

General Information or Other (PAR)

Event # 45465

Rep Org: WESTINGHOUSE ELECTRIC COMPANY	Notification Date / Time: 10/24/2009 12:11 (EST)
Supplier: WESTINGHOUSE ELECTRIC COMPANY	Event Date / Time: 10/24/2009 (EDT)
	Last Modification: 01/14/2010
Region: 1	Docket #:
City: PITTSBURGH	Agreement State: Yes
County:	License #:
State: PA	
NRC Notified by: J. A. GRESHAM	Notifications: LAWRENCE DOERFLEIN R1DO
HQ Ops Officer: VINCE KLCO	JAY HENSON R2DO
Emergency Class: NON EMERGENCY	LAURA KOZAK R3DO
10 CFR Section:	NEIL OKEEFE R4DO
21.21 UNSPECIFIED PARAGRAPH	JOHN THORP(e-mail) NRR
	O. TABATABAI(e-mail) NRO

POTENTIAL AGGRESSIVE WEARING OF ROD CLUSTER CONTROL ASSEMBLY GUIDE CARDS

"Aggressive wearing of the RCCA [Rod Cluster Control Assembly] guide card has been observed at an international plant. Such aggressive wear has not been observed in any US plants. If this issue were to remain uncorrected, it is possible for enough wear to occur during the life of the plant that the RCCAs could become unguided and may not properly insert into the core. It has not been concluded whether there is a safety hazard which would result from this deviation."

*** UPDATE FROM GRESHAM TO CHUCK TEAL VIA FAX AT 1213 EST ON 1/14/2010 ***

"Aggressive wearing of the Rod Cluster Control Assembly (RCCA) guide card has been observed at an international plant. Such aggressive wear has not been observed in any other plants. If this issue were to remain uncorrected, it was postulated that enough wear could occur during the life of the plant that the RCCAs could become unguided and may not properly insert into the core.

"With the exception of the one international plant in which abnormal excessive wear has been found, the conclusion from the analysis of the collection of wear data and the analysis of rodlet insertion with worn guide cards is that there is no concern for safe operation of any plant regarding guide tube wear for the 40-year design life. The engineering analysis supports this conclusion regardless of the type of RCCA guide tube or the RCCA rodlet material currently in use. For the international plant with the excessive wear, years of continued safe operation is available, and a justification for continued operation has been provided to the utility. Directives in Materials Reliability Program (MRP 227) will necessitate guide tube inspections as part of life extension licensing.

"Concerning AP 1000, a guide tube wear analysis has been performed. The analysis demonstrates operability for the 60-year design life for the shutdown control rods.

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"Based on the above evaluation results, it has been determined that this issue does not represent a substantial safety hazard pursuant to the requirements delineated in 10CFR Part 21 ."



Westinghouse

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Our ref: LTR-NRC-10-2

January 14, 2010

Subject: Closure of Westinghouse Interim Report Log No. 2009-23

Reference: 1) Letter from J. A. Gresham to U.S. NRC Document Control Desk, LTR-NRC-09-52, "Interim Report of the Evaluation of a Deviation Pursuant to 10CFR21.21(a)(2)," dated October 24, 2009

Gentlemen:

Westinghouse submitted an Interim Report (Reference 1), pursuant to the requirements of 10CFR Part 21, regarding an evaluation of reportability which could not be completed within 60 days from the discovery of the deviation or failure to comply. The issue being evaluated by Westinghouse concerns Potential Aggressive Wearing of Rod Cluster Control Assembly Guide Cards. It was designated Interim Report Log No. 2009-23.

The purpose of this letter is to close Interim Report Log No. 2009-23.

If you have any questions regarding this matter, please contact me at (412) 374-4643.

Regards,

James A. Gresham, Manager
Regulatory Compliance and Plant Licensing

Attachment

Interim Report No. 2009-23 (Closeout)

SUBJECT:

Closure of Interim Report Log No. 2009-23 regarding an evaluation of a Deviation or Failure to Comply Pursuant to 10CFR21.21(a)(2)

TITLE:

Potential Aggressive Wearing of Rod Cluster Control Assembly Guide Cards

BASIC COMPONENT SUPPLIED BY:

Westinghouse Electric Company

NATURE OF DEVIATION:

Aggressive wearing of the Rod Cluster Control Assembly (RCCA) guide card has been observed at an international plant. Such aggressive wear has not been observed in any other plants. If this issue were to remain uncorrected, it was postulated that enough wear could occur during the life of the plant that the RCCAs could become unguided and may not properly insert into the core.

EVALUATION:

With the exception of the one international plant in which abnormal excessive wear has been found, the conclusion from the analysis of the collection of wear data and the analysis of rodlet insertion with worn guide cards is that there is no concern for safe operation of any plant regarding guide tube wear for the 40-year design life. The engineering analysis supports this conclusion regardless of the type of RCCA guide tube or the RCCA rodlet material currently in use. For the international plant with the excessive wear, years of continued safe operation is available, and a justification for continued operation has been provided to the utility. Directives in Materials Reliability Program (MRP 227) will necessitate guide tube inspections as part of life extension licensing.

Concerning AP1000, a guide tube wear analysis has been performed. The analysis demonstrates operability for the 60-year design life for the shutdown control rods.

Based on the above evaluation results, it has been determined that this issue does not represent a substantial safety hazard pursuant to the requirements delineated in 10CFR Part 21.