



Nebraska Public Power District
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NLS2010082
September 2, 2010

21.21(d)(3)

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

Subject: 10 CFR 21 Notification - Identification of Defect
Cooper Nuclear Station, Docket No. 50-298, DPR-46

Dear Sir or Madam:

The purpose of this letter is for Nebraska Public Power District to provide written notification to the Nuclear Regulatory Commission regarding the identification of a defect found in a basic component at Cooper Nuclear Station. This notification is being submitted pursuant to 10 CFR 21.21(d)(3). The attachment to this letter provides the information required by 10 CFR 21.21(d)(4).

Should you have any questions concerning this matter, please contact David Van Der Kamp, Licensing Manager, at (402) 825-2904.

Sincerely,

Brian J. O'Grady
Vice President - Nuclear and
Chief Nuclear Officer

/dm

Attachment

cc: Regional Administrator, w/attachment
USNRC - Region IV

NPG Distribution, w/attachment

Cooper Project Manager, w/attachment
USNRC - NRR Project Directorate IV-1

CNS Records, w/attachment

Senior Resident Inspector, w/attachment
USNRC - CNS

JE19
NRR

Notification per 10 CFR 21.21 (d)(3)(ii)

This notification follows the format of and addresses the considerations contained in 10 CFR 21.21 (d)(4)(i) – (viii).

- (i) Name and address of the individual or individuals informing the Commission.

Brian J. O'Grady
Vice President - Nuclear and Chief Nuclear Officer
Cooper Nuclear Station
P.O. Box 98
Brownville, NE 68321-0098

- (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.

Facility:

Cooper Nuclear Station
P.O. Box 98
Brownville, NE 68321-0098

Basic component which fails to comply or contains a defect:

General Electric – Hitachi (GE-H) Type SB-1 Control and Transfer Switch Part No. Q16SB1EB4G75SSS1C142.

Purchase Order Text Description is as follows:

SWITCH; CONTROL; LOCKING HANDLE; 5-STAGE ; 4-POSITION;
KEYLOCK IN CONNECT; SPRING RETURN TO TEST WHEN UNLOCKED;
SAME KEY; ENGRAVING TO STATE: "CONNECT @ 82.5 DEGREES CCW;
TRIP @ 45 DEGREES CCW; TEST @ 0 DEGREES; CLOSE @ 45 DEGREES
CW"

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

GE-H Nuclear Energy
3901 Castle Hayne Road
Wilmington, NC 28401

The basic component, described in paragraph (ii) above, was provided by GE-H to Nebraska Public Power District (NPPD) as a safety-related part for use at the Cooper Nuclear Station (CNS).

- (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.

GE-H Type SB-1 Control and Transfer Switch Part No. Q16SB1EB4G75SSS1C142 contained a defect that would have prevented the remote and/or automatic opening and closing of affected safety-related 4160 VAC breakers at CNS, had the switches been installed as received. Fourteen (14) of the twenty-three (23) switches exhibited a failure to maintain the established contact logic when implementing the locking feature of these switches. The defect would have prevented the transfer of the safety-related (essential) 4160 VAC switchgear from the normal station service transformer to either source of offsite power or the emergency diesel generators and the sequential loading of emergency core cooling system pumps in response to a design basis loss of cooling accident.

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

CNS accepted 23 switches on September 16, 2009. Of the 23 switches, 14 exhibited the described condition, which was discovered during pre-installation testing in support of a station modification of 4160 VAC breaker control, on November 25, 2009. The switches had been subsequently returned to GE-H for further failure evaluation and replacement on January 6, 2010. On March 8, 2010, GE-H informed NPPD, in a letter (transfer of information under 10 CFR Part 21.21(b)), that it did not have the information or knowledge to determine if the specific condition would have created a substantial safety hazard for CNS. However, NPPD personnel who needed to perform an internal 10 CFR Part 21 evaluation were not aware of the GE-H transfer of information until August 5, 2010. The transfer of information letter was discovered as a result of questions from the Nuclear Regulatory Commission during the Component Design Basis Inspection at CNS. On August 9, 2010, NPPD determined the condition was reportable under 10 CFR 21(d)(3)(i). An event notification was provided per Reference 1.

- (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.

All 23 of the GE-H switches (Part. No. Q16SB1EB4G75SSS1C142) were returned to GE-H on January 6, 2010. None of these switches were installed at CNS. These switches were designed and supplied by GE-H as a safety-related part specifically for CNS. NPPD was informed by GE-H that they have not supplied an SB-1 switch with the switch locking mechanism design to any other licensee.

- (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.

Corrective actions taken or planned:

As stated in paragraph (vi) above, all the subject switches have been returned to GE-H. GE-H has subsequently designed and supplied switches that meet the design requirements for CNS under a different manufacturer part number.

With respect to the 10 CFR Part 21 evaluation period exceeding 60 days, this condition has been entered into the CNS corrective action program.

- (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.

If SB-1 switches are a custom design, utilities should communicate to the manufacturer the specific contact logic and switch applications(s). Utilities should verify correct contact logic prior to acceptance.

References

- 1) Event Notification No. 46165, from NPPD to the U.S. Nuclear Regulatory Commission, August 9, 2010, Reported under 10 CFR 21(d)(3)(i)

Correspondence Number: NLS2010082

The following table identifies those actions committed to by Nebraska Public Power District (NPPD) in this document. Any other actions discussed in the submittal represent intended or planned actions by NPPD. They are described for information only and are not regulatory commitments. Please notify the Licensing Manager at Cooper Nuclear Station of any questions regarding this document or any associated regulatory commitments.

COMMITMENT	COMMITMENT NUMBER	COMMITTED DATE OR OUTAGE
None	N/A	N/A