

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

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Docket Nos.: 50-369 and 50-370

Duke Power Company

ATTN: Mr. William O. Parker, Jr.

Vice President - Steam Production

P. O. Box 33189

422 South Church Street

Charlotte, North Carolina 28242

Dear Mr. Parker:

SUBJECT: UNDERCLAD CRACKING IN REACTOR VESSEL NOZZLES

(McGUIRE NUCLEAR STATION, UNITS 1 AND 2)

We have reviewed the information provided in your June 6, 1980 letter regarding the reactor vessel nozzles at the McGuire Station.

We have determined that the McGuire Unit No. 2 reactor vessel was fabricated by Rotterdam Nuclear of the Netherlands using procedures for welding and pre- and post-clad heat treatments that increase the potential for underclad cracking. For this reason, we require that augmented ultrasonic examination for underclad cracking be performed on the McGuire Unit No. 2 reactor vessel nozzles prior to issuance of an operating license. The inspections should be conducted using techniques that have been designed to detect underclad cracks. These techniques previously have been used at Sequoyah 1, North Anna 2 and Salem 2. The McGuire Unit No. 1 vessel was fabricated by Combustion Engineering using welding heat treating practices expected not to cause underclad cracking. Therefore, we do not require that augmented preservice inspections be performed on the Unit No. 1 vessel. In the future augmented ultrasonic examination will be required for a reactor vessel whose nozzles were clad in the U. S., but only as part of a program to verify that cladding heat treatments used by U. S. manufacturers do not result in underclad cracking.

Sincerely,

B. J. Youngblood, Chief Licensing Branch No. 1

Calvin W. Moon

Division of Licensing

ccs: See next page

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