



**Consumers
Power
Company**

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Mr J G Keppler, Regional Director
Office of Inspection and Enforcement
US Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

**MIDLAND NUCLEAR PLANT -
INSPECTION REPORT NO 50-329/79-20 AND NO 50-330/79-20**

The enclosure to this letter is a response to your letter of October 10, 1979, which transmitted the subject Inspection Report and which requested our written statement on an item of noncompliance.

Stephen H. Howell

WRB/lr

Enclosure: Consumers Power Company's Response to Inspection
Report No 50-329/79-20 and No 50-330/79-20

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Consumers Power Company Response to the Notice of Violation
Described in NRC Inspection Report
No 50-329/79-20 and No 50-330/79-20

A. LACK OF CONTROL FOR SPECIAL PROCESSES RELATIVE TO WELDING ACTIVITIES
(329/79-20-01; 330/79-20-01)

1. Description of Noncompliance

Appendix A of Report No 50-329/79-20 and 50-330/79-20 provides the following:

- "1. 10 CFR 50, Appendix B, Criterion IX, requires, in part, that measures shall be established to assure that special processes, including welding are controlled.

Paragraph 5.2 of procedure 9-1 of the Consumers Power Company Quality Assurance Program Topical Report (CPC QA PTR) CPC-1 states, in part, 'Special processes are accomplished with written process sheets, procedures, checklists or equivalent which describe parameters to be met during the performance of the special process...'

Contrary to the above, the following discrepancies identified relative to the anchoring of safety related 4.16KV switchgear indicate that welding activities may not have been adequately controlled; these documents went through several reviews and were approved.

- a. Quality Control Inspection Record (QCIR) #C304-288W specifies that the switchgear be anchored to the embeds by plug welds; Note 13 on the installation drawing C-195(Q) requires fillet welds. This indicates that the manufacturer's recommendations were not followed.
- b. The QCIR specifies the use of Weld Procedure Specification (WPS) Pl-A-Lh (structural) for plug welds; this WPS is prequalified to AWS D1.1-76 requirements which excludes 7/8" diameter plug welds. This indicates that an incorrect WPS was specified and approved.
- c. The inspection records indicate that "plug welds" were inspected and determined acceptable.
- d. On August 23, 1979, subsequent to the NRC inspection, corrections were made to the above record without the benefit of procedural requirements.
- e. Visual inspection of the welds and discussion with the various site personnel indicate that they may be fillet welds."

2. Consumers Power Company Response

- a. Drawing No C-197(Q), Rev 4 for 4.16 kV Switchgear Distribution Centers specified fillet welds to secure the unit frames to the embeds. A memo from Project Engineering stated in part, "This weld may be plug welded." The Quality Control Inspection Report (QCIR) recorded that plug welds were to be used for the attachment. The problem here was that an improper document (a memo) was used to change a drawing and Bechtel Quality Control allowed that situation. As corrective action to help to preclude recurrence, Bechtel's procedure has been revised, individuals have been apprised, and training sessions have been conducted in requiring a formal design change approval prior to implementation of field changes. The action revising Bechtel's procedure is contained in Bechtel's Engineering Department Project Instruction (EDPI) 4.49.9, Rev 2, dated May 4, 1979.
- b. In actuality, fillet welds were used during the welding operation. Upon completing the circumferential fillet welds, the welder filled in the center hole as allowed by AWS D1.1, Paragraph 2.7.1.3, which states in part, "Fillet welds in holes . . . may be used to transfer shear These fillet welds may overlap Fillet welds in holes or slots are not to be considered as plug or slot welds." There is no problem apparent here.
- c. The QCIR indicates the use of Welding Procedure Specification (WPS) P1-A-Lh (Structural) for plug welds. The description of the non-compliance states that this procedure is not prequalified for 7/8" diameter plug welds. In clarifying these statements, WPS P1-A-Lh was used for 7/8" diameter welds, but these welds are not plug welds and are considered fillet welds as described in AWS D1.1, Paragraph 2.7.1.3. The WPS P1-A-Lh (Structural) is prequalified per AWS D1.1-1976 for P1 materials shielded metal arc welding (A) using low-hydrogen E7018 electrodes (Lh). The WPS is used on all prequalified joint details specified in AWS D1.1. The circumferential fillet weld procedure used in securing the switchgear to the embed is considered prequalified. No problem is apparent.
- d. The description of the noncompliance states that the QCIR was not corrected in accordance with an applicable administrative procedure. The problem here is that, on August 24, 1979, a Level I Quality Control Engineer (QCE) revised the QCIR, but his actions were never reviewed by a Level II QCE as required in SF/PSP G-7.1. As corrective action, on September 27, 1979, Bechtel corrected the QCIR, in accordance with SF/PSP G-7.1, to redress the type of welding actually used. To help to preclude recurrence of this problem, the individual QCE involved has been apprised of the errors and trained in the proper method of correcting QCIRs per SF/PSP G-7.1. Additionally, all QCEs have received training in the requirements of SF/PSP G-7.1.

The above actions are considered effective to achieve full compliance with respect to this infraction.

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