

Part 21 (PAR)

Event # 47990

<b>Rep Org:</b> MITSUBISHI HEAVY INDUSTRIES, LTD.	<b>Notification Date / Time:</b> 04/19/2012 12:33 (EDT)
<b>Supplier:</b> MITSUBISHI HEAVY INDUSTRIES, LTD.	<b>Event Date / Time:</b> 02/13/2012 (EDT)
	<b>Last Modification:</b> 09/07/2012
<b>Region:</b> 1	<b>Docket #:</b>
<b>City:</b> ARLINGTON	<b>Agreement State:</b> Yes
<b>County:</b>	<b>License #:</b>
<b>State:</b> VA	
<b>NRC Notified by:</b> MIKE SCHULTZ	<b>Notifications:</b> CHRISTOPHER CAHILL R1DO
<b>HQ Ops Officer:</b> HOWIE CROUCH	STEVEN VIAS R2DO
<b>Emergency Class:</b> NON EMERGENCY	DAVE PASSEHL R3DO
<b>10 CFR Section:</b>	HEATHER GEPFORD R4DO
21.21(a)(2) INTERIM EVAL OF DEVIATION	PART 21 GRP (EMAIL)

## PART 21 - STEAM GENERATOR TUBE WEAR ADJACENT TO RETAINER BARS

The following information was obtained from Mitsubishi Heavy Industries, LTD on April 19, 2012 was inadvertently added to Event Notification #47833 as an update to that event. The vendor's intent was to issue two interim reports; one for San Onofre Nuclear Generating Station (SONGS) Unit 2 and one for SONGS Unit 3. The information was obtained via fax:

"On January 31, 2012, San Onofre Unit 3 shut down due to indications of a steam generator tube leak. Steam generator tube inspections confirmed one small leak on one tube in one of the two steam generators. Continuing inspections of 100% of the steam generator tubes in both Unit 3 steam generators discovered unexpected wear, including tube to tube as well as tube to tube support structural wear. Inspection, testing, and analysis of SG tube integrity in both Unit 3 SGs is ongoing. In-situ pressure testing identified eight Unit 3 SG tubes that did not meet the target performance criteria in Technical Specification for tube integrity. One of the failed tubes was the leaking tube that required the Unit 3 shutdown.

"Discovery date: February 21, 2012

"Evaluation completion schedule date: August 31, 2012"

Interim Report: U21-019-IR

Reference Document: UET-20120105

Original notifications (per EN# 47833) were made to R1DO (Joustra), R2DO (Nease), R3DO (Peterson), R4DO (O'Keefe), and Part 21 Group via email.

TE19  
NRR

Part 21 (PAR) Event # 47990  
Notified R1DO (Cahill), R2DO (Vias), R3DO (Passehl), R4DO (Gepford) and Part 21 Groups via email.

\* \* \* UPDATE FROM MITSUBISHI HEAVY INDUSTRIES, LTD VIA FAX ON 6/4/12 AT 1145 EDT \* \* \*

The vendor reported that eight Unit 3 SG tubes did not meet the target performance criteria in Technical Specifications for tube integrity.

Notified R1DO (Cahill), R2DO (Vias), R3DO (Passehl), R4DO (Gepford) and Part 21 Groups via email.

\* \* \* UPDATE FROM MITSUBISHI HEAVY INDSUSTRIES, LTD VIA FAX ON 9/7/12 AT 1539 EDT \* \* \*

"MHI evaluated that the deviation contains a reportable defect for San Onofre Nuclear Generating Station Unit 2 and 3."

Notified R4DO (Gaddy) and Part 21 Reactor Group.

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**MITSUBISHI HEAVY INDUSTRIES, LTD.**

16-5, KONAN 2-CHOME, MINATO-KU

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

Ref: UET-20120201 Rev.0  
Date: September 7, 2012

**Subject: Notification of a defect under 10 CFR 21.21(d)(3)(i)**

**1. Interim Reports and Evaluation Results**

Mitsubishi Heavy Industries, LTD (MHI) has identified steam generator tube wear for San Onofre Nuclear Generating Station. MHI had generated the following two interim reports for these tube wear and submitted them to U.S. Nuclear Regulatory Commission (NRC). MHI completed evaluation of a defect.

**Interim Report 1** (No.U21-018-IR Revision 1 with a letter UET-20120089 Revision 1)

**Title:** Steam Generator tube wear adjacent to retainer bars

**Evaluation Result:**

MHI evaluated that the deviation contains a reportable defect for San Onofre Nuclear Generating Station Unit 2 and 3.

**Interim Report 2** (No.U21-019-IR Revision 1 with a letter UET-20120105 Revision 1)

**Title:** Steam Generator tube to tube wear

**Evaluation Result:**

MHI evaluated that the deviation contains a reportable defect for San Onofre Nuclear Generating Station Unit 2 and 3.

**2. The written report**

The written reports pursuant to 10 CFR 21.21 (d)(4) will be submitted to NRC by October 6, 2012.

Yours very truly,

Ei Kadokami

Senior Vice President

Deputy Head of Nuclear Energy Systems

Head of Nuclear Energy Systems

Head of Kobe shipyard & Machinery Works

Mitsubishi Heavy Industries, Ltd.