

CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9810060154 DOC. DATE: 98/09/30 NOTARIZED: NO DOCKET #
FACIL: 50-269 Oconee Nuclear Station, Unit 1, Duke Power Co. 05000269
AUTH. NAME AUTHOR AFFILIATION
MCCOLLUM, W.R. Duke Power Co.
RECIP. NAME RECIPIENT AFFILIATION
Records Management Branch (Document Control Desk)

SUBJECT: Provides response to NRC 980323 RAI concerning reactor
pressure vessel beltline region cross-sectional developed
inner-surface areas of plate & welds for Oconee Unit 1.

DISTRIBUTION CODE: A001D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 5
TITLE: OR Submittal: General Distribution

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD2-2 LA	1 1	PD2-2 PD	1 1
	LABARGE, D	1 1		
INTERNAL:	ACRS	1 1	FILE CENTER 04	1 1
	NRR/DE/ECGB/A	1 1	NRR/DE/EMCB	1 1
	NRR/DRCH/HICB	1 1	NRR/DSSA/SPLB	1 1
	NRR/DSSA/SRXB	1 1	NUDOCS-ABSTRACT	1 1
	OGC/HDS2	1 0		
EXTERNAL:	NOAC	1 1	NRC PDR	1 1

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE. TO HAVE YOUR NAME OR ORGANIZATION REMOVED FROM DISTRIBUTION LISTS
OR REDUCE THE NUMBER OF COPIES RECEIVED BY YOU OR YOUR ORGANIZATION, CONTACT THE DOCUMENT CONTROL
DESK (DCD) ON EXTENSION 415-2083

TOTAL NUMBER OF COPIES REQUIRED: LTTR 14 ENCL 13

C
A
T
E
G
O
R
Y

1

D
O
C
U
M
E
N
T



W. R. McCollum, Jr.
Vice President

Duke Energy Corporation

Oconee Nuclear Station
P.O. Box 1439
Seneca, SC 29679
(864) 885-3107 OFFICE
(864) 885-3564 FAX

September 30, 1998

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Subject: Oconee Nuclear Station
Docket Nos. 50-269
Request for Additional Information Concerning
Reactor Pressure Vessel Beltline Region Cross-
Sectional Developed Inner-Surface Areas of Plate
and Welds for Oconee Nuclear Station Unit 1

In a letter dated March 23, 1998, the NRC issued a request for information concerning the reactor pressure vessel beltline region cross-sectional developed inner-surface areas of plate and welds for Oconee Nuclear Station Unit 1. The information was needed to perform an overall pressurized thermal shock analysis and revise Regulatory Guide 1.154. Attachment 1 to this letter provides the additional information that was requested by the NRC.

A copy of the NRC's pressurized thermal shock summary report for Oconee Unit 1 was included as enclosure 2 to the Staff's March 23, 1998, letter. During the development of the response to the NRC's request for information, Duke noticed that the information in the NRC's pressurized thermal shock summary report for Oconee Unit 1 needed to be updated. Thus, Attachment 2 contains a marked up copy of the NRC's pressurized thermal shock summary report for Oconee Unit 1 that can be used to update the NRC's database for Oconee Unit 1. Duke anticipates that similar changes are necessary for the NRC's pressurized thermal shock summary reports for Oconee Units 2 and 3.

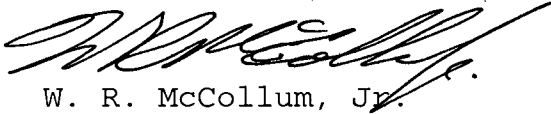
060032

9810060154 980930
PDR ADOCK 05000269
P PDR

Aool

If there are any questions regarding this submittal, please contact Michael Bailey at (864) 885-4390.

Very truly yours,

A handwritten signature in black ink, appearing to read 'W. R. McCollum, Jr.', written in a cursive style.

W. R. McCollum, Jr.
Site Vice President
Oconee Nuclear Station

Attachments

cc: L. A. Reyes, Regional Administrator
Region II

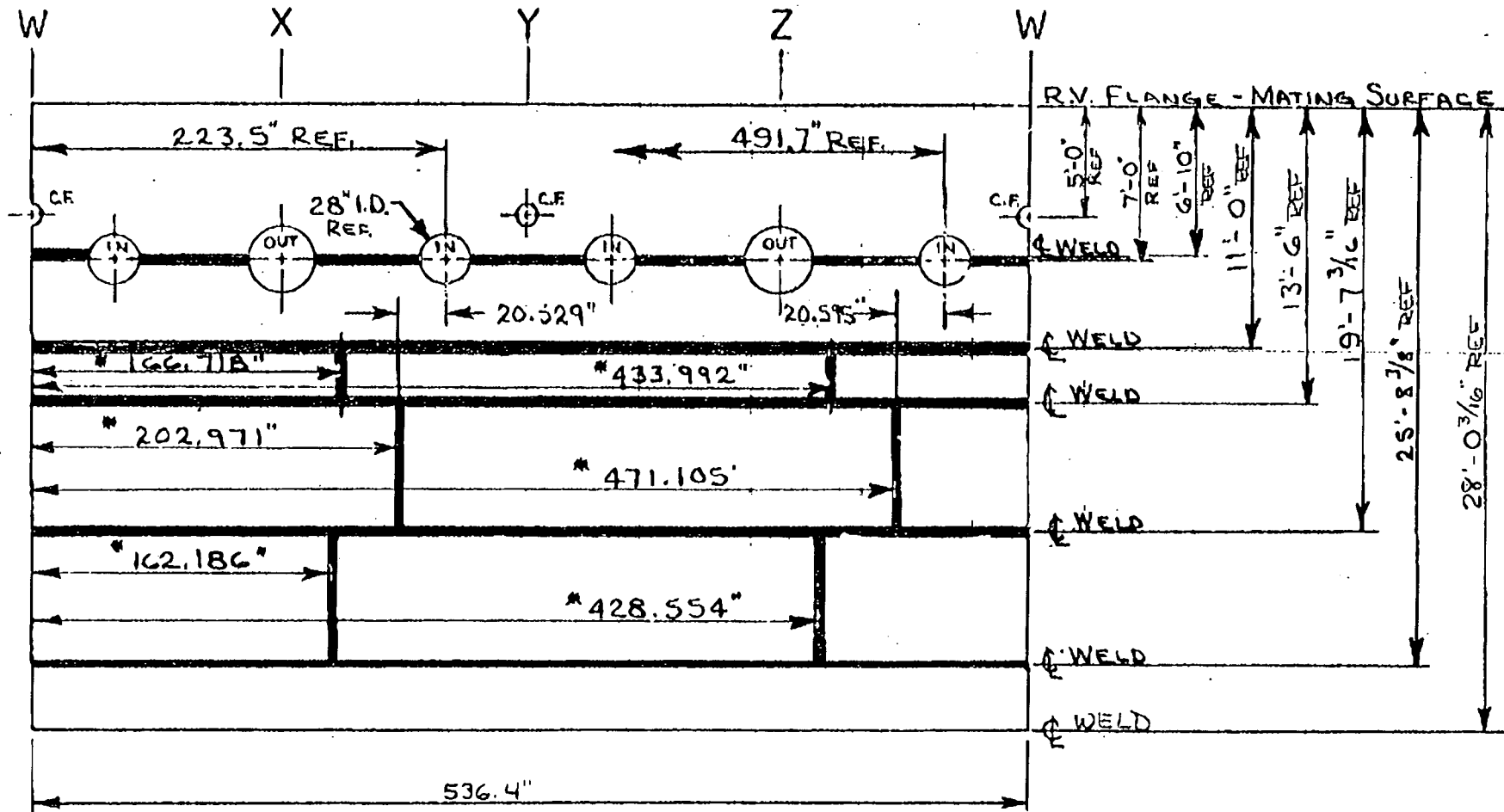
M. A. Scott, Senior Resident Inspector
Oconee Nuclear Site

D. E. LaBarge, Project Manager
NRR

Attachment 1

Reactor Pressure Vessel Beltline Region Cross-
Sectional Developed Inner-Surface Areas of Plate
and Welds for Oconee Nuclear Station Unit 1

Figure 3.2-2. Reactor Vessel Weldment Locations in Oconee Unit 1



Dimensions based on inside travel

Attachment 2

Markup of Pressurized Thermal Shock Summary
Report for Oconee Nuclear Station Unit 1

NRC - Reactor Vessel Integrity Database

PTS Summary Report

OCONEE 1

Printed 3/13/98 8:48:44 AM

Page 1

Docket No: 50-269

EOL Date: 02/06/2013

Beltline Identification		RTpts @ EOL	Neutron Fluence @ EOL	RTndt(u)	RTndt(u) METHOD	ΔRTndt(u) @ EOL	Fluence Factor @ EOL	Chem Factor	Chemistry Factor Method	Margin	Margin Method	Cu %	Ni %	P %	S %
1	LOWER NOZZLE BELT	127.3	0.118	3.0	B&W GENERIC	52.8	0.451	119.25	TABLE	70.7	POSITION 1.1 (NO S DATA)	0.180	0.850	0.008	0.010
	FORGING AHR54 (ZV2881)	117.9	0.079			44.2									
2	INTERMEDIATE SHELL	182.4	0.788	1.0	B&W GENERIC	87.8	0.938	104.50	TABLE	83.8	POSITION 1.1 (NO S DATA)	0.150	0.500	0.008	0.010
	PLATE C2197-2	164.0	0.838			99.3									
3	LOWER SHELL	198.1	0.888	1.0	B&W GENERIC	71.5	0.960	74.45	TABLE	83.8	POSITION 1.1 (NO S DATA)	0.110	0.630	0.012	0.017
	PLATE C2800-1	137.6	0.930			72.9									
4	LOWER SHELL	198.1	0.888	1.0	B&W GENERIC	71.5	0.960	74.45	TABLE	83.8	POSITION 1.1 (NO S DATA)	0.110	0.630	0.012	0.017
	PLATE C2800-2	137.6	0.930			72.9									
5	UPPER SHELL	443.8	0.984	1.0	B&W GENERIC	68.4	0.972	58.01	OVERRIDE	68.4	POSITION 2.1 (S DATA)	0.100	0.500	0.015	0.015
	PLATE C3285-1	128.4	0.932			63.7				63.6					
6	UPPER SHELL	443.8	0.984	1.0	B&W GENERIC	80.7	0.972	83.00	TABLE	83.8	POSITION 1.1 (NO S DATA)	0.120	0.800	0.010	0.018
	PLATE C3278-1	146.0	0.932			81.4									
7	INTERMEDIATE SHELL AXIAL WELDS SA-1073	211.8	0.828	-5.0	B&W GENERIC	148.4	0.870	170.80	TABLE	88.5	POSITION 1.1 (NO S DATA)	0.210	0.840	0.025	0.017
	WELD 1P0982	213.8	0.655			150.4									
8	NOZZLE BELT INT. SHELL CIRC WELD SA-1135	113.2	0.118	-5.0	B&W GENERIC	89.8	0.451	154.87	OVERRIDE	48.3	POSITION 2.1 (S DATA)	0.250	0.540	0.011	0.013
	WELD 81782	121.8	0.079			58.3				68.5			0.52		
9	INT./LOWER SHELL CIRC WELD SA-1229	233.4	0.798	-6.0	B&W GENERIC	170.0	0.938	181.80	OVERRIDE	88.5	POSITION 1.1 (NO S DATA)	0.280	0.610	0.021	0.012
	WELD 71249	225.6	0.844	10.0		159.6				56.0			0.59		
10	LS/DUTCHMAN CIRC. WELD WF-9	59.4	0.010	-5.0	B&W GENERIC	48.4	0.110	148.09	OVERRIDE	48.3	POSITION 2.1 (S DATA)	0.210	0.590	0.000	0.000
	WELD 72445														
11	UPPER/LOWER SHELL CIRC WELD SA-1585	483.5	0.888	-5.0	B&W GENERIC	140.2	0.960	148.00	OVERRIDE	48.3	POSITION 2.1 (S DATA)	0.210	0.590	0.016	0.018
	WELD 72445	216.8	0.899			153.3				68.5		0.22	0.54		
12	LOWER SHELL AXIAL WELDS SA-1428	202.2	0.728	-5.0	B&W GENERIC	138.7	0.911	152.25	TABLE	88.5	POSITION 1.1 (NO S DATA)	0.200	0.550	0.017	0.013
	WELD 8T1782	201.6	0.767			138.1		149.3				0.19			
13	LOWER SHELL AXIAL WELDS SA-1430	202.2	0.728	-5.0	B&W GENERIC	138.7	0.911	152.25	TABLE	88.5	POSITION 1.1 (NO S DATA)	0.200	0.550	0.017	0.015
	WELD 8T1782	201.6	0.767			138.1		149.3				0.19			
14	UPPER SHELL AXIAL WELDS SA-1493	201.8	0.728	-5.0	B&W GENERIC	138.7	0.909	152.25	TABLE	88.5	POSITION 1.1 (NO S DATA)	0.200	0.550	0.017	0.010
	WELD 8T1782	203.1	0.794			139.6		149.3				0.19			

Plant References and Beltline Material Notes

Fluence, chemical composition, and RTndts are from BAW-2186.

FTI document BG-1266231-01; PTS FTI document 32-5000884-00

Chemistry Factor for SA-1585 was calculated from Point Beach and Crystal River surveillance data that was reported in BAW-1803, Rev. 1. The surveillance welds were fabricated using the same weld wire heat number as SA-1585.

Chemistry Factor for SA-1135 was calculated from Ginna and Davis-Besse surveillance data that was reported in BAW-1803, Rev. 1. The surveillance welds were fabricated with the same weld wire heat number as SA-1135.

The UUSE data are from BAW-2222 (June 1994).

Surveillance data for heat 71249 was determined not credible, Table was used to calculate chemistry factor.

Encl Incima 9