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GE Hitachi Nuclear Energy

Proprietary Notice

This letter transmits ~~proprietary~~ information in accordance with 10CFR2.390. Upon removal of Enclosure 1, the balance of this letter may be considered non-proprietary.

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March 13, 2014
MFN 14-010 R0

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

**Subject: Part 21 60-Day Interim Report Notification:
Unseating of Valve Spring on SSPV**

This letter provides information concerning an evaluation being performed by GE Hitachi Nuclear Energy (GEH) regarding a malfunction of a Scram Solenoid Pilot Valve (SSPV), which has been observed to impair control rod scram performance. As stated herein, GEH has not concluded that this is a reportable condition in accordance with the requirements of 10CFR 21.21(d). The SSPV manufacturer (ASCO Valve, Inc.) has not yet concluded its own investigation under 10CFR 21, and the results of that investigation are needed as input for the GEH evaluation. The manufacturer has issued an Interim Report, which provides confidence that this condition is limited to a very small portion of the suspect population.

The information required for this GEH 60-Day Interim Report Notification per §21.21(a)(2) is provided in Attachment 2. The commitment for follow-on actions is provided in Attachment 2, item (vii).

If you have any questions, please call me at (910) 819-4491.

Sincerely,

Dale E. Porter
Safety Evaluation Program Manager
GE-Hitachi Nuclear Energy Americas LLC

Attachments:

1. US Plants Potentially Affected
2. 60-Day Interim Report Notification Information per §21.21(a)(2)

Enclosures:

1. Description of Evaluation, GEH Proprietary Information – Class II (Internal)
2. Description of Evaluation, Non-Proprietary Information – Class I (Public)
3. Affidavit

cc: J. Golla, USNRC
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PRC File
PLM Spec 000N5377 R0

Document Components:

001 MFN 14-010 R0 Cover Letter.pdf
002 MFN 14-010 R0 Enclosure 1 Proprietary.pdf
003 MFN 14-010 R0 Enclosure 2 Non-Proprietary.pdf
004 MFN 14-010 R0 Enclosure 3 Affidavit.pdf

Attachment 2 – 60-Day Interim Report Notification Information per §21.21(a)(2)

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

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- (ii) Identification of the facility, the activity, or the basic component supplied for such facility which fails to comply or contains a defect.

See Attachment 1 for a list of potentially affected U.S. plants

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

GE Hitachi Nuclear Energy (ASCO Valve, Inc., manufacturer)

- (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.

A malfunction of a Scram Solenoid Pilot Valve was attributed to the disengagement of the valve spring from the valve plunger. The effect of the malfunction is to degrade scram performance of an affected control rod. The safety significance of this condition cannot be determined at this time, but several mitigating and compensatory functions have been identified.

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

A Potential Reportable Condition Evaluation in accordance with 10 CFR Part 21 was initiated on January 16, 2014.

- (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.

SSPVs from a production population identified by the manufacturer are currently considered suspect (though considered to have low likelihood of being affected). Those SSPVs were shipped by GEH to the following plant sites in the quantities indicated in the following table.

Attachment 2 – 60-Day Interim Report Notification Information per §21.21(a)(2)

Plant	Quantity
Browns Ferry	3
Columbia Generating Station	20
Dresden	2
Enrico Fermi 2	162
Oyster Creek	88
Peach Bottom	8
Quad Cities	6
Non-U.S. Plant	110

- (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.

After the 2012 occurrence of this condition, the manufacturer completed a corrective action to implement an in-process inspection to ensure that SSPV valve springs are properly engaged with the plungers. This action was completed in November 2012.

- (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.

GEH suggests that plant staff with valves from the affected populated assist the manufacturer's investigation as practical.

- (ix) In the case of an early site permit, the entities to whom an early site permit was transferred.

This is not an early site permit concern.