

Bruce J. Rash Vice President Nuclear Engineering

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102-07868-BJR/MMD March 6, 2019

ATTN: Document Control Desk U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

Reference:

Palo Verde Nuclear Generating Station Interim 10 CFR 21 Report for General Electric Hitachi (GEH) Relay Contact Cartridge DJ148C6159P001,

dated September 26, 2018, NRC Log Number 2018-23-00

Dear Sirs:

Subject:

Palo Verde Nuclear Generating Station (PVNGS) Units 1, 2, and 3

Docket No. STN 50-528, STN 50-529, and STN 50-530

License No. NPF 41, NPF 51, and NPF 74

10 CFR 21 Follow-up Report for General Electric Hitachi (GEH)

Relay Contact Cartridge DJ148C6159P001

Arizona Public Service (APS) Company has completed the evaluation described in the reference interim report previously submitted pursuant to 10 CFR 21.21(a)(2). The evaluation concluded that the deviation did not constitute a substantial safety hazard. and is therefore not a defect.

During pre-installation testing, a GEH Relay Contact Cartridge was identified as missing contact pads on the movable contact bifurcated arm. These contact pads mate with the stationary contact tips and provide a low resistance surface that minimizes the potential for arcing as the contacts open and close.

Engineering staff performed an evaluation that included operating experience review and testing. The testing bounded the most limiting electrical scenarios for the GEH Relay Contact Cartridge and focused on the potential effect of the deviation on the cartridge's design functions in both alternating and direct current applications.

The number of cycles for each test was higher than the estimated number of operations installed in the plant to ensure the tests were thorough. The tests confirmed adequate conductance and resistance and showed minimal degradation on the pad-less contact cartridge.

APS concluded that the pad-less cartridge would have performed its design function for its safety-related applications and would not have created a substantial safety hazard.

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10 CFR Part 21 Follow-up Report for GEH Contact Cartridge DJ148C6159P001

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The 10 CFR 50, Appendix B, vendor and affected components described in the referenced interim report are provided below:

> Vendor: General Electric -Hitachi Nuclear Energy 3901 Castle Hayne Rd WILMINGTON, NC 28402-2819

Device:

Relay Contact Cartridge, GEH part number DJ148C6159P001

In accordance with 10 CFR 50.4, copies of this notification are being forwarded to the NRC Regional Office, NRC Region IV and the Senior Resident Inspector.

No commitments are being made to the NRC by this letter.

If you have any questions or require additional information, please contact Matthew Kura, Regulatory Affairs Department Leader, at (623) 393-5379.

Sincerely,

cc: S. A. Morris NRC Region IV, Regional Administrator

S. P. Lingam NRC NRR Project Manager for PVNGS

C. A. Peabody NRC Senior Resident Inspector for PVNGS