



September 28, 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 Potential Defect, Solid State Relays – Update of Previous Notification (reference: ML111250239)

Dear Sir or Madam:

This letter provides updated information regarding the notification of a failure to comply with specifications associated with the SS5 Relay, Part Number 611130-T13-N, previously submitted May 2, 2011.

The notifying individual is Mr. Dennis Batovsky, Managing Director, ABB Inc. (Protective Relay and Switches) 4300 Coral Ridge Drive, Coral Springs FL, 33065.

This update adds the following relays as subject components:

Type	Part Number	Type	Part Number
SS4	609901-K101-N	SS3	609902-T203-N
SS3G	609901-T106-N	SS5G	609902-T205-N
SS3G	609901-T106-NR	SS3G	609902-T206-N
SS4	609902-K101-N	SS3G	609902-T301-N
SS3	609902-K103-N	SS4G	609902-T304-N
SS3	609902-K203-N	SS4	609903-K101-N
SS4G	609902-T104-N	SS3G	609903-K106-N
SS4G	609902-T104-NR	SS4	609903-T201-N
SS3G	609902-T106-N	SS3	609903-T203-N
SS3G	609902-T106-NR	SS14	609903-T210-N
SS4	609902-T201-N	SS4	609905-T201-N

The instantaneous trip function of the relay may actuate at 16 times normal current instead of the design value of 24 times normal current.

As previously reported, ABB was notified by Progress Energy – Brunswick plant (“Brunswick”) that spare relays being tested prior to being placed in service were tripping at approximately 4700 amps instead of the expected 7200 amps. Brunswick stated that their applications require having a short time delay for all faults up to the 24 times instantaneous value is critical for system design and compliance with their design basis and licensing documents.

ABB Inc.

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Subsequent evaluation by ABB Engineering determined that the relay works as intended. However, if there is a fault at the same time the relay is energized, the instantaneous unit becomes more sensitive, and will operate at lower than expected current level.

For conditions where a fault occurs downstream of an associated in-service circuit breaker, the relay works as intended, for single phase, phase to phase, and three phase fault conditions.

ABB Engineering determined that other similar relays of different ratings may have a similar deviation from technical specifications.

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

- Affected relay part numbers have been made obsolete to prevent future sales.
- Stopped production of all affected relays until corrective action is implemented.
- The Circuit board assembly, 611856-T1, T2, T3, will be made obsolete and replaced by 611857-T1, T2, T3 accordingly, which do not exhibit this deviation.
- ABB acknowledges the response time for this report is beyond the required reporting window and has initiated a separate corrective action to address this problem.

ABB does not have the capability to perform the evaluation to determine if a defect exists, so we are informing the purchasers or affected licensees of this determination so that the purchasers or affected licensees may evaluate the deviation or failure to comply, pursuant to §10CFR 21.21(a).

ABB recommends that the affected licensees evaluate their specific application and determine whether the deviation described in this notice affects their design basis. If the licensee determines that it does, the licensee should contact ABB to determine appropriate corrective action.

If you have any questions regarding this notice, please contact ABB Technical Support at 954-752-6700.

Very truly yours,


Dennis Batovsky

ABB Inc.