

10CFR21 NOTIFICATION LETTER

April 12, 2023

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

Subject: 10CFR21 Notification for Schneider Electric P/N: ASP840-000 Primary/Secondary Power Supply

The purpose of this letter is to provide the NRC with a report in general conformity of the requirements of 10CFR Part 21.21. On September 7, 2022, Dominion's Surry Power Station notified United Controls International (UCI) that Qty. 3 Schneider Electric P/N: ASP840-000 Modicon Primary/Secondary Power Supply units that were supplied by UCI in 2014 had failed after installation. Hard failures that shutdown the associated PLC were observed. The first unit was installed since June 6, 2017 and then failed in August of 2022. The second and third units failed approximately 3 days after installation. All units appeared to function properly at initial installation.

The subject items were returned to UCI on October 19, 2022 for evaluation. Items were received at UCI with substantial shipping damage noted. One item was received with a loose transformer inside the unit. All items were received with bent or cracked cases. These issues are attributed to poor shipping practices as items were not supplied in such conditions and these issues would have been noted at receipt by the utility. Due to the complexity of the items and unavailability of design documentation for these obsolete items, further evaluation of item failures required manufacturer (Schneider Electric) evaluation. UCI returned all Qty. 3 items to the manufacturer for evaluation of failed components. The manufacturer was able to repair Qty. 1 item by replacing several capacitors, transistors, integrated circuits, and resistors; however, a specific cause of the failure could not be identified. The remaining Qty. 2 items were determined to be unrepairable, and cause of failure could not be identified.

UCI is not capable of providing any further evaluation as to the root cause of the subject module failures. The item manufacturer Schneider Electric was also unable to provide a determination as to the cause of failure. Since the root cause of failure cannot be determined or inspected for, UCI will no longer be supplying these modules which are now obsolete.



Required information as per 10CFR Part 21.21(d)(4) follows:

(i) Name and Address of the individual or individuals informing the Commission
Rob Hale
President
United Controls International
205 Scientific Drive
Norcross, GA 30092

(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.

Schneider Electric P/N: ASP840-000 Primary/Secondary Power Supply

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

United Controls International 205 Scientific Drive Norcross, GA 30092

(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.
 Dominion Surry Power Station informed UCI that Qty. 3 Schneider Electric P/N: ASP840-000 primary/secondary power supplies experienced hard failures that shutdown the associated PLC. The first unit was installed on June 6, 2017 and

failed in August of 2022. The second and third units failed approximately 3 days after installation. UCI and Schneider Electric were not capable of identifying the root cause of failure for these items.

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

Dominion's Surry Power Station notified UCI of the subject item failures on September 7, 2022. UCI requested three evaluation extensions on November 4, 2022; January 3, 2023; and March 3, 2023 due to the need for the item manufacturer (Schneider Electric) to perform evaluation of failure. The affected items were returned to UCI from Schneider Electric on 04/03/2023 after which UCI performed additional receipt inspection of item condition.



(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.

Part Number	Utility	Purchase Order	Quantity
ASP840-000	Dominion – North Anna	45627445	2
		45626843	2
	Dominion – Surry Power Station	4500073675	4

(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.
 Since UCI and the item manufacturer (Schneider Electric) were not capable of

identifying the root cause of the subject item failures. UCI will not be able to supply the subject Schneider Electric P/N: ASP840-000 power supplies in the future. The utilities that UCI has supplied these items to have been notified of the issue.

(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.

Cause of failures is unknown, UCI and Schneider Electric were not capable of providing further evaluation regarding cause of failures.

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

Not Applicable.



If you have any questions or wish to discuss this matter or this report, please contact:

Wesley Hickle Engineering Manager whickle@unitedcontrols.com 770-496-1406 x 165

Sincerely,

Rob Hale President

United Controls International