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September 6, 2017
GO2-17-156

10 CFR 21

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

Subject: **COLUMBIA GENERATING STATION, DOCKET NO. 50-397
10 CFR 21 NOTIFICATION**

Dear Sir or Madam:

Transmitted herewith is a 10 CFR 21 Notification for Columbia Generating Station. This report is submitted pursuant to 10 CFR 21.21(d)(3)(ii). This information was initially reported to the Nuclear Regulatory Commission Operations Center on August 17, 2017 via Event Notification #52913.

The enclosure provides the information required by 10 CFR 21.21(d)(4).

There are no commitments being made to the Nuclear Regulatory Commission by this letter. If you have any questions or require additional information, please contact Ms. D.M. Wolfgramm, Regulatory Compliance Supervisor, at (509) 377-4792.

Executed on this 6th day of September, 2017

Respectfully,

A handwritten signature in black ink, appearing to read "Alex L. Javorik", written over a horizontal line.

A. L. Javorik
Vice President, Engineering

Enclosure: 10 CFR 21.21(d)(4) Notification, GE-Hitachi Relays HMA124A2

cc: NRC Region IV Administrator
NRC NRR Project Manager
NRC Senior Resident Inspector/988C
CD Sonoda – BPA/1399
WA Horin – Winston & Strawn

**10 CFR 21.21(d)(4) Notification
GE-Hitachi Relays HMA124A2**

(i) Name and address of the individual or individuals informing the Commission.

Alex Javorik
Vice President, Engineering
Columbia Generating Station
Energy Northwest
PO Box 968
Richland, WA 99352

(ii) Identification of the facility, the activity, or the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect.

Facility:
Columbia Generating Station
PO Box 968
Richland, WA 99352

Basic Component:
General Electric Nuclear
Instantaneous Auxiliary Relay
Type HMA124A2

(iii) Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect.

General Electric - Hitachi Nuclear Energy Americas LLC
3901 Castle Hayne Road
Wilmington, NC 28401

(iv) Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.

Contrary to the outline figure of the panel drilling and internal connections of the HMA124A relay in the GE instruction manual, two relays supplied as basic components were found with the back plate mounted incorrectly. The incorrect configuration of the back plate resulted in the terminal numbers to be mis-aligned to the designed configuration. However, because the internal wiring was as per design, relays installed with this configuration would be mis-wired.

The substantial safety hazard which could be created by the incorrectly configured back plate is the failure of the basic component to energize when

required. Two potential conditions could occur if the incorrectly configured back plate is not corrected:

- the relay would not have the internal coil wired to the correct part of the control circuitry and would not be energized when required
- the relay would not have the contacts wired to the correct part of the control circuitry and would not energize, or would de-energize other control devices when required.

(v) The date on which the information of such defect or failure to comply was obtained.

The assessment for Part 21 was completed on August 12, 2017, and determined that the identified deviation constituted a defect in accordance with 10 CFR 21.3.

An officer of the company was notified of the defect and Part 21 reporting requirement on August 15, 2017.

Notification to the Nuclear Regulatory Commission of the defect was completed on August 17, 2017 via Event Notification #52913, by the Manager of Regulatory Affairs as delegated by the Vice President of Engineering.

(vi) In the case of a basic component which contains a defect or fails to comply, the number and location of these components in use at, supplied for, being supplied for, or may be supplied for, manufactured, or being manufactured for one or more facilities or activities subject to the regulations in this part.

Two relays supplied as basic components were identified with the defect, neither of which was installed in any plant equipment.

Although the defective relays were never installed in plant equipment, the HMA124A2 relays are approved for use in the following locations:

High Pressure Core Spray System – 23 components
Low Pressure Core Spray System – 7 components
Main Steam System – 57 components
Reactor Core Isolation Cooling System – 25 components
Residual Heat Removal System – 27 components

- (vii) The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.**

The defect was easily detected by Maintenance craft utilizing standard calibration practices that are performed on all plant-installed relays. The non-conforming relay was originally identified prior to installation while performing calibration of the relay; a new non-defective relay was calibrated and installed. Station staff evaluated the remaining relays and verified the configuration of the back plates. One additional relay was found out of configuration and was removed from warehouse storage. All actions were completed the same day the issue was identified.

- (viii) Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.**

Do not solely rely on the terminal numbers on the back plate when wiring the relays.

- (ix) In the case of early site permit, the entities to whom an early site permit was transferred.**

Not applicable.