

ERRATA #2

Please note several corrections to the following document:

Title: An Evaluation of the Status of Diablo Canyon Unit 1 With Respect to
Reactor Pressure Vessel Condition Monitoring and Prediction
Part 2: Evaluation of Diablo Canyon Unit 1 Embrittlement

Date: 26 January 2024

Six minor errors in the subject report have been identified since its posting on the DCISC website. They are corrected and explained in this document.

Table 1, which appears on page 14 of this report, should be **modified as follows**. These changes are very small and do not affect the conclusions of the subject report, which depend exclusively on calculations concerning the welds.

Capsule Type	Type I	Type II	Copper (wt%)	Nickel (wt%)
Capsule Designations	T, U, X, W, Z	S, Y, V		
Lead Factors	3.57 for T & Z 1.17 for others	3.57 for S & Y 1.17 for V		
Intermediate Shell Plate B4106-1	8 CVN, 1 Tensile, 2 WOL	---	0.11 0.14	0.53
Intermediate Shell Plate B4106-2	8 CVN, 1 Tensile, 2 WOL	---	0.11 0.13	0.50
Intermediate Shell Plate B4106-3	8 CVN, 1 Tensile, 2 WOL	8 CVN, 2 Tensile, 2 WOL	0.077	0.46
Weld Heat 27204, Linde 1092 flux	---	8 CVN, 2 Tensile, 2 WOL	0.21	0.98
Heat Affected Zone	---	8 CVN	---	---
Correlation Monitor Material	8 CVN	8 CVN	0.14	0.68

Table 3, which appears on page 17 of this report, should be **modified as follows**. These changes are very small and do not affect the conclusions of the subject report, which depend exclusively on calculations concerning the welds.

Capsule	Program	Lead Factor	Installed before Fuel Cycle	Removed after Fuel Cycle	Removal Year	Status
S	Original	3.46 3.48	0	1	1986	Tested
Y		3.44 3.46	0	5	1992	
V		2.26	0	11	2002	
T		3.44 3.46	0	5	1992	Stored
Z		3.44 3.46	0	5	1992	
U		1.28 1.25	0	TBD	TBD	Standby
X		1.28 1.25	0	TBD	TBD	
W		1.28 1.25	0	TBD	TBD	
A		1.31 0.97	6	TBD	TBD	Planned Removal
B	Supplemental	3.46 2.58	6	24 or 25	2025	
C		3.46 1.86	6	12	2004	Stored
D		3.46 1.86	6	12	2004	

Table 4, which appears on page 18 of this report, should be **modified as follows**. This change is very small and does not affect the conclusions of the subject report, which depend exclusively on calculations concerning the welds.

Identifier	Copper (wt%)	Nickel (wt%)	Unirradiated RT _{NDT} (°C)	RT _{NDT} Type	Unirradiated USE (J)	Maximum Inner Diameter Fluence ÷ 1×10 ¹⁹ n/cm ²		Maximum ¼T Fluence ÷ 1×10 ¹⁹ n/cm ²	
						32 EFPY	54 EFPY	32 EFPY	54 EFPY
PLATE MATERIALS									
Intermediate Shell B4106-1	0.125	0.53	-23	NB-2331	157	1.23	2.02	0.73	1.20
Intermediate Shell B4106-2	0.12	0.5	-19	NB-2331	155	1.23	2.02	0.73	1.20
Intermediate Shell B4106-3	0.086	0.476	-1	Generic	104	1.23	2.02	0.73	1.20
Lower Shell B4107-1	0.13	0.56	-9	NB-2331	149	1.22	2.01	0.73	1.20
Lower Shell B4107-2	0.12	0.56	-7	NB-2331	140	1.22	2.01	0.73	1.20
Lower Shell B4107-3	0.12	0.52	-30	NB-2331	157	1.22	2.01	0.73	1.20
Surveillance (B4106-3)	0.086	0.476	--	--	160	--	--	--	--
WELD MATERIALS									
Intermediate Shell Longitudinal 2-442 A, B, and C (Heat 27204)	0.203	1.018	-49	Generic	123	A, B: 0.905 C: 0.463	A, B: 1.49 C: 0.768	A, B: 0.539 C: 0.267 0.276	A, B: 0.888, C: 0.458
Lower Shell Longitudinal 3-442 A, B, and C (Heat 27204)	0.203	1.018	-49	Generic	123	A, B: 0.721 C: 1.22	A, B: 1.19 C: 2.01	A, B: 0.43 C: 0.727	A, B: 0.709 C: 1.198
Intermediate to Lower Shell Circumferential 9-442 (Heat 21935)	0.183	0.704	-49	Generic	148	1.22	2.01	0.73	1.20
Surveillance (Heat 27204)	0.198	0.999	--	--	123	--	--	--	--

Table 5, which appears on page 20 of this report, should be **modified as follows**.

These changes have a minor effect on estimates of adjusted reference temperature for weld wire heat 27204 provided in the subject report. The magnitudes of these changes are very small and do not affect the conclusions of the subject report.

Plant	Capsule	Fluence $\div$ 1×10^{19} n/cm ²	Time Averaged Cold Leg Temperature (°C)	T ₄₁₁ (°C)	USE (J)	Cu (wt%)	Ni (wt%)
Diablo 1	--	0	--	-54.2	123.4	0.21	0.98
Diablo 1	S	0.283 0.284	284.4	7.3	109.8	0.21	0.98
Diablo 1	Y	1.05	283.3	75.0	81.3	0.21	0.98
Diablo 1	V	1.36 1.37	282.8 283.1	57.5	89.5	0.21	0.98
Palisades	--	0	--	-40.7	147.0	0.194	1.067
Palisades	SA-60	1.50	279.4	99.9	71.9	0.194	1.067
Palisades	SA-240	2.38	280	108.1	72.9	0.194	1.067

Table 7, which appears on page 39 of this report, should be **modified as follows**. This is a typographical error. Because the correct values of T₀ were used in the calculations there is no effect on the conclusions of the subject report.

Fluence $\div$ $1 \times$ 10^{19} n/cm ²	# specimens tested	# specimens meeting E1921 criteria	T ₀ reported in [MRP- 127] (°C)	T ₀ from Consultant's re-calculation (°C)	Unirradiated RT _{T0} from Consultant's re- calculation [°C]	Δ T ₀ from Consultant's re- calculation (°C)
0	9	9	-93.0	-92.5	-73.1	--
1.61	11	11	-43.0 +43.0	-42.0 +42.0	--	+134.5

In Figure 9, which appears on page 39 of this report, the caption should refer to weld wire heat 27204, not to weld wire heat 27207. This was a typographical error.