

SNUPPS

Standardized Nuclear Unit  
Power Plant System

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February 7, 1984

SLNRC 84-0026 FILE: 0541/M-189  
SUBJ: NRC Request for Information re  
Preservice Inspection (PSI)  
Relief Request: Callaway Plant

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

Docket Nos. STN 50-482 and STN 50-483

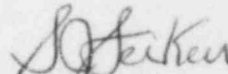
Ref: SLNRC 84-0005, dtd. 1/18/84: Subject as Above

Dear Mr. Denton:

The reference letter forwarded to NRC an identification of categories of Callaway preservice (PSI) examination for which relief requests were anticipated. Three (3) examination categories were cited in the reference. It was further stated that, in the event additional relief requests were indicated, the NRC would be advised. The purpose of this letter is to advise NRC that relief will be required from Section XI volumetric examination of 18 branch connection welds in the Reactor Coolant System. While the examination of the Reactor Coolant System piping is not fully completed at Callaway, relief from commitments for volumetric examinations of these specific branch connection welds is required on the basis of data and experiences of similar examinations at the SNUPPS Wolf Creek unit.

Details supporting this relief request including an identification of specific welds, is provided in an attachment to this letter. If you have any questions regarding the attachment, please advise.

Very truly yours,



S. J. Seiken  
Manager, Quality Assurance

SJS/dck/24b5

Attachment

cc: J. Neisler/B. Little, USNRC/CAL w/attach.  
W. Schum/K. Whittlesey, USNRC/WC  
J. Konklin, USNRC Region III  
G. L. Koester, KGE  
D. T. McPhee, KCPL  
D. F. Schnell, UE

Boo!

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PDR ADOCK 05000482  
Q PDR

RELIEF REQUEST FOR THE  
VOLUMETRIC PRESERVICE INSPECTION -  
CALLAWAY PLANT REACTOR COOLANT  
SYSTEM BRANCH CONNECTIONS

I. ASME CODE SECTION XI REQUIREMENTS

In Section XI, 1977 Edition/Summer 1978 Addenda, Table IWB-2500-1, examination Category BJ, item B9.31 requires a surface and volumetric examination of regions described in Figures IWB-2500-10 and 11, for branch connection piping 2" nominal pipe size and greater. However, the above code does not define the specific weld volume required to be examined. To address this lack of definition, Figure IWB-2500-8 was used as a guideline to define the examination volume of the branch connection welds.

Figure 01 corresponds to Figure IWB-2500-8 of the Code and Figures 02 and 03 correspond to Figures IWB-2500-10 and 11, respectively, with the modifications as stated above. The preservice inspection examinations were performed to ultrasonically examine the defined volumes in Figures 02 and 03.

II. SPECIFIC RELIEF REQUEST

Relief is requested from performing volumetric examinations of 18 branch connection welds on the primary loops of the Reactor Coolant System. The welds are identified in Table I along with identification of the type of weld (referring to the weld configuration in the attached figures). Branch connections for the accumulator discharge lines are butt welded to the reactor coolant loop piping and are not included in this relief request. All branch connections to the reactor coolant loop piping are covered by this relief request, with the exception of the accumulator discharge lines as noted above.

III. BASIS FOR RELIEF

Due to the materials of construction (austenitic) and the design and fabrication geometry of corner type branch connections depicted in attached Figures 02 and 03, it is concluded that meaningful examination by ultrasonic methods is not feasible and that no other practical volumetric method is available.

IV. ALTERNATE TEST METHOD

As an alternative, VT-2 examinations for leakage will be conducted in accordance with IWA-5240. These will be carried out during the leakage test specified under IWB-5221. The combination of required surface examination, visual examination for leakage and the Code required fabrication examinations will establish the integrity of the as-built pressure boundary.

Table 1

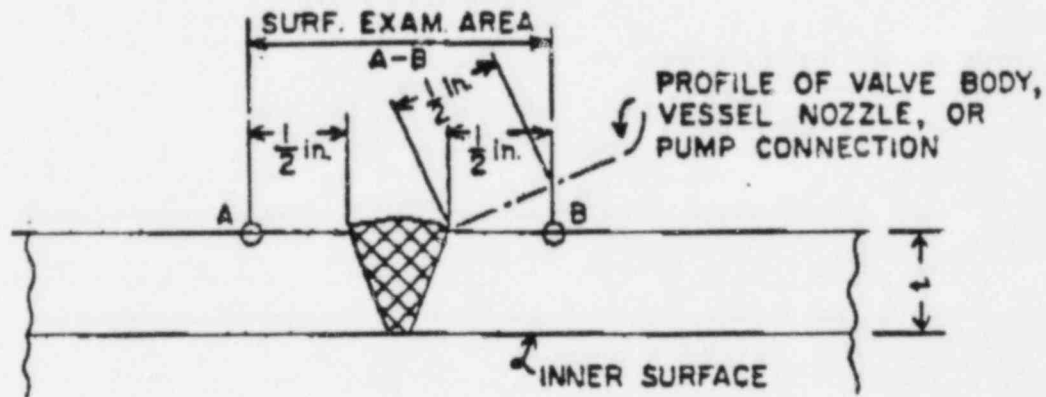
BRANCH CONNECTION WELDS

<u>Item</u>	<u>W WELD #</u>	<u>KGE WELD #</u>	<u>TYPE OF WELD</u>
<u>Loop 1</u>			
1	15	2BB 01 S102-3	Figure 03
2	17	2BB 01 S105-5	02
3	19	2BB 01 S101-5	02
4	21	2BB 01 S101-8	03
5	22	2BB 01 S101-9	02
<u>Loop 2</u>			
6	15	2BB 01 S202-3	03
7	17	2BB 01 S205-5	02
8	19	2BB 01 S201-5	02
9	21	2BB 01 S201-8	02
<u>Loop 3</u>			
10	15	2BB-01 S302-3	03
11	17	2BB-01 S305-5	02
12	21	2BB-01 S305-5	02
13	20	2BB-01 S301-5	02
<u>Loop 4</u>			
14	15	2BB-01 S402-3	03
15	16	2BB-01 S402-4	02
16	18	2BB-01 S405-5	02
17	20	2BB-01 S401-5	02
18	22	2BB-01 S401-6	02

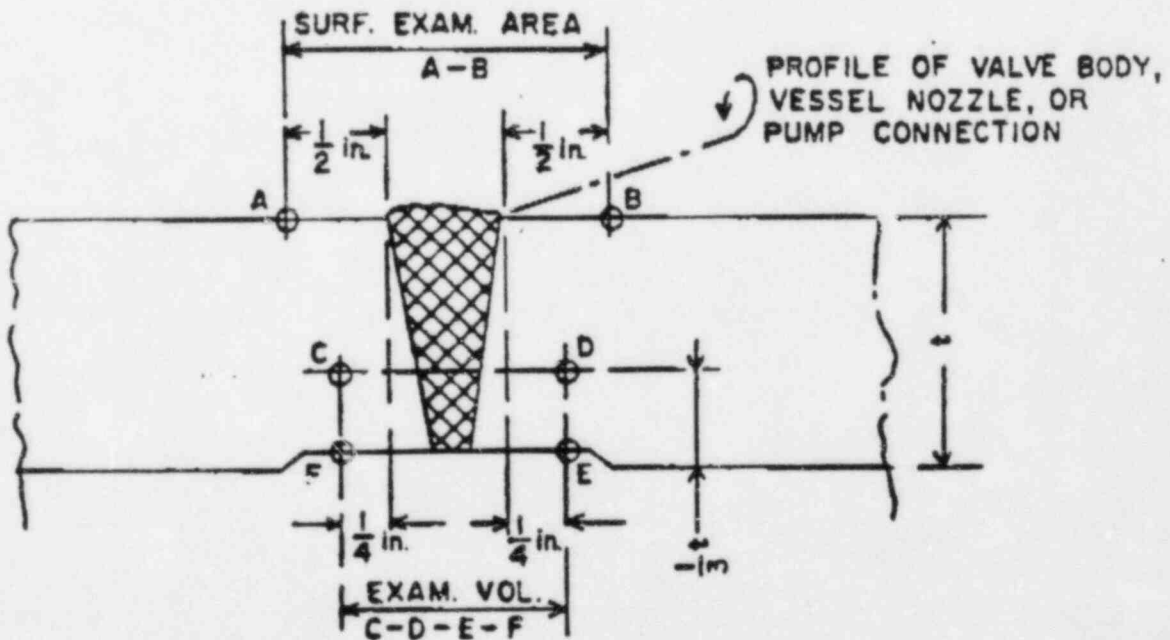
ILLUSTRATIVE ONLY  
REFERENCE TABLE 1

FIGURE 01

# SIMILAR AND DISSIMILAR METAL WELDS IN PIPING



NOM. PIPE SIZE LESS THAN 4 IN.

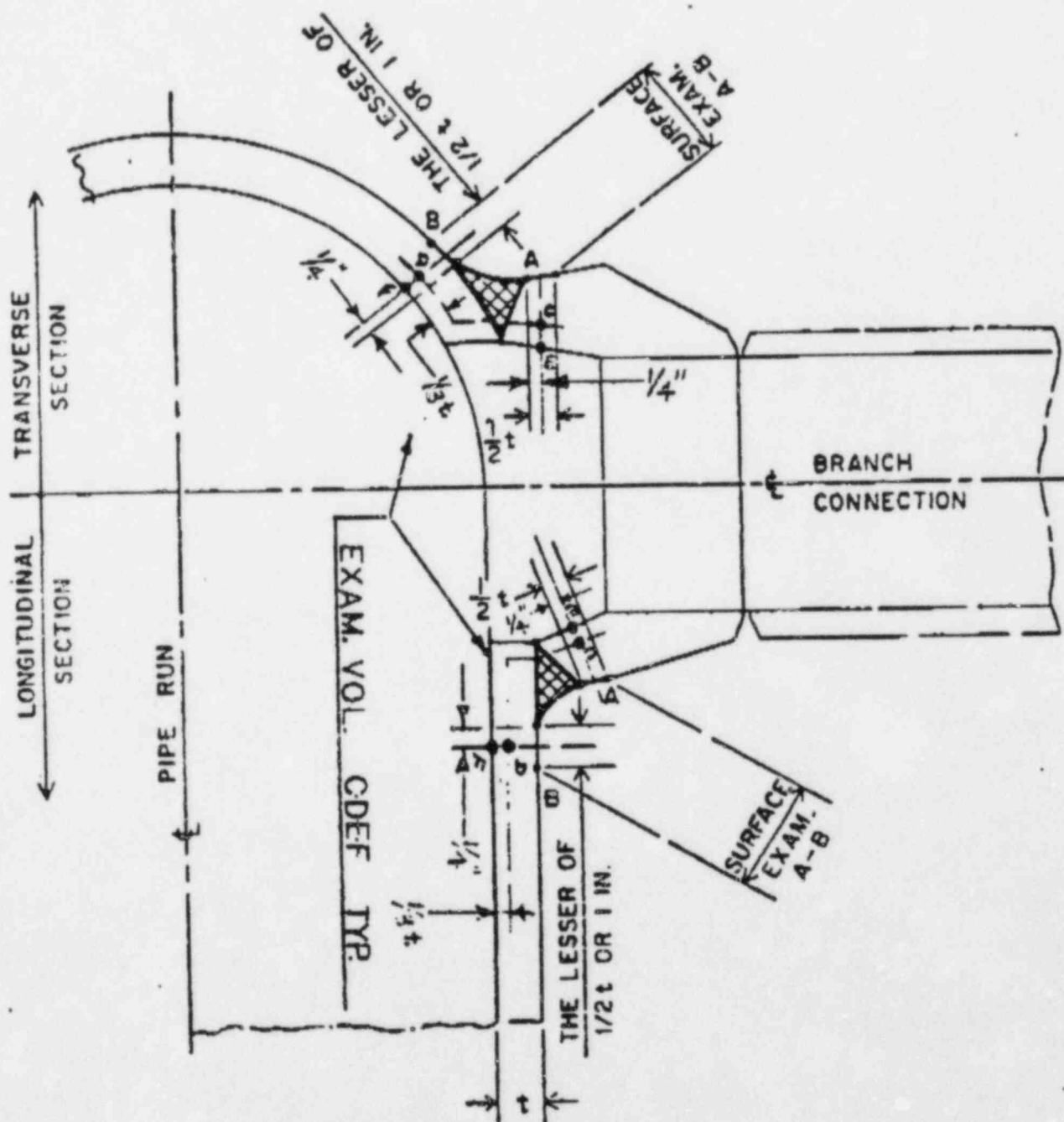


NOM. PIPE SIZE 4 IN. AND GREATER

ILLUSTRATIVE ONLY  
REFERENCE TABLE 1

FIGURE 02

# PIPE BRANCH CONNECTION



ILLUSTRATIVE ONLY  
REFERENCE TABLE 1

FIGURE 03

# PIPE BRANCH CONNECTION

