



Duke Energy Corporation

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W. R. McCollum, Jr.
Vice President

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.

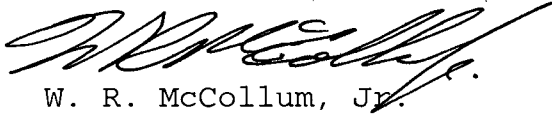
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If there are any questions regarding this submittal, please contact Michael Bailey at (864) 885-4390.

Very truly yours,



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

Attachments

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

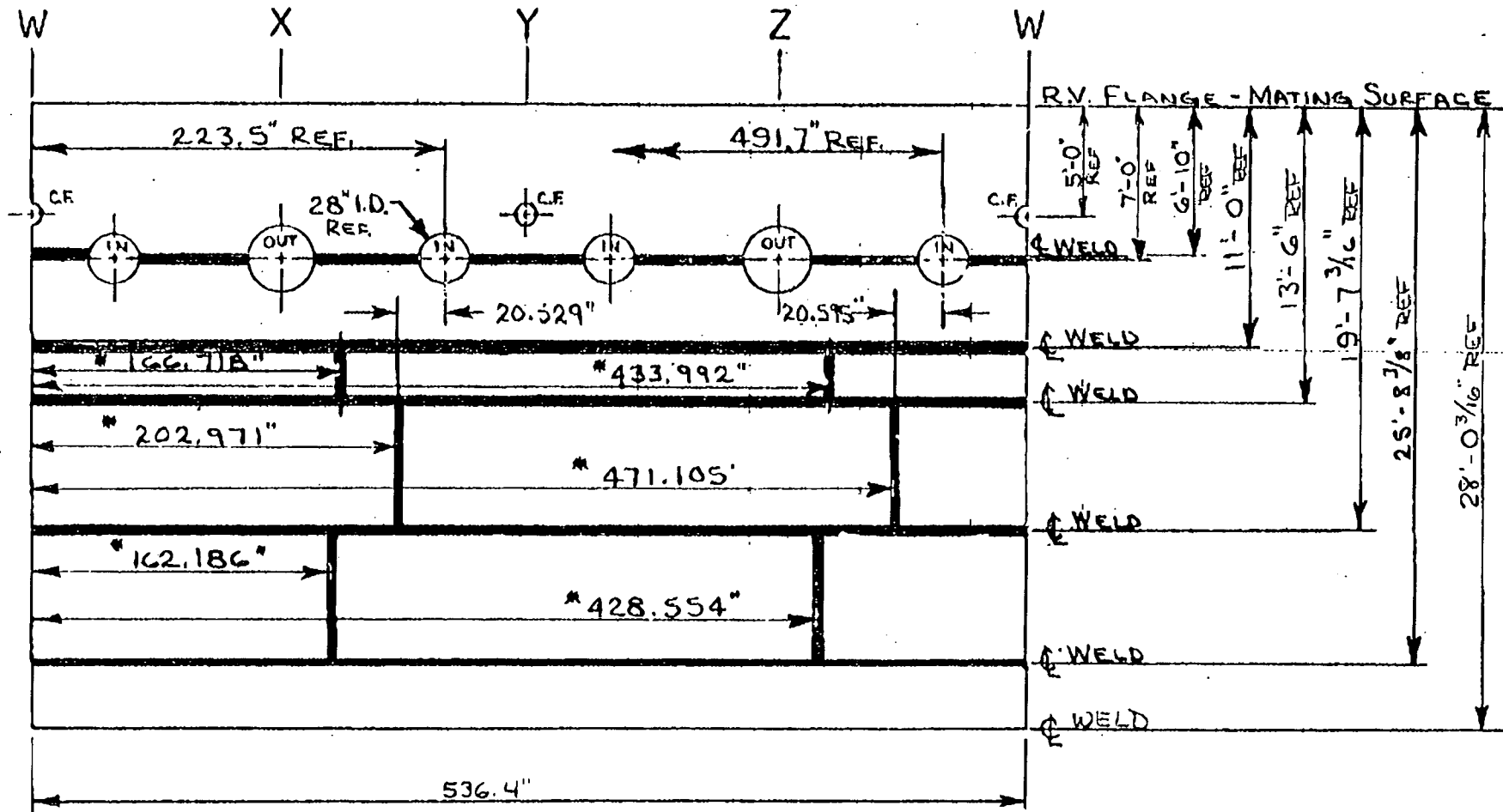
M. A. Scott, Senior Resident Inspector
Oconee Nuclear Site

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

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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	127.3 117.9	0.118 0.079	3.0	B&W GENERIC	53.8 44.2	0.451	119.25	TABLE	70.7	POSITION 1.1 (NO S DATA)	0.160	0.650	0.008	0.010
	FORGING AHR54 (ZV2881)														
2	INTERMEDIATE SHELL	162.4 164.0	0.788 0.838	1.0	B&W GENERIC	87.8 99.3	0.938	104.50	TABLE	83.6	POSITION 1.1 (NO S DATA)	0.150	0.500	0.008	0.010
	PLATE C2197-2														
3	LOWER SHELL	136.1 137.6	0.888 0.930	1.0	B&W GENERIC	71.5 72.9	0.960	74.45	TABLE	83.6	POSITION 1.1 (NO S DATA)	0.110	0.630	0.012	0.017
	PLATE C2800-1														
4	LOWER SHELL	136.1 137.6	0.888 0.930	1.0	B&W GENERIC	71.5 72.9	0.960	74.45	TABLE	83.6	POSITION 1.1 (NO S DATA)	0.110	0.630	0.012	0.017
	PLATE C2800-2														
5	UPPER SHELL	443.8 128.4	0.984 0.932	1.0	B&W GENERIC	68.4 63.7	0.972	58.01	OVERRIDE	68.4 63.6	POSITION 2.1 (S DATA)	0.100	0.500	0.015	0.015
	PLATE C3285-1														
6	UPPER SHELL	443.8 146.0	0.984 0.932	1.0	B&W GENERIC	80.7 81.4	0.972	83.00	TABLE	83.6	POSITION 1.1 (NO S DATA)	0.120	0.600	0.010	0.016
	PLATE C3278-1														
7	INTERMEDIATE SHELL AXIAL WELDS SA-1073	211.8 213.8	0.928 0.655	-5.0	B&W GENERIC	448.4 150.4	0.870	170.80	TABLE	88.5	POSITION 1.1 (NO S DATA)	0.210	0.640	0.025	0.017
	WELD 1P0962														
8	NOZZLE BELT INT. SHELL CIRC WELD SA-1135	113.7 121.8	0.118 0.079	-5.0	B&W GENERIC	89.8 58.3	0.451	154.87	OVERRIDE	48.8 68.5	POSITION 2.1 (S DATA)	0.250	0.540 0.52	0.011	0.013
	WELD 81782														
9	INT. LOWER SHELL CIRC WELD SA-1229	233.4 225.6	0.798 0.844	-6.0	B&W GENERIC	170.0 159.6	0.938	181.80	OVERRIDE	68.5 56.0	POSITION 1.1 (NO S DATA)	0.280	0.610 0.59	0.021	0.012
	WELD 71249														
10	LS/DUTCHMAN CIRC. WELD WF-9	59.4 59.4	0.010 0.010	-5.0	B&W GENERIC	48.4 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	483.5 216.8	0.888 0.899	-5.0	B&W GENERIC	440.2 153.3	0.960	148.00	OVERRIDE	48.3 68.5	POSITION 2.1 (S DATA)	0.210 0.22	0.590 0.54	0.016	0.016
	WELD 72445														
12	LOWER SHELL AXIAL WELDS SA-1428	202.2 201.6	0.728 0.767	-5.0	B&W GENERIC	438.7 138.1	0.911	162.25 149.3	TABLE	88.5	POSITION 1.1 (NO S DATA)	0.200 0.19	0.550	0.017	0.013
	WELD 8T1782														
13	LOWER SHELL AXIAL WELDS SA-1430	202.2 201.6	0.728 0.767	-5.0	B&W GENERIC	438.7 138.1	0.911	162.25 149.3	TABLE	88.5	POSITION 1.1 (NO S DATA)	0.200 0.19	0.550	0.017	0.015
	WELD 8T1782														
14	UPPER SHELL AXIAL WELDS SA-1493	201.8 203.1	0.728 0.794	-5.0	B&W GENERIC	438.7 139.6	0.909	162.25 149.3	TABLE	88.5	POSITION 1.1 (NO S DATA)	0.200 0.19	0.550	0.017	0.010
	WELD 8T1782														

Plant References and Beltline Material Notes

Fluence, chemical composition, and RTndts are from BAW-2166.

↳ FTI document 86-1266231-01; 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.

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