



Date: 05/24/2024

To: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555

10CFR Part 21 Initial Notification: P21-05242024-IN, Rev. 0

Subject: Defect with Emergency Diesel Generator Voltage Regulator Part Number NLI-3S7950GR751A1

Paragon has identified a defect in the subject voltage regulator supplied as identified below.

Plant	Client PO#	Project Number	Serial #	QTY
AEP DC Cook	01600229	351030025	NLI-3S7950GR751A1-1007	1

Pursuant to 10CFR Part 21 § 21.21(d)(3)(i) Paragon is providing initial notification of a defect associated with the Emergency Diesel Generator Voltage Regulator as noted in the table above. The voltage regulator was refurbished under the customer purchase order noted above. Part of the refurbishment involved complete replacement of the units wiring, physical inspection and testing of the unit to Paragon approved acceptance testing instructions. The refurbished unit was supplied to the customer in December 2023. Prior to installation (March 2024), the unit successfully passed bench testing at the plant. During post installation testing, the emergency diesel generator was started, and the output voltage pegged high and was not controllable. DC Cook subsequently removed the voltage regulator and documented the non-conformance. DC Cook troubleshooting determined the unit was mis-wired. The unit was returned to Paragon, and inspection confirmed the plant's diagnosis. The identified mis-wire affects the system circuitry by placing silicon controlled rectifier 5CD in a reverse biased position. The reversed biased rectifier blocks the flow of current which creates an open circuit condition. This open circuit condition causes the output voltage to max out and does not allow the output voltage to be adjusted. This condition, if left uncorrected could contribute to a substantial safety hazard and is reportable in accordance with 10CFR Part 21.

Date of Discovery: May 9th, 2024

Reportability Determined: May 23rd, 2024

Paragon has entered this condition in our corrective action program, and we have custody of the effected unit. The extent of condition is limited to this unit supplied to DC Cook. Paragon has determined there is no action necessary for DC Cook at this time.

Sincerely,

Richard Knott

Vice President Quality Assurance, Paragon Energy Solutions.

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