Part 21 (PAR) Event # 47975

Rep Org: ABB INC

Notification Date / Time: 05/29/2012 17:07 (EDT)

Supplier: ABB INC

Event Date / Time: 03/29/2012 (EDT)

Last Modification: 04/01/2013

Region: 1 Docket #:

City: CORAL SPRINGS Agreement State: Yes

County: License #:

State: FL

NRC Notified by: DENNIS BATOVSKY

Notifications: HIRONORI PETERSON R3DO

HQ Ops Officer: MARK ABRAMOVITZ PART 21 GROUP

**Emergency Class: NON EMERGENCY** 

10 CFR Section:

21.21(a)(2) INTERIM EVAL OF DEVIATION

## PART 21 NOTIFICATION - PROTECTIVE RELAYS MAY NOT BE QUALIFIED FOR HARSH ENVIRONMENTS

The following report was received via fax:

"During the commercial grade dedication process for a unit that was returned for repair, the unit was found to be in nonconformance with ABB specifications. The ABB specifications require that two (2) particular components, integrated circuits (ICs) of plastic construction, are replaced with 2 ICs of ceramic construction during the assembly process. The chips found on the harmonic filter circuit board (HF Board) of the relays were of plastic construction. While plastic ICs are approved for use in commercial relays, they have not been qualified for safety-related applications. Relays in this condition will function normally in mild environments, but have not been qualified for harsh environments, or for elevated radiation environments."

The affected solid state relays are 27N and 59G shipped between August 1, 2010 and October 15, 2010.

"Eighteen (18) Relays (Material number: 211T4175-HF-1E) were sold to ABB Florence who in turn shipped the same to Detroit Edison's Fermi 2 Power Plant."

## \* \* \* UPDATE FROM TAUZER TO SNYDER AT 1730 EDT ON 4/1/13 \* \* \*

The supplier has concluded that the solid state relays with the plastic encapsulate are qualified for Class 1E applications.

"ABB Coral Springs is providing this letter to close the interim report and notice of deviation from specification requirements associated with Solid State Relays 27N and 59G dated May 29, 2012 (Event ML12153A030).

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"As stated in the interim report, one of the actions to be completed was the qualification and testing of representative plastic ICs to confirm acceptability and use in safety-related applications.

"This letter is a follow-up notification that the plastic IC qualification and testing is complete, and based upon the results, we have concluded that the ICs with the plastic encapsulate are qualified for Class 1E applications specific to the subject relays.

"Affected customers have been notified."

Notified R3DO (Daley) and Part 21 Reactors (Email).



March 28, 2013

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

Subject: 10 C.F.R. Part 21 Notifications of Potential Defect, Solid State Relays 27N and 59G

Closure of Interim Report dated May 29, 2012 (Event ML12153A030)

Notification By: ABB Inc.

Distribution Automation 4300 Coral Ridge Drive Coral Springs, FL 33065

Dear Sir or Madam,

ABB Coral Springs is providing this letter to close the interim report and notice of deviation from specification requirements associated with Solid State Relays 27N and 59G dated May 29, 2012 (Event ML12153A030).

As stated in the interim report, one of the actions to be completed was the qualification and testing of representative plastic ICs to confirm acceptability and use in safety-related applications.

This letter is a follow-up notification that the plastic IC qualification and testing is complete, and based upon the results, we have concluded that the ICs with the plastic encapsulate are qualified for Class 1E applications specific to the subject relays.

Affected customers have been notified.

Very truly yours,

Bryan Tauzer For

Dennis Batovsky Managing Director