

DUKE POWER COMPANY

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November 15, 1984

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

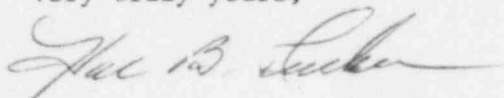
Attention: Ms. E. G. Adensam, Chief  
Licensing Branch No. 4

Re: Catawba Nuclear Station Unit 2  
Docket No. 50-414  
Preservice Inspection Program

Dear Mr. Denton:

Please find attached a request for relief from a requirement of the ASME Code for certain Class 2 circumferential butt welds for the Catawba Unit 2 Preservice Inspection Program.

Very truly yours,



Hal B. Tucker

RWO/mjf

Attachment

cc: Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323

NRC Resident Inspector  
Catawba Nuclear Station

Mr. Jesse L. Riley  
Carolina Environmental Study Group  
854 Henley Place  
Charlotte, North Carolina 28207

Mr. Robert Guild, Esq.  
Attorney-at-Law  
P. O. Box 12097  
Charleston, South Carolina 29412

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Mr. Harold R. Denton, Director  
November 15, 1984  
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cc: Palmetto Alliance  
2135 $\frac{1}{2}$  Devine Street  
Columbia, South Carolina 29205

DUKE POWER COMPANY  
Request For Relief From  
Inservice Inspection Requirement

Station: Catawba Nuclear Station

Unit: #2

Reference Code: ASME Boiler and Pressure Vessel Code Section XI  
1974 Edition including Addenda through Summer 1975.

I. Component for which exemption is requested:

a. Name and Identification Number:

Main Steam Piping

See Attachment 1 for complete list of assemblies and welds

b. Function:

Main Steam Pressure Boundary

c. ASME Section III Code Class:

Class 2

d. Valve Category:

N/A

II. Reference Code Requirement that has been determined to be impractical:

Table IWC-2600 Item #C2.1 requires volumetric examination for circumferential butt welds. Table IWC-2520 examination category C-G requires that the area of interest include the weld metal and base metal for one wall thickness beyond the edge of weld. One wall thickness beyond the edge of weld cannot be maintained on all radiographs due to accessibility of the welds.

III. Basis for Requesting Relief:

The Inservice Inspection Plan will be written to the ASME Boiler and Pressure Vessel Code Section XI 1980 Edition including Addenda through Winter 1980 or later. The examination area required by this code is the weld plus 1/4 inch on each side, as shown in Figure IWC-2500-7.

Because of limited accessibility due to guard pipe covering these welds, the volumetric examination of the full 1 "T" required by the Summer 1975 Code cannot be accomplished. Adequate assurance of the weld integrity can be provided by meeting the volumetric requirements of the Winter 1980 Code.

III. Basis for Requesting Relief (cont.)

IV. Alternate Examination:

Radiography will be performed in accordance with the volumetric examination requirements shown in Figure IWC-2500-7 welds in piping, of the 1980 Edition of ASME XI, including Addenda through Winter 1980.

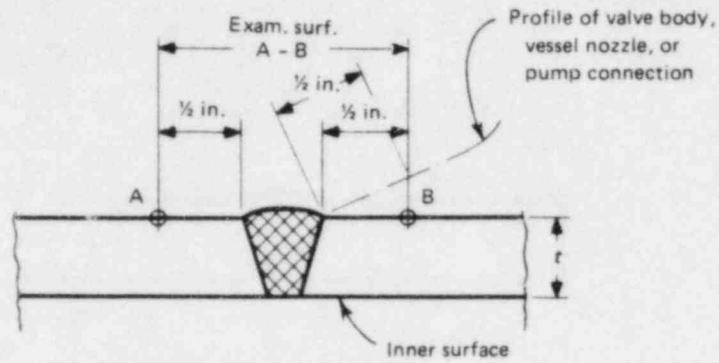
V. Implementation Schedule:

For Preservice Inspection these Class 2 welds will be radiographed to the Winter 1980 Code to be used for the baseline data.

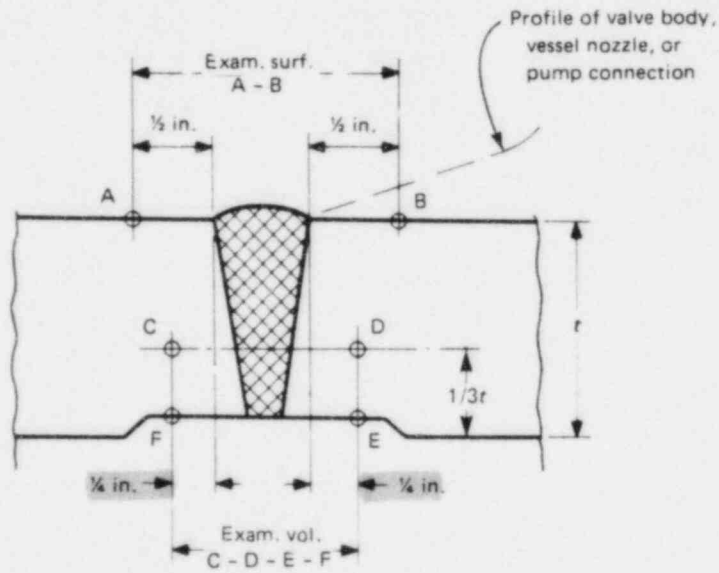
The following is a list of circumferential butt welds which the volumetric examination (Radiography) may not cover the base metal for one wall thickness beyond the edge of weld, for each Radiographic interval:

<u>Assembly</u>	<u>Weld No.</u>	<u>Geometric Configuration</u>	<u>Size</u>
Steam Generator A	CW-SM-1A-F	Pipe to Elbow	32"
Main Steam	CW-SM-1A-I	Elbow to Reducer	32"
	CW-SM-1A-K	Reducer to Pipe	34"
Steam Generator B	CW-SM-1B-F	Pipe to Elbow	32"
Main Steam	CW-SM-1B-I	Elbow to Reducer	32"
	CW-SM-1B-K	Reducer to Pipe	34"
Steam Generator C	CW-SM-1C-F	Pipe to Elbow	32"
Main Steam	CW-SM-1C-I	Elbow to Reducer	32"
	CW-SM-1C-K	Reducer to Pipe	34"
Steam Generator D	CW-SM-1D-F	Pipe to Elbow	32"
Main Steam	CW-SM-1D-I	Elbow to Reducer	32"
	CW-SM-1D-K	Reducer to Pipe	34"





(a) Nominal pipe wall thickness  $t < \frac{1}{2}$  in.



(b) Nominal pipe wall thickness  $t > \frac{1}{2}$  in.

FIG. IWC-2500-7 WELDS IN PIPING