framatome

October 23, 2020
NRC:20:026

U.S. Nuclear Regulatory Commission
Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

New Information Concerning a 10 CFR Part 21 Notification of Existence of a Defect

Ref. 1: Letter, Gary Peters (Framatome Inc.) to Document Control Desk (NRC), "10 CFR Part 21 Notification of Existence of a Defect," NRC:18:023, June 28, 2018.

Framatome Inc. (Framatome) provided notification of a reportable defect in accordance with 10 CFR Part 21 in Reference 1. This defect concerned the failure of Eaton NBF relays to change state and was initially reported to the NRC Operations Center by facsimile at 2:33 p.m. EST on June 2, 2018. This letter provides new information on the occurrence of the condition. The affected customer has been notified of the additional new information.

Actions taken to address the defect are provided in the attachment to this letter.

If you have any questions related to this information, please contact Ms. Gayle Elliott, Deputy Director, Licensing and Regulatory Affairs by telephone at (434) 832-3347, or by e-mail at Gayle.Elliott@framatome.com.

Sincerely,

Gary Peters, Director
Licensing & Regulatory Affairs
Framatome Inc.

cc: N. Otto
Project 728

Attachment:

1 Attachment A – Notification of 10 CFR 21 Defect – Revision 1

Framatome Inc.
3315 Old Forest Road
Lynchburg, VA 24501
Tel: (434) 832-3000

www.framatome.com

Attachment A

Notice of 10 CFR 21 Defect
Revision 1

Changes to the original notification are highlighted in yellow.

Subject:

Notification of 10 CFR 21 Defect

Name and Address of Individual Informing the Commission:

Gayle Elliott
Deputy Director, Licensing & Regulatory Affairs
Framatome Inc.
3315 Old Forest Road
Lynchburg, Va. 24501

Title:

Failure of Relays to Change State

Identification of Basic Activity:

Eaton NBF66F Relay, Part Numbers ANP00156, ANP00159, and ANP00160

Basic Activity Supplied By:

Framatome Inc.

Nature of Defect:

While performing analysis on AC Eaton NBF relays, Framatome discovered that, unless a specific application technique is utilized while applying epoxy to the pin within the crossbar, the potential for the epoxy to become foreign material is introduced. This foreign material could migrate to the area between the moving and stationary magnets, preventing the relay from completing its change of state when called upon. This condition occurs in the energized and de-energized direction. Framatome has not been notified of any occurrence of this condition with relays that have been installed in nuclear power plants. This was discovered during bench testing of new replacement relays provided to HB Robinson between 2008 and May of 2013 as discussed in the following paragraph.

A different epoxy application technique was utilized between 2008 and May of 2013 on relays provided to HB Robinson (the only customer requiring the epoxy application by Framatome). Thus, a potential for this defect is limited to those relays provided to H.B. Robinson during that time period.

Defect Determination Date:

This issue was determined to be a 10 CFR 21 Defect on May 31, 2018.

Number and Location of Basic Components:

307 potentially affected safety related relays with epoxy applied to their relay pins were supplied to the H.B. Robinson nuclear plant.

Corrective Actions to Date:

The application process was reevaluated and revised in 2013.

H.B. Robinson was notified of this 10CFR21 reportable defect on June 1, 2018 by Framatome Inc. via telephone. Detailed information regarding the defect was informally provided from Framatome Inc. to H.B. Robinson later that same day and in a formal letter on June 2, 2018.

Upon learning that this condition occurs in both the energized and de-energized direction, Framatome provided a letter to H.B. Robinson on October 21, 2020 of the new information.

Advice related to the Defect:

Framatome provided a letter to the customer on June 2, 2018 to resolve this issue.

Framatome provided an additional letter on October 21, 2020 to provide information on the occurrence of the condition in both the energized and de-energized directions.