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Nebrezka Public Power District

NLS9000196 July 31, 1990

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

Gentlemen:

Subject: Response to NRC Inspection Report No. 90-09 Cooper Nuclear Station NRC Docket 50-298, DPR-46

Reference: NRC Inspection Report 50-298/90-09 dated April 20, 1990.

NRC Inspection Report 90-09 (Reference 1) documents the NRC in pection of instrumentation calibration conducted at Cooper Nuclear Station (CNS) during the per'od April 2-6, 1990. Statements made in the Inspection Report indicate an aprarent misunderstanding may exist regarding the use of Okonite splices in instrumentation circuit applications. The Nebraska Public Power District (District) hereby provides some additional information to clarify its position regarding use of Okonite T95/35 tape splices in instrumentation applications.

The splicing of environmentally qualified equipment with Okonite T-95/35 tape is controlled through CNS Procedures 7.3.26.1, "Environmentally Qualified Okonite Tape Wrapped Cable Breakouts, Splices, and Terminations (Bolted)," and 7.3.26.2, "Environmentally Qualified Okonite Tape Wrapped Splices and Terminations (Crimped)." During the inspection, the NRC inspector reviewed Revisions 3 and 2 of these procedures. NRC Inspection Report 90-09 states, in part:

"The inspector found that the [Okonite splicing] procedure[s] did not permit the use of taped splices in harsh environments for instrumentation circuits."

The environmental qualification of Okonite is documented in Equipment Qualification Data Package (EQDP) 224. Sections E.3, "Normal Functional Requirements," and E.4, "Accident Functional Requirements," of EQDP 224 each state:

"Splices provide electrical interfaces to Class 1E electrical equipment. The splices are used on power, control and instrumentation leads."

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EQDP 224, in Subsection 5, "Functional Testing," of Section F, "Equipment Evaluation," documents further the qualification of Okonite tape splices for use in instrumentation circuits. This section states that during qualification testing, the Okonite splices demonstrated a minimum insulation resistance of 9 X 10⁷ ohms. In addition, Design Input (DI) 2407, "Loop Accuracy Calculations," (Reference 20 of EQDP 224) demonstrates analytically the acceptability of Okonite splices in instrumentation and control applications. Therefore, the environmental qualification of Okonite splices in instrumentation applications is well documented.

It is the intent of CNS Procedures 7.3.26.1 and 7.3.26.2 to allow use of Okonite tape splices in instrumentation applications. However, the District acknowledges that CNS Procedures 7.3.26.1 and 7.3.26.2 may need further clarification in their application statement. Section 1.0, "Purpose" of both of the above procedures state:

"To provide Maintenance personnel with instructions for making Okonite tape wrapped splices and lead terminations . . . on EQ (Environmentally Qualified) components and power or signal and control cables rated at 1000 volts or less . . ."

The above purpose statement allows use of Okonite splices in "signal" cables. The intent of this statement was that "signal" carrying cables encompasses instrumentation circuits. To ensure future clarity, the District will revise these procedures to clearly indicate acceptability of Okonite in instrumentation applications.

Please contact me if you have any questions.

Sincerely,

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Senior Staff Advisor Nuclear Power Group

cc: U. S. Nuclear Regulatory Commission Regional Office, Region IV

> Resident Inspector Cooper Nuclear Station