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102-07749-BJR/DCE  
September 26, 2018

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

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  
Interim 10 CFR 21 Report for General Electric Hitachi (GEH)  
Relay Contact Cartridge DJ148C6159P001**

Enclosed please find an interim report for an apparent deviation related to a workmanship problem on a basic component identified during pre-installation testing of a refurbished GEH Relay Contact Cartridge DJ148C6159P001. This report is being submitted pursuant to 10 CFR 21.21(a)(2).

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.

Arizona Public Service Company makes no commitments in this letter. If you have questions regarding this submittal, please contact Matthew Kura, Nuclear Regulatory Affairs Department Leader, at (623) 393-5379.

Sincerely,

A handwritten signature in black ink, appearing to read "Bruce J. Rash", written over a white background.

BJR/LMW

Enclosure: Interim 10 CFR 21 Report for GEH Relay Contact Cartridge  
DJ148C6159P001

cc: K. M. Kennedy NRC Region IV Regional Administrator  
M. D. Orenak NRC NRR Project Manager for PVNGS  
C. A. Peabody NRC Senior Resident Inspector PVNGS

# **Enclosure**

**Interim 10 CFR 21 Report for GEH Relay  
Contact Cartridge DJ148C6159P001**

**Enclosure**  
**Interim Part 21 Report for General Electric - Hitachi Relay Contact Cartridge**  
**DJ148C6159P001**

On August 1, 2018, Arizona Public Service Company (APS) documented a deviation in a component associated with a potential defect related to General Electric - Hitachi (GEH) Relay Contact Cartridge DJ148C6159P001 at Palo Verde Nuclear Generating Station (PVNGS). This interim report is being submitted pursuant to 10 CFR 21.21(a)(2).

APS will complete the evaluation of the deviation by February 27, 2019. The additional time beyond 60 days is necessary because of the effort needed to evaluate the potential effect of the deviation on the safety functions of the numerous applications that use this contact cartridge.

Pursuant to 10 CFR 21.21(a)(2), the following information is provided related to the deviation:

During pre-installation testing, a GEH Relay Contact Cartridge DJ148C6159P001 was identified as missing contact buttons on the movable contact bifurcated arm. These contact buttons mate with the stationary contact tips and provide a low resistance surface that minimizes the potential for arcing as the contacts open and close.

GEH was contacted and concurred that the missing contact buttons is a deviation from the intended configuration and that no cycle testing has ever been performed on these cartridges without contact buttons. GEH stated the presumed effects would be for the contacts to arc and in a worst case scenario, arc weld shut.

APS performed an inspection of warehouse stock and identified one additional cartridge out of 84 that was missing pads.

APS determined the contact cartridge is used in 829 components at Palo Verde. None of the devices are known to contain a contact cartridge with missing contact buttons.

APS received the following information via a 10 CFR 21.21(b) notification from GEH, dated September 6, 2019, following the discussion with them:

- This cartridge, GEH part number DJ148C6159P001, is sold solely to PVNGS.
- Contact cartridges currently in stock at GEH have been inspected to verify that the conditions described in this evaluation are not present.
- Delivery of this part has been suspended pending completion of in-house corrective action evaluation.

The following information is provided:

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

Device:  
Contact Cartridge, GEH part number DJ148C6159P001