

NLS2024055 July 29, 2024

Attention: Document Control Desk U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

- Subject: Data from Metamic Coupon Sampling Program Cooper Nuclear Station, Docket No. 50-298, Renewed License No. DPR-46
- Reference: Letter from Stewart B. Minahan, Nebraska Public Power District, to U.S. Nuclear Regulatory Commission, dated April 17, 2007, "Response to Request for Additional Information Regarding License Amendment Request for Onsite Spent Fuel Expansion" (ML071240495)

The purpose of this letter is for the Nebraska Public Power District (NPPD) to provide to the Nuclear Regulatory Commission surveillance data from the Cooper Nuclear Station (CNS) Metamic coupon sampling program. The purpose of the sampling program is to characterize certain physical and chemical properties of the Metamic sample coupons in the CNS spent fuel storage pool (SFSP). Per the referenced letter, NPPD committed to remove a Metamic coupon from the SFSP for testing after 2, 4, 8, 12, 16, 20, 24, and 28 years, including performance of a neutron attenuation test after 4, 12, and 20 years. This letter pertains to the 16-year test.

Coupon 102-087C-2 was removed from the SFSP after sixteen years and the testing results are provided in the Enclosure. Inspection results indicated no bowing, pitting, or swelling. All measurements were within close tolerances of the pre-irradiation baseline data and all inspection acceptance criteria were met. The results indicate the Metamic coupon samples are not degrading within the SFSP environment, which indicates the SFSP Metamic fuel storage rack is not degrading.

There are no regulatory commitments made in this submittal. If you should have any questions regarding this submittal, please contact me at (402) 825-5416.

Sincerely.

Linda Dewhirst Regulator Affairs and Compliance Manager

/dv

Enclosure: Testing Data for Metamic Sample Coupon 102-087C-2

COOPER NUCLEAR STATION 72676 648A Ave / P.O. Box 98 / Brownville, NE 68321 http://www.nppd.com NLS2024055 Page 2 of 2

cc: Regional Administrator w/enclosure USNRC - Region IV

> Cooper Project Manager w/enclosure USNRC - NRR Plant Licensing Branch IV

Senior Resident Inspector w/enclosure USNRC - CNS

NPG Distribution w/enclosure

CNS Records w/enclosure

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## Enclosure

## Testing Data for Metamic Sample Coupon 102-087C-2

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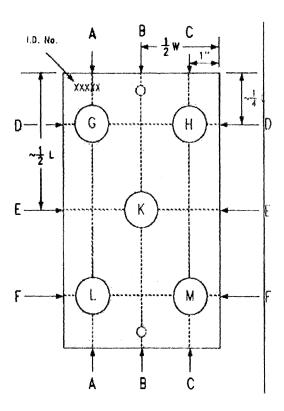
## ATTACHMENT 1 COUPON DATA FORM

ATTACHMENT 1 COUPON DATA FORM

Coupon ID: 102-0876-2

Visual Inspection Results: Nothing adverse found

Performed By: Mich Htend 2/24/2024



Serial Number	Data Point	<b>Baseline Data</b>	February 2024 Data	Delta of Base to 2024 Data	Acceptance Criteria
102-087C-2	Α	6.186	6.191	0.005	Good
	В	6.174	6.177	0.003	Good
Water Temp deg C	С	6.157	6.16	0.003	Good
22.3	D	4.095	3.997	0.098	Good
	E	4.088	3.994	0.094	Good
Water Density	F	4.088	3.992	0.096	Good
0.9978	G	0.08	0.082	0.002	Good
	н	0.08	0.082	0.002	Good
	к	0.08	0.082	0.002	Good
	L	0.08	0.081	0.001	Good
	М	0.08	0.082	0.002	Good
	Weight (D)	86.28	86.78	0.579508577	Good
	Weight (W)	54.18	54.29	0.203026947	Good
	Density	2.68	2.665		

Data for A through M is in inches. Weight is in grams. Delta of A through M is in inches. Delta for Weight is in % change. AC for Weight is Delta  $\le \pm 5\%$ . AC for A through F is  $\le \pm 0.125^{\circ}$ . AC for G through M is  $\le \pm 0.07^{\circ}$ .