



Consumers
Power
Company

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Vice President

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August 17, 1977

Regulatory

7/27/77

Director of Nuclear Reactor Regulation
Attn: Mr Roger Boyd, Director
Division of Project Management
US Nuclear Regulatory Commission
Washington, DC 20555



MIDLAND PROJECT
DOCKET NOS 50-329, 50-330
MATERIALS ENGINEERING EVALUATION OF
REGULATORY GUIDE POSITIONS
FILE: 0505 SERIAL: 4097

Mr S A Varga's September 24, 1976 letter transmitted the NRC Staff evaluation of the Consumers Power Company position on Regulatory Guides 1.2, 1.14, 1.31, 1.34, 1.36, 1.43, 1.44, 1.50, 1.65, 1.66 and 1.71 relative to the Midland Plant. Subsequent to your review some of our positions have changed, or require additional clarification due to reinterpretation of Regulatory Guide contents. Also, we wish to advise you of our intended action in those areas where the Staff's position is interpreted to be different from the Consumer's position.

Attachment 1 is a Summary Status of each Regulatory Guide reviewed in the Materials Engineering category. Attachments 2 thru 4 provide additional discussion of individual Regulatory Guides.

The attached material is for information only since NRC evaluation of the final Midland Plant Regulatory Guide positions will be performed during review of the Final Safety Analysis Report which is scheduled for submittal on September 1, 1977.

Stephen H. Howell

SHH/jbg

CC: CLMahaney, Lynchburg
ELCastleberry, A²

THIS DOCUMENT CONTAINS
POOR QUALITY PAGES

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SUMMARY STATUS

<u>Regulatory Guide</u>	<u>Comment</u>
1.2	NRC agrees with the Midland position
1.14	See Attachment 2
1.31	NRC agrees with the Midland position
1.34	NRC agrees with the Midland position
1.36	Midland project is complying fully
1.43	NRC agrees with the Midland position
1.44	See Attachment 3
1.50	NRC agrees with the Midland position
1.65	NRC agrees with the Midland position
1.66	See Attachment 4
1.71	NRC agrees with the Midland position

Regulatory Guide 1.14 - Reactor Coolant Pump Flywheel Integrity
(Safety Guide 14, 10/27/71)

In accordance with the suggestion expressed in the NRC staff's comments on the Midland implementation of this guide, a flywheel overspeed spin test has been conducted (at 125% of normal speed) on one of the eight Midland Unit 1 and 2 reactor coolant pump flywheels, for the purpose of providing additional assurance of flywheel integrity.

Regulatory Guide 1.44 - Control of the Use of Sensitized Stainless Steel
(May 1973)

The NRC Staff evaluations contained the following statement:

"The NRC staff recommends that Positions C.3 and C.6 of Regulatory Guide 1.44 be conformed with by B&W and Bechtel: 1) for procurement of the remaining austenitic stainless steel components of B&W and of the balance of plant, 2) for welding installation of the B&W components, and 3) for the remaining welding installation of the balance of plant components. In regard to Position C.3, nonsensitization of the material should be verified by using ASTM A262-70 or the Strauss Test whenever the materials specification does not require water quenching from the solution temperature. In regard to position C.6, both B&W and Bechtel should perform intergranular corrosion tests for sufficient welding procedures to cover the complete ranges of the welding parameters (i.e., material thickness, etc.) that will be involved in component fabrication and installation."

The Midland project has taken the following steps to comply with Positions C.3 and C.6 for procurement, under new purchase orders, issued after April 1, 1977 of the remaining balance-of-plant austenitic stainless steel components addressed in Item 1 above.

- a) To comply with Position C.3, all austenitic stainless steel material for the remaining balance-of-plant components is required to be cooled to below 800F in less than 3 minutes following solution heat treatment.

- b) To comply with Position C.6, material having a carbon content of less than 0.03% is specified for use. In cases where this is not practical qualification of the welding procedure to, ASTM A262-70 is required.

- c) No B&W components remain to be purchased, thus no action is required.

To comply with Items 2 and 3 above, Bechtel has performed intergranular corrosion tests in accordance with Position C.6, for sufficient welding procedures to cover the range of welding parameters that will be involved in field welding of stainless steel components. Welding procedures used for field welding of stainless steel safety-related components during NSS erection will be qualified in accordance with Position C.6 of the Regulatory Guide.

One point which we wish to clarify is the degree of compliance to Regulatory Guide 1.44 for additional quantities such as valves and pipe added to existing purchase orders. As these additional quantities are added to established purchase orders with previously approved welding procedures, the degree of compliance for these added quantities will be as described in the previously submitted Midland position accepted for components already procured.

Regulatory Guide 1.66 - Nondestructive Examination of Tubular Products

The NRC Staff evaluation accepted the Midland Position for previously procured components in the B&W and balance-of-plant scope of supply, and recommended compliance to either Regulatory Guide 1.66 or the non-destructive examination requirements of the summer 1974 addenda of ASME Section III for procurement of the remaining components.

In response to this NRC recommendation, and as required by the Code, the requirements of the Summer 1974 addenda of ASME Section III and/or subsequent addenda in effect on the date of procurement of the remaining balance-of-plant tubular products have been met. As all B&W scope of supply equipment has been previously purchased, no action on B&W supplied components is required.

DOCKET NUMBER
50-329/330

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

TO: Mr. Roger Boyd		FROM: Consumers Power Company Jackson, Michigan Stephen H. Howell		PSAR/FSAR AMDT DIST. DATE OF DOCUMENT 8/17/77 DATE RECEIVED 8/22/77
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<p>DESCRIPTION</p> <p><i>RE OUR 9-24-76 LTR</i></p> <p>ACKNOWLEDGED</p> <p>DO NOT REMOVE</p> <p>PLANT NAME: Midland Units 1 & 2 RJL 8/22/77</p>	<p>ENCLOSURE</p> <p>Attachment 1.) Summary Status of each Regulatory Guide reviewed in the Materials Engineering category.</p> <p>Attachment 2 thru 4.) Additional discussion of individual Regulatory Guides..</p> <p>(1-P) (5-P)</p>
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