

December 3, 2004

Mr. Daniel J. Malone  
Site Vice President  
Palisades Nuclear Plant  
Nuclear Management Company, LLC  
27780 Blue Star Memorial Highway  
Covert, MI 49043-9530

SUBJECT: PALISADES PLANT - REVIEW OF THE REACTOR PRESSURE VESSEL  
SURVEILLANCE CAPSULE W-100 REPORT (TAC NO. MC2746)

Dear Mr. Malone:

By letter dated March 25, 2004, Nuclear Management Company (the licensee), submitted a reactor pressure vessel (RPV) surveillance capsule report for Capsule W-100 to Nuclear Regulatory Commission (NRC) in accordance with the requirement in Title 10 of the *Code of Federal Regulations* Part 50, Appendix H. Capsule W-100 was withdrawn from the RPV of Palisades, on March 28, 2003. The NRC staff's review of the submittal focused on two subjects: (1) to verify and compile the new and revised information on surveillance data in a format ready for Reactor Vessel Integrity Database (RVID) updating, and (2) to perform the chemistry factor calculation based on the added surveillance data to update the RVID. Impacts of the capsule results on pressurized thermal shock, upper shelf energy, and pressure-temperature limits were not evaluated at this time and a complete evaluation will be performed during the license renewal application process (expected in March 2005).

The NRC staff has completed its review of the licensee's surveillance report and found it acceptable. The NRC staff verified and compiled the new surveillance data for Capsule W-100 and generated the enclosed table for updating the RVID.

Sincerely,

**/RA/**

David H. Jaffe, Acting Project Manager, Section 1  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-255

Enclosure: Table

cc w/encl: See next page

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Docket No. 50-255

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DATE	12/02/04	12/02/04	11/15/04	12/03/04

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DOCUMENTATION AND EVALUATION OF ALL SURVEILLANCE DATA

NUCLEAR MANAGEMENT COMPANY, LLC

PALISADES PLANT

DOCKET NO. 50-255

Material*	Capsule	Fluence (10E <sup>19</sup> n/cm <sup>2</sup> )	FF (Fluence Factor)	$\Delta RT_{NDT}$ (EF) (a)	FF x $\Delta RT_{NDT}$	FF <sup>2</sup>	Scatter/ $\Delta RT_{NDT}$ -CFxFF (EF) (b)	Credible?	Meas .USE (ft-lb)
Plate-L D3803-1	W-290	.926	.976	176.8	172.56	.953	31.61	No	112.3
	W-110	1.66	1.14	179.5	204.63	1.3	9.92	Yes	102.7
	W-100	2.09	1.2	159.1	190.92	1.44	-19.4	No	102
	A-240	4.01	1.36	205.1	278.94	1.85	2.77	Yes	92.3
Plate-T D3803-1	W-290	.926	.976	158	154.21	.953	12.8	Yes	83.8
	W-100	2.09	1.2	142.5	171.0	1.44	-36.	No	73
	A-240	4.01	1.36	194.3	264.25	1.85	-8.02	Yes	68.4
	Sum:					1436.51	9.656		
$CF_{CF-D3803-1} = 1436.51/9.656 = 148.77^0 F$									
Surveillance Weld Material (Heat#3277)	W-290	.926	.976	286	279.14	.953	29.26	No	63
	W-110	1.66	1.14	304.8	347.47	1.3	4.92	Yes	57.8
	W-100	2.09	1.2	305.4	366.48	1.44	-10.26	Yes	51.8
	A-240	4.01	1.36	341.9	464.98	1.85	-15.85	Yes	50.8
	Sum:					1458.07	5.543		
$CF_{Surv. Weld} = 1458.07/5.543 = 263.05^0 F(c)$									

Notes:

a.  $\Delta RT_{NDT}$  values are measured.

b. Predicted  $\Delta RT_{NDT}$  is based on CF\*FF. For example, CF for plate, CF=148.77 and FF=0.976 and thus predicted  $\Delta RT_{ndt}$  is 148.77\*0.976=145.19. Hence the scatter is 176.8-145.19=31.61.

c. CF for weld is 263.05. However, the vessel heat number and capsule heat number are different and this CF should not be used for evaluating RV integrity.

ENCLOSURE

Palisades Plant

cc:

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October 2003