

Part 21 (PAR)

Event # 47089

Rep Org: ABB, INC. Supplier: ABB, INC.	Notification Date / Time: 07/22/2011 13:55 (EDT) Event Date / Time: 07/22/2011 (EDT) Last Modification: 07/22/2011
Region: 1 City: CORAL SPRINGS County: State: FL	Docket #: Agreement State: Yes License #:
NRC Notified by: DENNIS BATOVSKY HQ Ops Officer: STEVE SANDIN Emergency Class: NON EMERGENCY 10 CFR Section: 21.21 UNSPECIFIED PARAGRAPH	Notifications: GLENN DENTEL R1DO MARVIN SYKES R2DO NRR PART21 GP

PART 21 REGARDING KF PROTECTIVE RELAY - DEFECTIVE CAPACITOR

The following information was received via fax and email:

"Subject: 10 C.F.R. Part 21 Notification of Deviation regarding KF Protective Relay - Defective Capacitor

"On June 2, 2011, Constellation Energy reported that two relays caused unnecessary breaker trips three weeks after the relays were placed in service. Their investigation found that the Under-frequency Trip setpoint had drifted from the pre-set value of 57.77 Hz to 60.316 and 61.2 Hz.

"Our investigation determined that both relays contained a defective capacitor (ABB Part Number #606B340H07). The capacitor should have measured 0.225 µf (micro-farads) ± 3%. Actual measured value of the capacitors was 0.195 µf and 0.208 µf. A failure analysis conducted by Arizona Capacitor Corporation identified the capacitors were incorrectly constructed with metalized film, instead of oil impregnated paper/film/oil, as required by ABB design specifications. These capacitors were manufactured by Aldon Corporation, with a date code of April 4, 2008.

"Per 10 C.F.R. 21.21 (b), we do not have the capability to perform the evaluation to determine if a defect exists, and will notify the purchasers or affected licensees within five working days. Currently, we believe there are a total of six suspect relays, provided to three customers."

The three customers are:

WESCO located in Murrysville, PA, KF Relay Style 1328D72A02A, S/N 12027, 12028A, Qty 2,
ABB Inc located in Florence, SC, KF Relay Style 1328D72A02A, S/N 12253, Qty 1 and,
ABB Ltd located in Cheonan, South Korea, KF Relay Style 1328D72A01, S/N 12025, 12026, 12366, Qty 3.

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July 21, 2011

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

Subject: 10 C.F.R. Part 21 Notification of Deviation regarding KF Protective Relay – Defective Capacitor

Dear Sir or Madam:

On June 2, 2011, Constellation Energy reported that two relays caused unnecessary breaker trips three weeks after the relays were placed in service. Their investigation found that the Under-frequency Trip setpoint had drifted from the pre-set value of 57.77 Hz to 60.316 and 61.2 Hz.

Our investigation determined that both relays contained a defective capacitor (ABB Part Number #606B340H07). The capacitor should have measured 0.225 μf (micro-farads) \pm 3%. Actual measured value of the capacitors was 0.195 μf and 0.208 μf . A failure analysis conducted by Arizona Capacitor Corporation identified the capacitors were incorrectly constructed with metalized film, instead of oil-impregnated paper/film/oil, as required by ABB design specifications. These capacitors were manufactured by Aldon Corporation, with a date code of April 4, 2008.

Per 10 C.F.R. 21.21(b), we do not have the capability to perform the evaluation to determine if a defect exists, and will notify the purchasers or affected licensees within five working days. Currently, we believe there are a total of six suspect relays, provided to three customers.

Very truly yours,

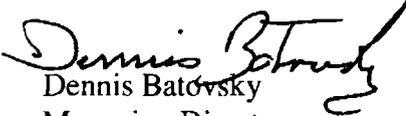

Dennis Batovsky
Managing Director

ABB Inc.

From: [Rene Henriquez](#)
To: [HCO Hoc](#)
Cc: [Dennis F. Batovsky](#); [Terence P. Malloy](#)
Subject: KF Relay - List of Affected Customers
Date: Friday, July 22, 2011 2:47:00 PM

Hello, Mr. Sandin - Dennis Batovsky told me you had called and requested a list of customers who have purchased nuclear safety-related KF Relays that may be impacted by our recent notification regarding a defective capacitor, as reported to the NRC in our letter. Please see the list below. Per 10CFR21.21(b), we have notified each of these customers.

Please do not hesitate to contact me if I may provide any additional information.

Best regards,

Rene Henriquez
954.825.0622

Customer	Address1	Address2	KF Relay Style	Serial Numbers	Qty
WESCO	1 Wesco Drive	Murrysville, PA 15668	1328D72A02A	12027, 12028A	2
ABB Inc	2300 Mechanisville Hwy.	Florence, SC 29501	1328D72A02A	12253	1
ABB Ltd	Chungchungnam-do 513 Sungsung-Dong	Cheonan, South Korea 330-300	1328D72A01	12025, 12026, 12366	3