ABB

March 8, 2010

Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001
FAX 301-816-5151

Subject: Amended 10CFR Part 21 Notification of Deviation re. P/N 1SDA055274R1 Close Coil

Dear Sir or Madam:

ABB is amending its earlier notification letter of February 18, 2010 as a result of a change to the replacement standard close coil as detailed in the corrective action section of this letter. This letter provides notification of a potential failure of a breaker component to comply with design specifications associated with P/N 1SDA055274R1 Close Coil x Lamp manufactured by ABB Sace TMS SPA, and sold by ABB Inc. to Southern Company. Information is provided as specified in 10 C.F.R. § 21.21(d) (4).

The notifying individual is Mr. Jay Lavrinc, Plant Manager, ABB Inc. (Medium Voltage Service), 2300 Mechanicsville Road, Florence, SC 29501.

The identification of the subject component is as follows: ABB P/N 1SDA055274R1 Close Coil x Lamp. These close coils are used in Sace EMAX breakers exclusively provided to Southern Nuclear Company plant Vogtle for safety related applications. The close coils are used to release stored energy that in turn closes the breaker. The failure is limited to applications with constant voltage applied to the close coil. Intermittent use of the close coil has not resulted in any failures.

ABB Sace EMAX circuit breakers procured from ABB between 2006 to present for Plant Vogtle may have suspect close coils installed where the particular application requires constant control voltage to be applied to the close coil.

Nature of the deviation: A 125VDC Close Coil x Lamp for EMAX E1/3UL breaker, code 1SDA055274R1, serial number G0869A011 failed during operation at SNC Plant Vogtle during operation. A failure analysis indicated that the resistors on the electronic board fail to an open circuit status. On January 14, 2010, a failure analysis indicated that the resistors fail to a short circuit status prior to failing open. In this failure mode, the internal temperature increases to a point where the plastic core melts and thereby can potentially block the operation of the internal plunger. In such a case, the breaker remains closed, but if the breaker is opened then a new closing command is not possible.

IE19
NRR

ABB Inc.

2300 MECHANICSVILLE ROAD
FLORENCE, SC 29501 USA

MEDIUM VOLTAGE SERVICE

PHONE (843) 413-4700
FACSIMILE (843) 413-4850

ABB

ABB is taking, or has taken, the following corrective actions:

a. As noted above, the only affected customer is Southern Company's Nuclear Plant Vogtle, and ABB has discussed this issue with Southern Company. An initial notification letter was issued on 2-18-2010.
b. ABB will provide a standard close coil 1SDA0383013R1. This part number has been updated from the 2-18-2010 notification and is based on ABB Sace input. This solution will be limited to applications that do not require the low impedance in the close coil for lamp applications.

Given the large number of applications for the affected circuit breakers, ABB (Medium Voltage Service) cannot determine if the potential for a substantial safety hazard exists at this licensee's facility if a similar failure of the close coil occurs. As noted above, the failure has been limited to applications that require continuous close coil duty. No failures have been reported or produced in testing in applications with intermittent use of the close coil. The Licensee is requested to evaluate the application of affected breakers to determine the priority of close coil replacement.

If you have any questions regarding this notice, please be so kind as to contact the Quality Manager, Mr. Victor Romano, directly at 843-472-4727.

Very truly yours,

J. Lavrinc

Jay Lavrinc
Plant Manager

ABB Inc.

2300 MECHANICSVILLE ROAD
FLORENCE, SC 29501 USA

MEDIUM VOLTAGE SERVICE

PHONE (843) 413-4700
FACSIMILE (843) 413-4850