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GE Hitachi Nuclear Energy

Proprietary Notice

This letter transmits proprietary information in accordance with 10 CFR 2.390. Upon removal of Enclosure 1, the balance of this letter may be considered non-proprietary

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MFN 08-420 R1

U.S. Nuclear Regulatory Commission

Attn: Document Control Desk

Washington, DC 20555-0001

**Subject: Update to GEH Surveillance Program for Channel-Control Blade
Interference Monitoring**

GE Hitachi Nuclear Energy (GEH) has updated the guidance and supporting evaluations that were reported in MFN 08-420 R0 on December 19, 2008 (Reference 1). This update separates the guidance provided to the BWR/6 plants, originally contained in MFN 08-420 R0, from that provided to the BWR/2-5 plants, now contained in MFN 10-245 R6 (Reference 2). With this update MFN 08-420 R1 is now **only** applicable to BWR/6 plants.

In MFN 10-245 R6, GEH reported that, when channel-control blade interference is present at reduced reactor pressures and at friction levels considered acceptable in MFN 08-420 R0, a simultaneously occurring Safe Shutdown Earthquake (SSE) may result in control rod friction that inhibits the full insertion of the affected control rods during a reactor scram in BWR/2-5 plants. However, the supporting seismic analysis found that the required scram performance for the BWR/6 plants was not adversely impacted by the SSE and that the guidance specified in MFN 08-420 R0, and as updated in this document, continued to ensure that the BWR/6 control rods will fully insert during an SSE. That determination does not change with this revision.

The enclosure provides the updated surveillance recommendations for BWR/6 plants. The recommended surveillance is intended to augment the surveillance requirements in the plant Technical Specifications and define populations of control rods to be tested, and the method of testing, until other actions that mitigate or limit the potential for channel-control blade interference can be identified and implemented.

Please note that Enclosure 1 contains proprietary information of the type that GEH maintains in confidence and withholds from public disclosure. The information has been handled and classified as proprietary to GEH as indicated in its affidavit. The affidavit contained in Enclosure 3 identifies that the information contained in Enclosure 1 has been handled and classified as proprietary to GEH. GEH hereby requests that the information in Enclosure 1 be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390 and 9.17. Enclosure 2 is a non-proprietary version.

Conclusion

GEH is updating the surveillance recommendations for all BWR/2-6 plants such that the guidance for the BWR/6 plants is contained in MFN 08-420 R1. The guidance to the BWR/2-5 plants has been removed from MFN 08-420 R0 and is now contained in MFN 10-245 R6. The information contained in this document updates the NRC regarding the guidance which is now only applicable to the BWR/6 plants.

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

Sincerely,



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

References:

1. Letter from Dale E. Porter (GEH) to Document Control Desk (US NRC), Subject: Update to GEH Surveillance Program for Channel-Control Blade Interference Monitoring, December 19, 2008, MFN 08-420 R0.
2. Letter from Dale E. Porter (GEH) to Document Control Desk (US NRC), Subject: Part 21 60-Day Interim Report Notification: Failure to Include Seismic Input in Channel-Control Blade Interference Customer Guidance, September 2, 2010, MFN 10-245 R0.

Attachments:

1. US Plants Potentially Affected

Enclosures:

1. Description of the Evaluation and Surveillance Recommendations for BWR/6 Plants, GEH Proprietary Information – Class II (Internal)
2. Description of the Evaluation and Surveillance Recommendations for BWR/6 Plants, Non-Proprietary Information – Class I (Public)
3. Affidavit

cc: S. S. Philpott, USNRC
S. J. Pannier, USNRC
O. Tabatabai-Yazdi, USNRC
J. Golla, USNRC
J. F. Harrison, GEH
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PRC File
000N1053, Revision 0

Document Components:

001 MFN 08-420 R1 Cover Letter.pdf

002 MFN 08-420 R1 Enclosure 1 Proprietary.pdf

003 MFN 08-420 R1 Enclosure 2 Non-Proprietary.pdf

004 MFN 08-420 R1 Enclosure 3 Affidavit.pdf

Attachment 1

**US Plants Previously Notified of Relevant
Channel-Control Blade Concerns via MFN 08-420 R0**

(1) = BWR/2-5 Plant

(2) = BWR/6 Plant for which MFN 08-420 R1 is applicable

(1)	(2)	Utility	Plant
X		Constellation Nuclear	Nine Mile Point 1
X		Constellation Nuclear.	Nine Mile Point 2
X		Detroit Edison Co.	Fermi 2
X		Energy Northwest	Columbia
X		Entergy Nuclear Northeast	FitzPatrick
X		Entergy Nuclear Northeast	Pilgrim
X		Entergy Nuclear Northeast	Vermont Yankee
	X	Entergy Operations, Inc.	Grand Gulf
	X	Entergy Operations, Inc.	River Bend
	X	Exelon Generation Co.	Clinton
X		Exelon Generation Co.	Oyster Creek
X		Exelon Generation Co.	Dresden 2
X		Exelon Generation Co.	Dresden 3
X		Exelon Generation Co.	LaSalle 1
X		Exelon Generation Co.	LaSalle 2
X		Exelon Generation Co.	Limerick 1
X		Exelon Generation Co.	Limerick 2
X		Exelon Generation Co.	Peach Bottom 2
X		Exelon Generation Co.	Peach Bottom 3
X		Exelon Generation Co.	Quad Cities 1
X		Exelon Generation Co.	Quad Cities 2
	X	First Energy Nuclear Operating Co.	Perry 1
X		FPL Energy	Duane Arnold
X		Nebraska Public Power District	Cooper
X		Xcel Energy	Monticello
X		PPL Susquehanna LLC.	Susquehanna 1
X		PPL Susquehanna LLC	Susquehanna 2
X		Progress Energy	Brunswick 1
X		Progress Energy	Brunswick 2
X		PSEG Nuclear.	Hope Creek
X		Southern Nuclear Operating Co.	Hatch 1
X		Southern Nuclear Operating Co.	Hatch 2
X		Tennessee Valley Authority	Browns Ferry 1
X		Tennessee Valley Authority	Browns Ferry 2
X		Tennessee Valley Authority	Browns Ferry 3