52-DD6

Part 21 (PAR)

Event #

49781

Rep Org: WESTINGHOUSE ELECTRIC COMPANY

Notification Date / Time: 01/31/2014 13:39

Supplier: WESTINGHOUSE ELECTRIC COMPANY

Event Date / Time: 01/31/2014 Last Modification: 01/31/2014 (EST)

(EST)

Region: 1

City: CRANBERRY TOWNSHIP

Docket #:

Agreement State: License #: Yes

County:

State: PA

Notifications: GERALD MCCOY

R2DO

HQ Ops Officer: DANIEL MILLS

PART 21 GROUP

EMAIL

Emergency Class: NON EMERGENCY

NRC Notified by: JAMES GRESHAM

ART BURRITT

R1DO

10 CFR Section:

21.21(a)(2)

INTERIM EVAL OF DEVIATION

50.55(e)

CONSTRUCT DEFICIENCY

PART 21/50.55 - AP1000 UPDATED REACTOR COOLANT PUMP LOCKED ROTOR ANALYSIS

The following was received via facsimile:

"The purpose of this letter is to provide the Commission with the prescribed interim report as required per 10 CFR 21.21(a)(2) of a deviation identified by Westinghouse Electric Company LLC. This also will serve as an interim report under 10 CFR 50.55 (3)(ii) to the extent applicable.

"A postulated reactor coolant pump (RCP) locked rotor (LR) transient has been explicitly analyzed for the AP1000 steam generator (SG) structural design, as documented in the latest AP1000 Design Control Document (DCD), Revision 19. This includes the calculation of LR hydrodynamic forces (HF) on the SG using the BANG UP code. This activity was performed based upon the unique features of the AP1000 design. However, the other AP1000 reactor coolant system (RCS) structural component analyses have not considered the locked rotor transient for hydrodynamic forces, even though a determination has been made that the effects of these loads could be more bounding than the limiting design-basis loss of coolant accident (LOCA) hydrodynamic forces (based on the BANG UP calculation of pressure pulsations through the RCS).

"Westinghouse has not yet completed its evaluation as to whether there is a reportable condition as defined in 10 CFR 21 (or 10 CFR 50.55 to the extent applicable) if the deviation is left uncorrected.

"Westinghouse expects to complete this evaluation by September 30, 2014. We will inform the staff if there are any changes to this schedule, prior to that date."

Westinghouse Non-Proprietary Class 3



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LTR-NRC-14-5 January 29, 2014

Subject: Interim Report of the Evaluation of a Deviation Pursuant to 10 CFR 21.21(a)(2)

The purpose of this letter is to provide the Commission with the prescribed interim report as required per 10 CFR 21.21 (a)(2) of a deviation identified by Westinghouse Electric Company LLC. This also will serve as an interim report under 10 CFR 50.55 (e)(3)(ii) to the extent applicable.

A postulated reactor coolant pump (RCP) locked rotor (LR) transient has been explicitly analyzed for the AP1000^{® 1} steam generator (SG) structural design, as documented in the latest AP1000 Design Control Document (DCD), Revision 19. This includes the calculation of LR hydrodynamic forces (HF) on the SG using the BANGUP code. This activity was performed based upon the unique features of the AP1000 design. However, the other AP1000 reactor coolant system (RCS) structural component analyses have not considered the locked rotor transient for hydrodynamic forces, even though a determination has been made that the effects of these loads could be more bounding than the limiting design-basis loss of coolant accident (LOCA) hydrodynamic forces (based on the BANGUP calculation of pressure pulsations through the RCS).

Westinghouse has not yet completed its evaluation as to whether there is a reportable condition as defined in 10 CFR 21 (or 10 CFR 50.55(e) to the extent applicable) if the deviation is left uncorrected.

Westinghouse expects to complete this evaluation by September 30, 2014. We will inform the staff if there are any changes to this schedule, prior to that date.

Very truly yours,

James A. Gresham, Secretary

Westinghouse Safety Review Committee

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cc: E. Lenning (NRC MS O-11-F1)

B. Whitley (SNC)

A. Paglia (SCANA)