger supports welded to in-place embedded plates.

(c) HJK Electrical Construction Procedure ECP-2, Conduit Supports and Additional Support Beams Installation Procedure (for full procedure see Reference AC-6666-2154). Exhibit S shows W81 Structural Beam used as a spanner between two in-place beams.

AC-6666-3494 Letter, Kaiser Ref KEQ-1462 dated 2/23/83, H. R. Sager (CG&E QA Manager) to W. A. Hedzik (HJK QA Manager) Subject: request for more information concerning disposition of CAR 82-102.

AC-6666-3495 CAR 82-102 Rev. 1

Attachments: (a) CG&L letter Ref KEQ-1664, H. R. Sager (CG&E) to W. A. Hedzik (HJK) dated 4/28/83, accepting Kaiser disposition.

(b) Corrective Action Statement by HJK.

(c) Examples of previous HJK Nonconformance Reports on procurements of non-essential structural material with P.O. requirements for mill test reports and heat number markings.

AC-6666-3486 Interview with Mark Albertin, HJK Project Manager.

Attachments: Senior Management Committee Action Item Agenda 6/2/83.

AC-6666-3492 Kaiser Report, Investigation of Supplier Quality Assurance at William H. Zimmer Nuclear Generating Station, by Kaiser Corporate Supplier Quality Engineer Sherrill J. Nolder, July 1981.

AC-6666-2133 Kaiser Field Construction Procedure FCP #1-12 dated 12/20/74, Material Control for Structural Plate and Shapes.

AC-6666-3245 Interview with H.R. Sager, CG&E QA Manager.

Attachments: HJK Approved Vendor's List (AVL) Audit  
and Nonconformance Report Status 6/2/83

AC-6666-3485 Interview with Eugene McVae, leader of CG&E QCP Task  
III.

AC-6666-3481 Interview with B.D. Varchol, Kaiser QC.

AC-6666-3320 Site Communique Number 26 Rev. 1, Traceability for  
Structural Steel Material.

4. REFERENCES - WELDING PROCEDUREQUALIFICATIONS AND WELDER PERFORMANCE QUALIFICATIONS

- AC-6666-0594 Testimony by D. Milan, Ch. Insp. State of Ohio, to City of Cincinnati, Environ. Advisory Council, 09/16/82
- 0957 Report No. 50-358/78-21; USNRC, Office of Inspection and Enforcement, Region III, and transmitted letter, R. Heishman, NRC, to E. Borgmann, CG&E, dated 12/21/78
- 2223 Handwritten letter, B. Scangs, Westinghouse Electric, to H. Sager, CG&E, dated 02/02/82
- 2224 Handwritten letter, J. Caplan to B. Scangs, Westinghouse electric, dated 01/27/82
- \* -2769 Memo, B. Sylvia to Distribution, dated 11/08/82
- \* -2770 Letter, NRC Region III, J. Keppler to E. Borgman, CG&E, dated 10/27/82
- \* -2771 Draft letter, B. Sylvia, CG&E, to J. Keppler, NRC Region III, dated 11/15/82
- \* -2772 Draft letter, B. Sylvia, CG&E, to J. Keppler, NRC Region III, dated 11/11/82
- \* -2773 Draft list of attachments for B. Sylvia letter to NRC (listed above)
- 2774 Memo, B. Fears to K. Keller, dated 05/11/83
- \* -2775 Welder Qualification Program, Zimmer Project, w/attachments 1, 2, and 4, undated
- \* -2776 Witnessed Statement re 07/08-07/09 meetings, H. Sager
- \* -2777 Memo, H. Sager to B. Sylvia, dated 11/08/82, w/attachments, including attendance list for Welder Qualification Discussion (probably 07/09/82 meeting)

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\*References which relate to July 8 and July 9 meetings.

AC-6666-2778 HJK CAR No. 091, dated 04/08/82  
-2779 HJK CAR No. 078, dated 03/23/82  
-2780 HJK CAR No. 079, dated 03/23/82  
-2781 HJK CAR No. 084, dated 04/03/82  
-2782 HJK CAR No. 085, dated 04/02/82  
-2783 HJK CAR No. 097, dated 04/30/82  
-2784 HJK CAR No. 098, dated 04/27/82  
-2785 HJK CAR No. 084, dated 04/03/82  
-2786 HJK Procedure No. SPPM 3.2 R7, Welder Performance  
Qualification Testing, General, dated 08/28/81  
-2787 CG&E Procedure No. SC.ACP.23, Rev. 00, Startup  
Administrative Control Procedure, Startup Punch-  
list, dated 04/13/83  
-2788 HJK CAR No. 076, dated 03/23/82  
-2789 HJK CAR No. 100, dated 04/27/82  
-2790 HJK CAR No. 102, dated 05/07/82  
-2791 HJK CAR No. 114, dated 05/20/82  
-2792 HJK Form Q-1G for J. Crawley, for WPS 3.1.6B,  
dated 01/02/80  
-2793 HJK Speedimemo, C. Person to Bill re CAR No. 114,  
dated 06/03/82  
-2794 HJK CAR No. 131, dated 06/11/82  
-2795 HJK CAR No. 132, dated 06/10/82  
-2796 HJK CAR No. 136, dated 06/17/82

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\*References which relate to July 8 and 9 meetings.



AC-6666-2797 HJK draft CAR re welding torch purge rate, undated

-2798 Telecopy coversheet re Welder Qualification folder, dated 09/02/82

-2799 HJK Memo, M. Butterworth to M. Goldecke, re CAR No. 117, dated 06/02/82

-2800 HJK CAR No. 117 re signatures on Form Q-1G, dated 05/19/82

-2801 HJK CAR No. 123, dated 06/03/82

-2802 Nonconformance Report E-4144, dated 02/01/82

-2803 HJK CAR No. 077, dated 03/23/82

-2804 HJK draft CAR re amperage range on Welder Qualification forms, undated

-2805 HJK draft CAR re alteration of Welding Procedure numbers on Welder Qualification form Q-1G, dated 06/25/82

-2806 HJK CAR No. 145, dated 05/28/82

-2807 HJK CAR No. 147, dated 05/28/82

-2808 HJK NR No. E-4857, Rev. 1, dated 04/10/82

-2809 KEI Welder Performance Qualification Record, C. Ascue, WPS 3.1.21, dated 03/16/76

-2810 KEI Welder Performance Qualification form Q-1G for State of Ohio, C. Ascue, WPS 3.1.21, dated 03/16/76

-2811 HJK NR No. E-4857, dated 04/10/82

-2812 S&L letter, J. Rodriguez to B. Sylvia, CG&E, dated 09/02/82

-2813 HJK Report, Generic Deficiencies on HJK Welder Qualification Records, G. Fones and M. Butterworth, dated 08/30/82

\*References which relate to July 8 and July 9 meetings.

- AC-6666-2814 S&L letter, J. Rodriguez to B. Sylvia, CG&E, dated 08/0/82
- \* -2815 Witnessed Statement re 07/08-07/09 meetings, M. Rhodes
  - \* -2816 Memo. M. Rhodes to B. Sylvia, dated 11/12/82
  - \* -2817 Witnessed Statement re 07/08-07/09 meetings, J. Shaffer
  - \* -2818 Memo. J. Shaffer to B. Sylvia, dated 11/12/82
  - \* -2819 Witnessed Statement re 07/08-07/09 meetings, G. Padula
  - \* -2820 Memo, G. Padula to B. Sylvia, dated 11/12/82
  - \* -2821 Witnessed Statement re 07/08-07/09 meetings, J. Louden
  - \* -2822 S&L letter, J. Louden to E. Borgmann, dated 11/08/82
  - \* -2823 Witnessed Statement re 07/08-07/09 meetings, N. Vitale
  - \* -2824 Memo, N. Vitale to B. Sylvia, dated 11/09/82
  - \* -2825 Witnessed Statement re 07/08-07/09 meetings, K. Cherian
  - \* -2826 HJK letter, K. Cherian to B. Sylvia, CG&E, dated 11/09/82
  - \* -2827 Witnessed Statement re 07/08-07/09 meetings, M. Boedecke
  - \* -2828 HJK letter, M. Goedecke to B. Sylvia, CG&E, dated 11/10/82
  - \* -2829 Witnessed Statement re 07/08-07/09 meetings, W. Hedzik
  - \* -2830 Memo, W. Hedzik to B. Sylvia, dated 11/08/82

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\*References which relate to July 8 and July 9 meetings.

- AC-6666-2831 Witnessed Statement re 07/08-07/09 meetings, M. Albertin
- -2832 Memo. M. Albertin to B. Sylvia, dated 11/09/82
- -2833 Memo, W. Puckett to B. Sylvia, dated 11/08/82
- -2834 Memo. B. Culver to B. Sylvia, dated 11/08/82
- -2835 Witnessed Statement re 07/08-07/09 meetings, B. Culver
- -2836 Witnessed Statement re 07/08-07/09 meetings, M. Butterworth
- -2837 HJK letter, M. Butterworth to B. Sylvia, with attachments, re Active Welders List, dated 11/0882
- -2838 Witnessed Statement re 07/08-07/09 meetings, G. Fones
- -2839 HJK letter, G. Fones to B. Sylvia, with 167 page document re Welder Qualification Records Status, dated 11/09/82
- 3626 CG&E Field Audit Report No. 241, 05/15-18/79, Audit of HJK
- 3627 CG&E Field Audit Report No. 319, 07/24-27/77, Audit of HJK
- 3628 CG&E Field Audit Report No. 226, 03/13/79, Audit of Waldinger, Young, and Bertke
- -3633 Discussion between F. Christianson, NRC, and B. Coleman, TPT, 05/26/83
- 3708 Documents relating to Report 10CFR50.55(e) M-29 (covering unapproved changes in Welding Procedures) consisting of HJK Potentially Reportable Condition Statements 292/CAR 400, 293/CAR 405, 294/CAR 404, 295/CAR 409, 296/CAR 408, 297/CAR 411, and 298/CAR 412
- 3709 Documents relating to Report 10CFR50.55(e) M-29 (covering unapproved Changes in Welding Procedures)consisting of HJK Potentially Reportable Condition Statements 307/CAR 420, 309/CAR 422, 310/CAR 423, 311/CAR 421

- 3710 Documents relating to Report 10CFR50.55(e) M-29 (covering unapproved changes in Welding Procedures) consisting of HJK Potentially Reportable Condition Statements 312/CAR 425, 313/CAR 427
- 3711 Memo, H. Sager to Distribution regarding updated information on 10CFR50.55(e) Reports E-29, M-45, M-49, M-24, E-39, and M-67, dated 02/15/83
- 3712 Letter, E. Borgmann, CG&E, to J. Keppler, NRC, Interim Report on 10CFR50.55(e) M-45, Indeterminate Welder Qualifications, dated 02/23/83
- 3713 CG&E Letter Review Sheet for 10CFR50.55(e) M-45 Interim Report, 02/23/83
- 3714 Letter, E. Borgmann, CG&E, to J. Keppler, NRC, Interim Report on 10CFR50.55(e) M-45, Indeterminate Welder Qualifications, dated 12/30/82
- -3715 Letter, B. Sylvia, CG&E, to J. Keppler, NRC Region III, dated 11/15/82
- -3716 Letter, E. Borgmann, CG&E, to J. Keppler, NRC, Interim Report on 10CFR50.55(e) M-45, Indeterminate Welder Qualifications, dated 05/27/83
- -3717 CG&E Potentially Reportable Condition Statements for 10CFR50.55(e) M-44, Potential overpressurization of piping line and valves, dated 04/28/82, and 10CFR50.55(e) M-45, Welder Qualification Record Deficiencies, dated 04/29/82
- 3718 Memo, B. Thompson to H. Sager, Status of 10CFR 50.55(e) Items, dated 12/23/82, with attachments
- 3719 Letter, J. Williams, Jr., CG&E, to J. Keppler, NRC, Interim Report on 10CFR50.55(e) M-29/M-73, Lack of Weld Procedure Qualification and Possibly Altered Welding Procedures, dated 04/29/83; also, Interim Report on M-73, dated 03/29/83; letter review sheets for above items; related memos covering status of M-29 and M-73; memo to Nuclear Regulatory Commissioners from D. Eisenhower, Division of Licensing, ONRR, "Information Items Regarding Alteration of Welding Procedures at the Zimmer Plant" (Board Notification No. 83-15), dated 02/15/83; Letter, E. Borgmann, CG&E, to J. Keppler, NRC, Interim Report on 10CFR50.55(e) M-73, Possibly Altered Welding Procedures, dated 01/14/83; CG&E Memo, H. Sager to Distribution, 10CFR50.55(e) M-73, dtd. 12/17/82, with attachments; HJK Memo, M. Butterworth to J. Coyle

- "non-approved Welding Procedures," dtd. 12/20/82, with backup information.
- 3720 Memo, H. Sager to G. Ficke, 10CFR50.55(e) M-45, Indeterminate Welder Qualifications, dtd. 6/20/83, with attachment.
- 3721 Minutes of Sacrificial Shield Meeting of 1/4/83 with respect to effects of deficiencies reported in 10CFR50.55(e) M-34, M-45, M-49, and M-73, dtd. 1/17/83, with attachments.
- 3722 Letter, J. Williams, Jr., CG&E, to J. Keppler, NRC, Activities in response to 10CFR50.55(e) M-29, dtd 6/1/83.
- 3723 Documents relating to Report 10CFR50.55(e) M-29, consisting of HJK Potentially Reportable Condition Statement 303/CAR 406.
- 3724 Letter review sheet and Letter, J. Williams, Jr., CG&E, to J. Keppler, NRC, Interim Report on 10CFR50.565(e) M-29/M-73, dtd 4/29/83.
- 3727 Documents relating to Report 10CFR50.55(e) M-29 consisting of HJK Potentially Reportable Condition Statements 299/CAR413, and 300/CAR414, with attachments.
- 3728 Documents relating to Report 10CFR50.55(e) M-29 consisting of HJK Potentially Reportable Condition Statements 288/CAR 395, 289/CAR 398, and 290/CAR 402.
- 3729 Documents relating to Report 10CFR50.55(e) M-29 Consisting of HJK Potentially Reportable Condition Statements 286/CAR 399.
- 3730 Documents relating to Report 10CFR50.55(e) M-29 Consisting of HJK Potentially Reportable Condition Reports 275/CAR 390, 276/CAR 389. CG&E Letters, E. Borgmann to J. Kepppppler, NR:C, relating to progress in correcting HJK Welding Procedures problems reported in M-29, and reporting establishment of Welding Review Group, dtd 1/7/83; Interim Report for M-29, dtd 11/2/82; CG&E Management Corrective Action Request No. 82-308, with transmittal ltr, H.Sager, CG&E, to M. Albertin, HJK, dtd 10/4/82; CG&E ltr, E. Borgmann to J. Keppler, NRC, (submitted as final report on Condition of Unqualified Welding Procedures for hanger lug attachment welds) Report 10CFR50.55(e) M-29, dtd 3/30/82. HJK ltr, W. Hedzik to H.Sager, CG&E, same subject, dtd 3/3/82;

CG&E ltr, H.Sager to D.Howard, HJK, same subject, dtd 2/19/82; CG&E ltr, E. Borgmann to J. Keppler, NRC Interim Report 10CFR50.55(e) M-29, dtd 1/18/82; HJK memo, M. Goedecke to M. Albertin, with attached list of hanger attachments lugs welded with unqualified procedures, dtd 12/17/81; CG&E ltr, E. Borgmann to J. Keppler, NRC, Interim Report 10CFR50.55(e) M-29, dtd 12/19/81; CG&E transmittal memo, H. Sager to Distribution, dtd 11/20/81, and CG&E Notification of Potentially Reportable Item, 10CFR50.55(e) M-29, to NRC 11/16/81, with attached HJK CAR 023 and HJK NRS E-3782, E-3666 R-1, E-3926 R.1; HJK memo, M. Albertin to R. Cranston, Stop Order, Installation of Hanger Lugs, dtd 10/29/81; HJK Memo, M. Albertin to R. Cranston, Limited Restart of Hanger Lug Installation, dtd 11/6/81; HJK ltr, W. Hedzik to H. Sager, CG&E, Status of Qualification of 91 HJK Welding Procedures, dtd 10/21/82.

- 3742 Quality Confirmation Program, Status Report, May 31, 1983
- 3743 Report of Welder Qualification Records (Six cases or types of deficiencies) by M. Nastari, CG&E QCP, dated 01/05/83
- \* -3798 Record of Telephone Conversation with Gregg Fones by J. E. Chafey, 06/21/83
- 3855 Record of Telecon Interview - Dick Spence, 07/13/83
- \* -4011 Record of Interview of F. Christianson, NRC, by J. Chafey, TPT, 06/07/83
- \* -4012 Additional Information - Telecon Interview of Gregg Fones, J. E. Chafey, 06/21/83
- 4034 National Board of Boiler and Pressure Vessel Inspectors, Interim Report No. 10, 05/13/83
- 4035 National Board of Boiler and Pressure Vessel Inspectors, Interim Report No. 1, 05/12/82
- 4037 National Board of Boiler and Pressure Vessel Inspectors, Interim Report No. 2, Supplement 1, 08/06/82
- 4038 CG&E Field Audit Report No. 222, 02/20/79, Audit of Reactor Controls, Inc.
- 4040 CG&E Field Audit Report No. 240, 05/15/79, Audit of HJK

- 4041 Supplement 1 to CG&E Field Audit Report No. 240, 05/18/79, Audit of HJK
- 4042 CG&E Field Audit Report No. 288, 12/18-19/79, Audit of HJK
- 4043 Record of Interview - P. Wilson, 06/28/83
- 4044 Record of Interview - M. Nastari, 06/27/83
- 4054 Record of Telecon Interview, G. Fones, by J. Chafey, 09/01/83
- 4055 Record of Interview, L. Burton, ANI, by J. Chafey, 06/07/83
- 4056 Record of Interview, C. Allison, R. Holt, and M. Sullivan, National Board Audit Team at ZNPS, by J. Chafey, 06/07/83