

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION III

799 ROOSEVELT ROAD GLEN ELLYN, ILLINOIS 60137

March 5, 1982

IS File 8212

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MEMORANDUM FOR: Region III Files, Midland

FROM:

James E. Foster, Investigator

SUBJECT:

INFORMATION DEVELOPED, ALLEGATIONS RE WELDING AT MIDLAND

(REFERENCE FOSTER MEMOS DATED 3/4/82, 3/5/82)

I was contacted by Ron Cook and Kavin Ward three times on March 3, 1982, to discuss their findings regarding allegations provided by E. Earl Kent, and determine further actions.

I was initially contacted at approximately 9:35 a.m. Cook and Ward had found that Kent had not been qualified to inspect welds at Midland, as he could not past the test for weld inspectors and was "erratic."

The licensee had advised that Bechtel had recently informed them an inspector named Morris had performed some questionable socket weld inspections.

Apparently, in December or January, it had been noticed that Morris had begun to make mistakes and transpositions on the welding documentation he was generating. It was then decided to inspect some of the welds he had inspected to insure that hardware errors had also not been made. When this inspection was done, it was found that some undersized socket welds had been accepted by Morris, and his inspector's qualification was revoked. The Midland Plant Quality Assurance Department was aware of the situation, and was preparing a program to reinspect the welds Morris had previously accepted to verify their acceptability. (This will be carried by Ward as an open item.)

Morris has been retrained and requalified.

I was recontacted at approximately 12:40 p.m. Cook and Ward had inspected the three welds described by Kent, and a sample of 26 additional socket welds. The three welds described by Kent were fully acceptable, and of good appearance. Ward indicated that the welds almost appeared machine produced, with no starts or stops evident. The additional sample of welds were also fully acceptable.

Discussion indicated that Kent had failed the Level I visual inspection qualification test. He had subsequently received additional training and orientation, but (according to site personnel) had spent much of his time indicating things he looked at "did not look right." He was given a second chance to pass the Level I visual qualification exam, and again failed the test. Also according to information from site personnel, Kent became loud and accusatory when confronted with his test failure, claiming that thousands of unacceptable welds had been accepted, and indicating he had vast expertise in the welding field.

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Region III Files, Midland

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The third contact came at approximately 3:30 p.m. Vanderbosch had identified the 36 inch diameter steam line weld which Kent had questioned. Ward indicated the weld has an inservice inspection weld prep (ground weld), has a slight mismatch which is fully acceptable for the line size, and has successfully passed an ultrasonic examination performed to assure minimum wall size. The weld was judged fully acceptable.

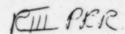
Discussion with licensee personnel indicated that a review by Hartford Steam Boiler and Insurance Company of all containment liner plate weld radiography (welds performed by Southern Boiler Works) had indicated approximately 20 radiographs which appeared to have technique or quality defects. The total sample of containment liner plate welds numbers approximately 900. This issue is documented on a Nonconformance Report dated February 19, 1982, and will be processed under the licensee's system.

Ron Cook noted that it was true that many Midland pipe hangers are welded only on the web, not on the flange, but he considers this acceptable per the forces placed on the hangers. No further review was indicated at present.

I briefly discussed Kent's comments on Bechtel welding specifications with Cook, and he indicated that the concerns did not have any technical significance or validity.

James E. Foster Investigator

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UNITED STATES NUCLEAR REGULATORY COMMISSION REGION III

799 ROOSEVELT ROAD GLEN ELLYN, ILLINOIS 60137

MAR 2 4 1982

Docket No. 50-329(DETP)
Docket No. 50-330(DETP)

Consumers Power Company ATTN: Mr. James W. Cook Vice President Midland Project 1945 West Parnall Road Jackson, MI 49201 82-04

Gentlemen:

This refers to the routine safety inspection conducted by Mr. K. D. Ward of this office on March 2-4, 1982, of activities at the Midland Plant, Units 1 and 2, authorized by NRC Construction Permits No. CPPR-81 and No. CPPR-82 and to the discussion of our findings with Mr. W. Bird 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 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you (or your contractors) believe to be exempt from disclosure under 10 CFR 9.5(a)(4), it is necessary that you (a) notify this office by telephone within ten (10) days from the date of this letter of your intention to file a request for withholding; and (b) submit within twenty-five (25) days from the date of this letter a written application to this office to withhold such information. If your receipt of this letter has been delayed such that less than seven (7) days are available for your review,

please notify this office promptly so that a new due date may be established. Consistent with Section 2.790(b)(1), any such application must be accompanied by an affidavit executed by the owner of the information which identifies the document or part sought to be withheld, and which contains a full statement of the reasons which are the bases for the claim that the information should be withheld from public disclosure. This section further requires the statement to address with specificity the considerations listed in 10 CFR 2.790(b)(4). The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit. If we do not hear from you in this regard within the specified periods noted above, a copy of this letter and the enclosed inspection report will be placed in the Public Document Room.

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

Sincerely,

Division of Engineering and Technical Programs

Enclosure: Inspection Report No. 50-329/82-04(DETP) and No. 50-330/82-04(DETP)

cc w/encl:
DMB/Document Control Desk (RIDS)
Resident Inspector, RIII
The Honorable Charles Bechhoefer, ASLB
The Honorable Jerry Harbour, ASLB
The Honorable Frederick P. Cowan, ASLB
The Honorable Ralph S. Decker, ASLB
Michael Miller
Ronald Callen, Michigan
Public Service Commission
Myron M. Cherry
Barbara Stamiris
Mary Sinclair
Wendell Marshall
Steve J. Gadler

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-329/82-04(DETP); 50-330/82-04(DETP)

Docket No. 50-329; 50-330

License No. CPPR-81; CPPR-82

Licensee: Consumers Power Company 1945 W. Parnell Road Jackson, MI 49201

Facility Name: Midland Plant, Units 1 and 2

Inspection At: Midland Site, Midland, MI

Inspection Conducted: March 2-4, 1982

Inspector: K. D. Ward

Approved By: D. H. Danielson, Chief

Materials & Processes Section

3/10/82

Inspection Summary

Inspection on March 2-4, 1982 (Report No. 50-329/82-04(DETP); 50-330/82-04(DETP)) Areas Inspected: Reports and radiographs of shop welds; previous inspection findings; nondestructive examination (NDE) personnel certifications of CPCo individuals; allegation. The inspection involved a total of 30 inspection-hours onsite by one NRC inspector.

Results: No items of noncompliance or deviations were identified.

DETAILS

Persons Contacted

Consumers Power Company (CPCo)

*B. Marguglio, Director QA

*W. Bird, Manager QA

*R. Whitaker, Section Head - Fluids and Mechanical QA

*R. Davis, NDE/Welding Group Supervisor QA

M. Curland, QA Superintendent

Bechtel Power Company (BPCo)

*E. Smith, QC Engineer

*M. Dietrich, Project QA Engineer

D. Fredianelli, LWQCE

W. Creel, LPMQCE

A. Van Den Bosoh, CQCE

A. McClure, PQAE

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

*Denotes those attending the exit interview.

Licensee Action on Previous Inspection Findings

(Closed) Deviation (329/80-01-02; 330/80-01-03): "No positive way of tracking design changes and assuring that completed work is modified in accordance with design changes and no procedure for handling design changes made after completion of work." The inspector reviewed the final response to RIII from CPCo dated May 15, 1980 and the following procedures which state the required information.

- Bechtel, Design Change Packages Interim Drawing Changes Notices, EDP14.47.1
- Bechtel, Functional Turnover of Systems, Subsystems and Items, AAPD/PSPG-11.1

(Open) Unresolved Item (329/80-17-02; 330/80-19-02): "Radiographic linear indications of welds in two borated water storage tanks." In the Summer of 1982, the tanks may be drained and made available for radiography.

(Open) Unresolved Item (329/81-21-01): Possible altered radiographs. Waiting results of RIV inspection of Grinnell. Four welds of altered radiographs were found out of 46,505 shop radiographic views reviewed on site.

Functional or Program Areas Inspected

1. Allegations

a. Region III received allegations indirectly from an individual who was previously employed at the Midland site by Bechtel Power Corporation for the purpose of training to be a Level I weld inspector in accordance with Bechtel Quality Control Instruction, Level I Fabrication, Welding, Heat Treating and Nondestructive Examinations of ASME Section III - Piping, PW-100. The individual failed the Level I test two times and was terminated.

The allegations were as follows:

- . Socket welds not being completely welded.
- . A steam line weld had concavity.
- . Problems in containment liner plate weld radiography.

BPCo had previously identified questionable areas in the inspection efforts of one QC welding inspector assigned to inspect socket welds. CPCo was notified of the problem March 2, 1982. BPCo is going to review 100% of the one QC welding inspector's efforts and random sample other inspector efforts in inspecting socket welds. CPCo may monitor the BPCo program. This is considered an unresolved item (329/82-04-01; 330/82-04-01) and the inspector will review this in depth at the next inspection.

The inspector visually examined the following socket welds in accordance with ASME Section III, 1971 Edition, Summer 1973 Addenda.

Line #	Field Weld #	Diameter
FSK-M-1HBC-58-2	FW50	2"
"	51	2"
"	56	2"
	61	1"
	62	1"
"	63	i"
"	64	2"
	65	2"
"	88	2"
"	89	2"
"	90	2"
"	91	2"
FSK-M-1MBC-57-5	10	2"
"	11	2"
"	12	2"
"	13	2"

Line #		Field Weld #	Diameter
FSK-M-2HBC-57-1		118	2"
		122	2"
		123	2"
"		124	2"
"		125	2"
			2"
"		126	
	* .	127	2"
FSK-M-2HBC-57-1		128	2"
"		129	2"
"		130	2"
		131	2"
		132	2"
"			
		133	2"

The inspector visually examined steam line 2ELB-11 field weld 1, 36" diameter, nominal wall thickness 2.375". There is a slight offset which met ASME Section III, 1971 Edition, Summer 1973 Addenda. The weld has been blended for inservice inspection and appeared to be acceptable.

CPCo recently contracted Hartford Steam and Boiler/NDT Engineering, a company with qualified/certified radiographic film interpreters, to interpret the shop weld radiographs of Units 1 and 2 containment liner plates 100%. This consisted of approximately 900 views. The results of the review found that approximately 20 welds had weld quality or radiographic technique problems. The results are documented in nonconformance report #M-01-9-2-025 issued February 19, 1982.

b. CPCo received four allegations concerning B&W NDE work from an individual previously employed at the Midland Site (File 16.0, Serial 98FWA80, dated April 11, 1980). Three of the allegations were closed (Reference NRC Report No. 50-329/80-27; 50-330/80-28 and No. 50-329/81-06; 50-330/81-06). The fourth allegation has not been resolved to date. CPCo management in Jackson, Michigan is reviewing the allegation and has hired Teledyne Engineering Services to analyze the as-welded conditions for acceptability.

No items of noncompliance or deviations were identified.

 Radiographic Review of Shop Radiographs (See NRC Report No. 329/81-21; 330/81-21

The inspector reviewed several nonconformance reports on the 46,505 shop radiographs reviewed in 1981. Approximately 50 items that were radiographed were found to be unacceptable in weld quality or radiographic techniques. The items are to be resolved in the near future.

No items of noncompliance or deviations were identified.

3. NDE Personnel Certifications

The inspector reviewed the following CPCo NDE personnel certifications in accordance with SNT-TC-1A, 1975 Edition:

Name		RT	PT	MT
R.	Davis	Ι·Ι	II	II
T.	Charette	II	II	

No items of noncompliance or deviations were identified.

4. Review of Shop Radiographs

The inspector reviewed radiographs and reports of the following shop components.

a. Radiography performed by ARMCo for Guyon Alloy Company in accordance with ASME Section III, 1977 Edition, Winter 1978 Addenda.

System	Weld	Diameter	Thickness	Date RT
SNO-8842	1P	12"	1.371"	8/8/80
SNO-8843	1P	12"	1.371"	8/8/80

b. Radiography performed by Peabody Testing, X-Ray Engineering Company for Bechtel Corporation in accordance with ASME Section III, 1974 Edition, Summer 1974 Addenda.

Component	Diameter	Thickness	Date RT
5346-14-1-8 Gate Valve	4"	1/8" - 1 1/2"	10/13/76

c. Radiography performed by Taylor-Bonney Division for McJunkin Corporation in accordance with ASME Section III, 1977 Edition, Winter 1978 Addenda.

Component	Weld	Diameter	Thickness	Date RT
90 E11 802352	14	18"	0.395	12/17/79

d. Radiography performed by ITT Grinnell Industrual Piping Inc. for CPCo in accordance with ASME Section III, 1971 Edition, Summer 1973 Addenda.

System	Weld	Diameter	Thickness	Date Rt
2CCB-6-S-604-9-L	E	4"	0.593"	1/25/77
2HCB-2-5-613-5-11	CR3	18"	0.437"	8/9/76

2HCC-84-S-604-18-1	В	2 1/2"	0.192"	9/26/77
2ELB-11-S-632-1-1	BUZ	36"	1.379"	10/30/78
2HCB-16-S-604-6-2	C	6"	0.156"	6/22/77
2FCB-18-S-604-5-9	A	6"	0.312"	4/25/77

No items of noncompliance or deviations were identified.

Unresolved Matters

Unresolved matters are items about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. Unresolved items disclosed during this inspection are discussed under the paragraph 1.a.

Exit Interview

The inspector met with site representatives (denoted in Persons Contacted paragraph) at the conclusion of the inspection. The inspector summarized the scope and findings of the inspection noted in this report. The inspector has been going on inspections to Midland since September 1978 and this was the most hostile exit interview ever encountered. The acting NDE and Welding Supervisor, Section Head, Fluids and Mechanical QA and the new Site QA Superintendent were very concerned with the socket weld problem noted in paragraph 1.a. The Site QA Superintendent informed the inspector prior to the exit that CPCo would establish an overview program to check into the welding and inspection of socket welds and qualification of QC personnel. However, at the exit this program was completely unacceptable to the QA Manager and Director. This matter is an unresolved item and this area will be reviewed indepth during a subsequent inspection.