

DUKE POWER COMPANY

P.O. BOX 33189
CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

March 30, 1984

TELEPHONE
(704) 373-4531

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
Docket Nos. 50-413 and 50-414

Dear Mr. Denton:

Section 5.2.4 of the Catawba Safety Evaluation Report discusses Confirmatory Item 11, Preservice Inspection Program. As discussed in this section the Staff requested that Duke identify all plant specific areas where ASME Code Section XI requirements could not be met, along with a supporting technical justification.

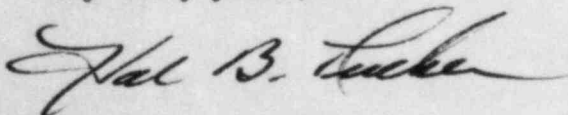
Relief requests were previously submitted as follow:

<u>Serial No.</u>	<u>Date of Submittal</u>
CN-1-001	December 1, 1981
CN-1-002	April 5, 1982
CN-1-003	March 25, 1983

With the Preservice Inspection Program essentially complete for Unit 1, the relief requests can now be finalized.

Attached are revised Requests for Relief CN-1-001 and CN-1-002. A copy of CN-1-003 is also attached for completeness. No additional Requests for Relief on Unit 1 are expected.

Very truly yours,



Hal B. Tucker

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Attachment

8404050282 840330
PDR ADOCK 05000413
E PDR

3001
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Mr. Harold R. Denton, Director
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cc: Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

NRC Resident Inspector
Catawba Nuclear Station

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

Palmetto Alliance
2135½ Devine Street
Columbia, South Carolina 29205

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

DUKE POWER COMPANY
Request for Relief from
Inservice Inspection Requirement

Station: Catawba Nuclear Stations

Unit: #1 and #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:

Reactor Coolant Loop Piping
Branch Connection Welds
See Attachment 1 for a complete list of assemblies and welds.

b. Function:

Reactor Coolant Pressure Boundary

c. ASME Section III Code Class:

Class 1

d. Valve Category:

N/A

II. Reference code requirement that has been determined to be impractical:

Table IWB-2600 Item No. B4.6 requires volumetric examination for branch pipe connection welds exceeding six inches in diameter. Ultrasonic examination is impractical due to configuration, and radiography cannot be performed for inservice inspection due to accessibility.

III. Basis for Requesting Relief:

- a. Material - SA 182 F304-N nozzle welded to SA 351 CF8A pipe.
- b. Estimate of extent of preservice examination which could be performed - 20%.
- c. Original fabrication examination - Liquid penetrant on inside and outside surfaces and radiography of the entire weld volume plus ultrasonic testing of the entire volume of the forged nozzle.
- d. Measures which would be required to make the welds inspectable - the nozzles would have to be re-designed and replacement nozzles prepared and welded in place.
- e. Reference drawing - CNM 1201.01-50 Sheet 1 (Attachment 2)

DUKE POWER COMPANY
Request for Relief from
Inservice Inspection Requirement

IV. Alternate Examination:

The welds listed on Attachment 1 will be inspected by the liquid penetrant method.

V. Implementation Schedule:

The alternate examinations listed above will be performed for all preservice and inservice inspections.

The following is a list of branch connection welds for which volumetric examination has been determined to be impractical:

Unit 1

<u>Assembly</u>	<u>Manufacturer's Serial Number</u>			
Loop 1:				
Crossover	17002	RTD Return	3"Sch. 160	6.700
Cold Leg	15177	Pressurizer Spray	4"Sch. 160	7.200
		Regenerative HX	3"Sch. 160	6.700
Loop 2:				
Crossover	17004	RTD Return	3"Sch. 160	6.700
Cold Leg	15178	Pressurizer Spray	4"Sch. 160	7.200
Loop 3:				
Crossover	17006	RTD Return	3"Sch. 160	6.700
		Regenerative HX	3"Sch. 160	6.700
Loop 4:				
Crossover	17008	RTD Return	3"Sch. 160	6.700
Cold Leg	15180	Regenerative HX	3"Sch. 160	6.700

Unit 2

<u>Assembly</u>	<u>Manufacturer's Serial Number</u>			
Loop 1:				
Crossover	18836	RTD Return	3"Sch. 160	6.700
Cold Leg	18837	Pressurizer Spray	4"Sch. 160	7.200
		Regenerative HX	3"Sch. 160	6.700
Loop 2:				
Crossover	18840	RTD Return	3"Sch. 160	6.700
Cold Leg	18841	Pressurizer Spray	4"Sch. 160	7.200
Loop 3:				
Crossover	18844	RTD Return	3"Sch. 160	6.700
		Regenerative HX	3"Sch. 160	6.700
Loop 4:				
Crossover	18848	RTD Return	3"Sch. 160	6.700
Cold Leg	18849	Regenerative Hx	3"Sch. 160	6.700

Inservice Inspection Requirement

e. Reference drawings - CN-1491-SM002 CN-2491-SM013 CN-2491-SM016
CN-1491-SM003 CN-2491-SM014
CN-1491-SM004 CN-2491-SM015

DUKE POWER COMPANY
Request for Relief from
Inservice Inspection Requirement

IV. Alternate Examination:

There are no alternate examinations that can be performed due to the inaccessibility of the welds.

V. Implementation Schedule:

The fabrication radiography records will be used in lieu of the on site preservice inspection examination.

The following is a list of circumferential butt welds for which volumetric examination has been determined to be impractical:

Unit 1

<u>Assembly</u>	<u>Weld Number</u>	<u>Size</u>
A Generator: Main Steam	CT-SM-1A-C	32"
B Generator: Main Steam	CT-SM-1B-C	32"
C Generator: Main Steam	CT-SM-1C-C	32"
D Generator: Main Steam	CT-SM-1D-C	32"

Unit 2

<u>Assembly</u>	<u>Weld Number</u>	<u>Size</u>
A Generator: Main Steam	CW-SM-1A-C	32"
B Generator: Main Steam	CW-SM-1B-C	32"
C Generator: Main Steam	CW-SM-1C-C	32"
D Generator: Main Steam	CW-SM-1D-C	32"

PG 11-30-78 CHK'D 12-1-78

OR CONT. NO. 712

DUKE POWER CO.

ION CATAWBA UNIT #1

SL 12-28-78 CHK'D PG 12-28-78

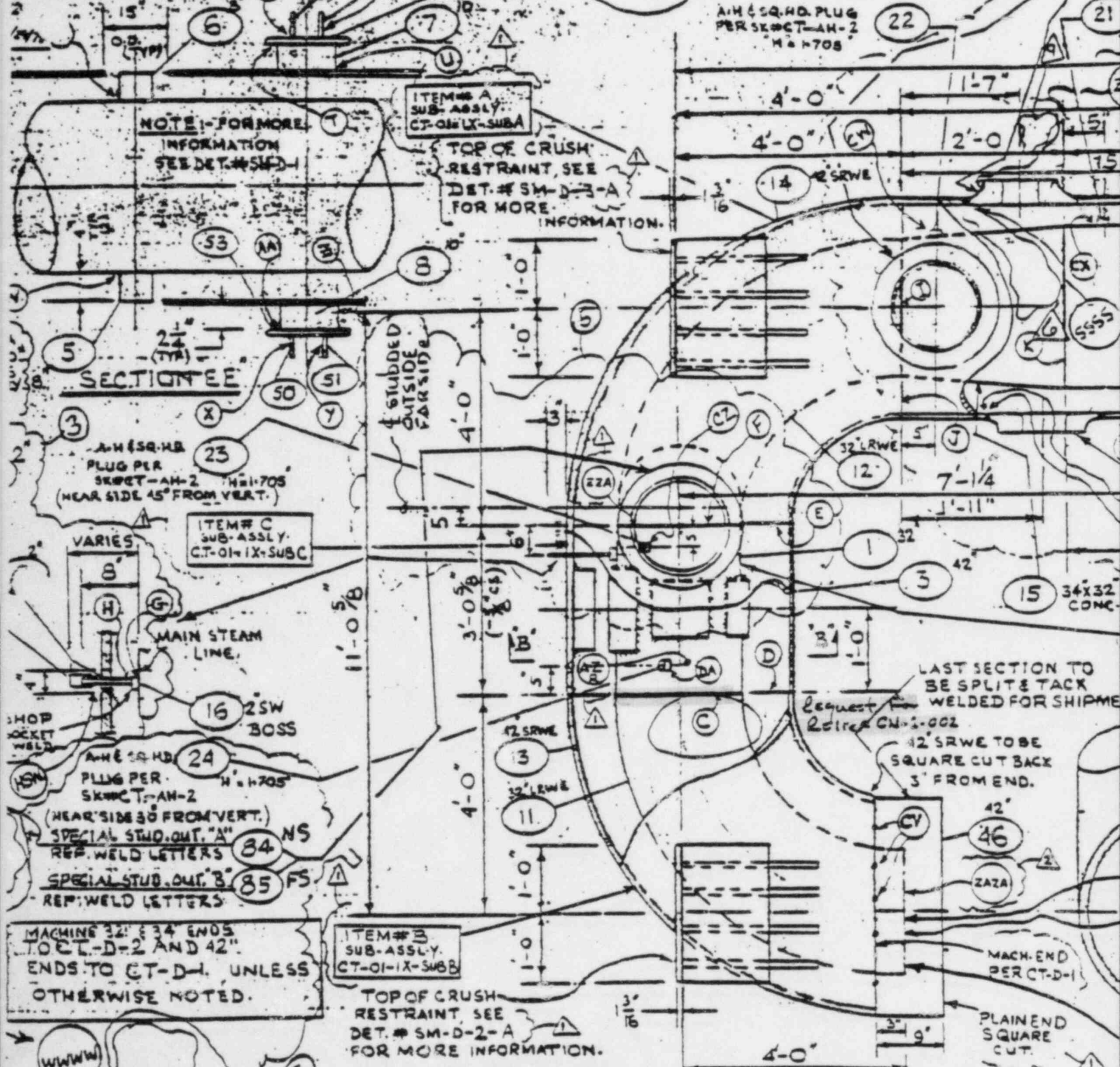
DEPT. I. T. T. KERNERSVILLE

REDRAWN Subhash 10-24-77 CHK'D PG 10-24-77

REV 1 SM 11-30-77 CHK'D PG 11-30-77

REV 2 SM 12-9-77 CHK'D PG

AH-2 SQ. HD. PLUG
PER SKETCH AH-2
H-1705



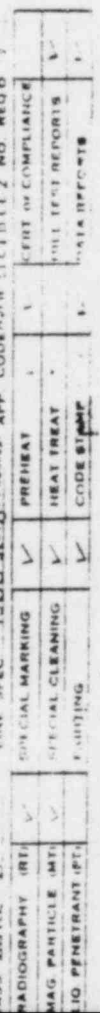
PS 1500.7(0.01) GUARD.
LINE SPEC. 1500.5(0.01) PROCESS. APP. CODE ASME SECT. II CL. 2 NO. REQ'D

DIAGRAM (RT)	✓	SPECIAL MARKING	✓	PREHEAT	✓	CERT. OF COMPLIANCE
FILE (MT)	✓	SPECIAL CLEANING	✓	HEAT TREAT	✓	MILL TEST REPORTS
PENETRANT (PT)	✓	PAINTING	✓	CODE STAMP	✓	DATA REPORTS

STEM MAIN STEAM (SM) 5 FAB. SPECS. JS 118

DRWG NO. CN-1491-SM003 PRESS. 1185 PSI. TEMP 600 F. WT. 80185 LBS.

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DUKE POWER COMPANY
Request For Relief From
Inservice Inspection Requirement

Station: CATAWBA NUCLEAR STATION

Unit: 1 & 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:

Pressurizer integrally welded supports

Seismic Lugs to shell

Support Brackets to shell

National Board Number 7245 (Unit 1)

b. Function:

Restraint of Class 1 Vessel

c. ASME Section III Code Class:

Class 1

d. Valve Category:

NA

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

Section XI Table IWB-2500, Examination Category B-H, requires that 100% of all support lug attachments to Class 1 Vessels shall be examined. Section XI Table IWB-2600, Item #B2.8, requires volumetric examination for integrally welded vessel supports.

III. Basis for Requesting Relief:

The Inservice Inspection Plan will be written to the ASME Boiler and Pressure Vessel Code Section XI 1980 Edition, or later edition if adopted prior to commercial operation. Section XI Table IWB-2500-1, Examination Category B-H integral attachments for vessels, will require surface examination of these attachment welds. Performing a surface examination for the preservice inspection will provide a basis for comparing future inservice inspection data.

III. Basis for Requesting Relief (cont.)

Reference drawing # - CNM-1201.01-175

Reference figure #'s - IWB-2500-13
IWB-2500-15

IV. Alternate Examination:

Surface examination will be performed on all seismic lug
and support bracket welds to the Class 1 pressure boundary.

V. Implementation Schedule:

Surface examination data will become the Preservice Inspection
record.

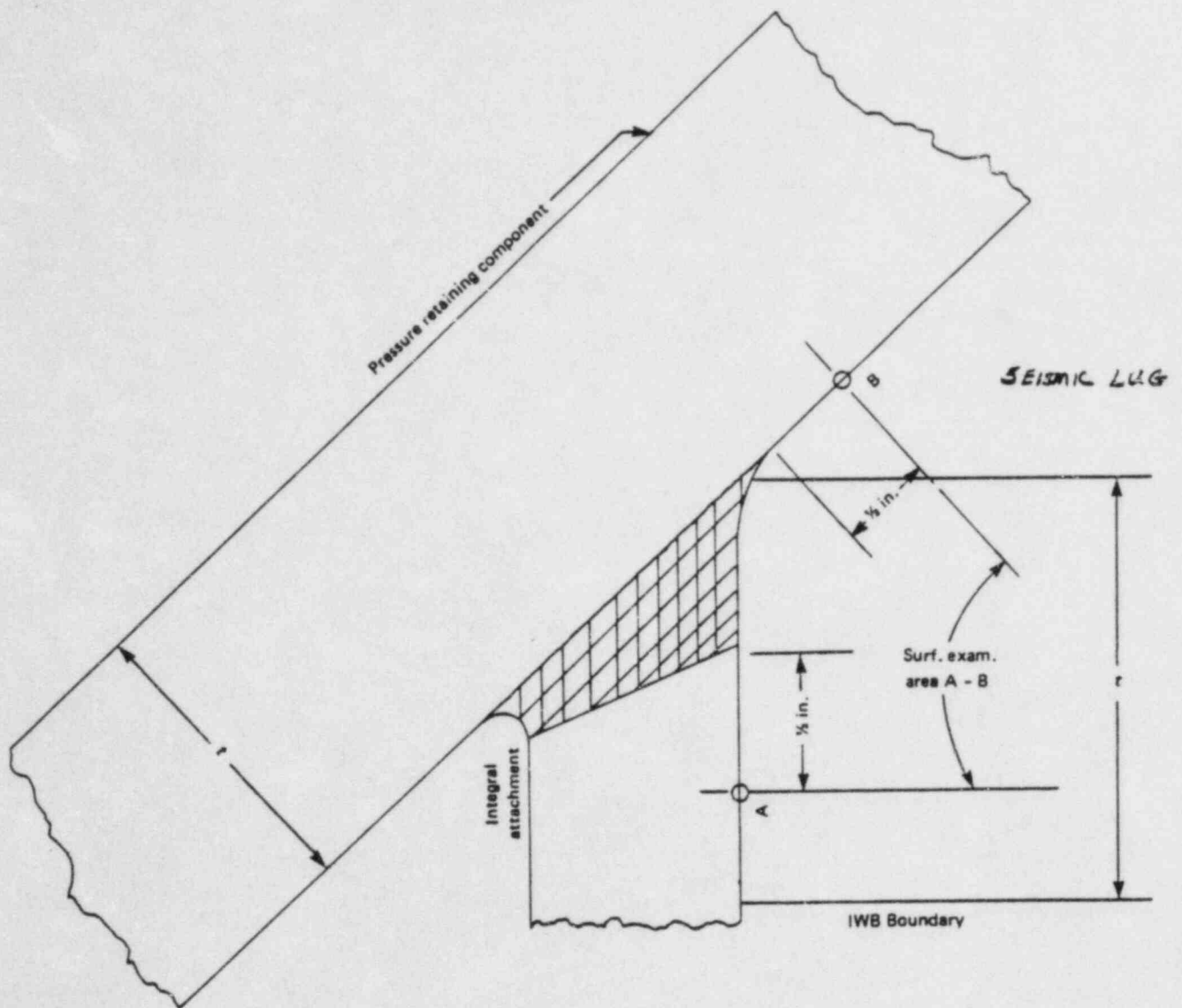


FIG. IWB-2500-13 INTEGRAL ATTACHMENT WELD

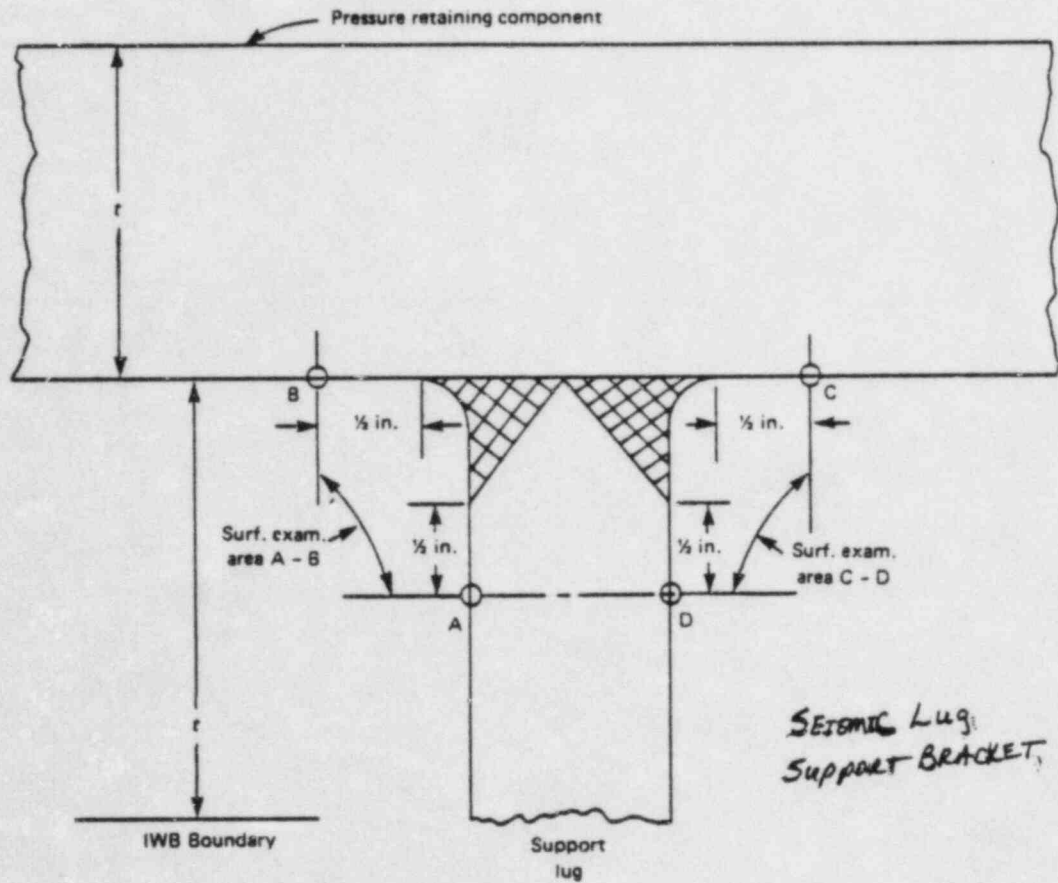


FIG. IWB-2500-15 INTEGRAL ATTACHMENT