

Part 21 (PAR)

Event # 49923

<b>Rep Org:</b> DRESSER-RAND COMPANY		<b>Notification Date / Time:</b> 03/17/2014 13:53 (EDT)	
<b>Supplier:</b> DRESSER-RAND COMPANY		<b>Event Date / Time:</b> 02/17/2014 (EDT)	
<b>Last Modification:</b> 04/17/2014			
<b>Region:</b> 1		<b>Docket #:</b>	
<b>City:</b> WELLSVILLE		<b>Agreement State:</b> Yes	
<b>County:</b>		<b>License #:</b>	
<b>State:</b> NY			
<b>NRC Notified by:</b> ED GRANDUSKY		<b>Notifications:</b> BLAKE WELLING	R1DO
<b>HQ Ops Officer:</b> DANIEL MILLS		KATHLEEN O'DONOHUE	R2DO
<b>Emergency Class:</b> NON EMERGENCY		JULIO LARA	R3DO
<b>10 CFR Section:</b>		PART 21 GROUP	EMAIL
21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE			

## PART 21 - BEARING DEFECT

The following was received via email:

"On Dresser-Rand Drawing 75439A part number 07 is identified as a Heim LSS-8 bearing that has an Aluminum Bronze insert to accommodate a non-lubricated application. Dresser-Rand shipped 10 bearings part number 75439A07 to Dominion Nuclear in 2006 that were Seal Master Com 8 bearings that do not have an Aluminum Bronze insert.

"This bearing is used on turbines that have a PG type mechanical governor with the cam plate linkage. Extended operation without lubrication will result in the Seal Master Com 8 bearing seizing. The customer should visually inspect this bearing for the bronze insert. If no insert is visible then the bearing should be replaced at the first opportunity."

Licensees potentially affected (turbine serial numbers): Calvert Cliffs (T36674A, T36674B, T36674C, T36674D), DC Cook (T36700A, T36700B), Salem (T36988A, T36988B), Crystal River (T37009A), Davis Besse (T37686A, T37686B), Millstone (F37273A, T38587A), Summer (T38765A).

International sites potentially affected: Bugey (T38498A, T38498B, T38880A, T38880B).

\*\*\* UPDATE AT 1102 EDT ON 04/17/14 FROM ED GRANDUSKY TO S. SANDIN VIA FAX \*\*\*

Dresser-Rand submitted their final report of the defect. This report is Dresser-Rand number 47.

Notified R1DO (Burritt), R2DO (Blamey), R3DO (Hills) and NRR Part 21 Group via email.

TE19  
NRR

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**DRESSER-RAND**

DRESSER-RAND COMPANY  
37 Coats Street  
Wellsville, NY 14895-0592  
Phone (716) 596-3631  
Fax (716) 593-3369

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April 17, 2014

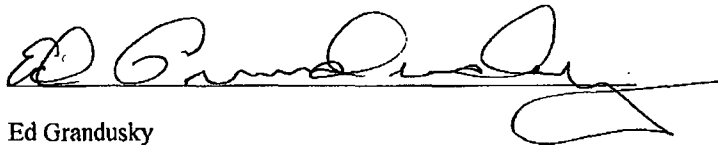
Fax#: 301-816-5151

Nuclear Regulatory Commission

Subject: 10CFR50art 21 Reporting of defects

Find attached our final report of defect. This report is Dresser-Rand number 47.

Please call if additional information is required

A handwritten signature in black ink, appearing to read "Ed Grandusky", is written over a horizontal line.

Ed Grandusky  
Manager Gov't Aftermarket Engineering  
(716) 498-7522 Cell

# **FINAL REPORT 10CFR PART 21 REPORT OF A POTENTIAL SAFETY HAZARD**

**Report No. 47**  
**Page 1 of 3**

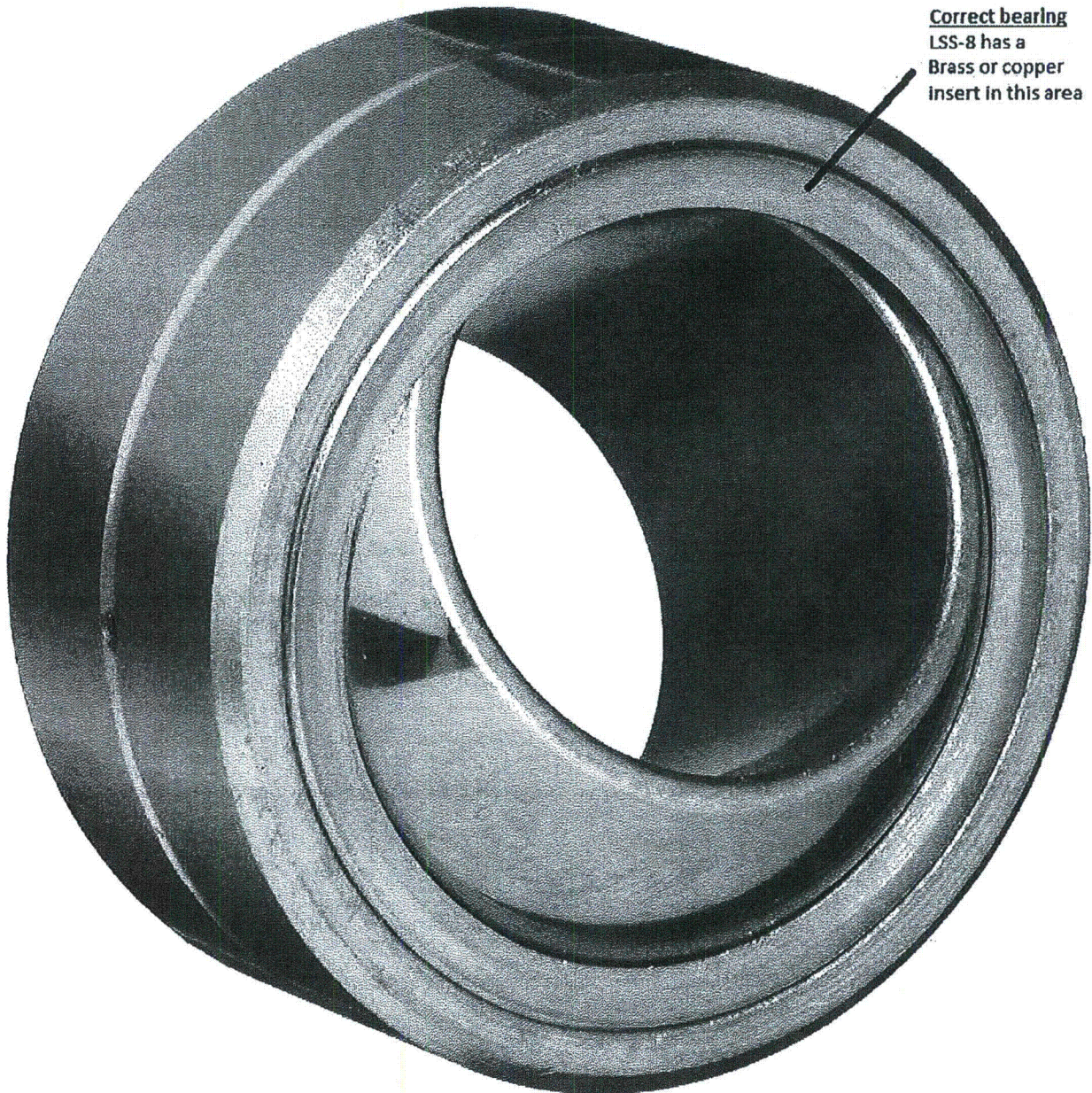
<b>PREPARED BY:</b> <u>Ed Grandusky</u>  <b>TITLE:</b> <u>Manager Gov't Aftermarket Engineering</u>  <b>PART NAME:</b> <u>Heim LSS-8 bearing</u>	<b>File No:</b> <u>Various</u> <b>Serial No:</b> <u>See page 2</u>  <b>Type:</b> <u>GS-2</u> <b>Ref:</b> <u>NA</u> <b>DR Part No:</b> <u>75439A07</u> <b>DR Dwg No:</b> <u>75439A</u> <b>Rev. Level:</b> <u>B</u>				
<b>1. DESCRIPTION OF DEFECT OR NON-COMPLIANCE</b> <p>On Dresser-Rand Drawing 75439A part number 07 is identified as a Heim LSS-8 bearing that has an Aluminum Bronze insert to accommodate a non-lubricated application. Dresser-Rand shipped 10 bearings part number 75439A07 to Dominion Nuclear in 2006 that were Seal Master Com 8 bearings that do not have an Aluminum Bronze insert.</p>					
<b>2. POTENTIAL SAFETY HAZARD OR NON-COMPLIANCE</b> <p>Extended operation without lubrication will result in the Seal Master Com 8 bearing dragging or seizing resulting in poor turbine control and turbine overspeed.</p>					
<b>3. NUMBER AND LOCATION OF ALL COMPONENTS</b> <p>There are 18 turbines tabulated on page 2 that use this bearing, all have PG type mechanical governors.</p>					
<table border="1"> <tr> <td><b>4. CORRECTIVE ACTION BY:</b></td> <td><u>Staff</u></td> <td><b>COMPLETED BY</b></td> <td><u>4/16/14</u></td> </tr> </table> <p>The Part Design record was updated to emphasize copper alloy insert and the Inspection record was changed to require the vendor part number be recorded on the inspection form.</p>		<b>4. CORRECTIVE ACTION BY:</b>	<u>Staff</u>	<b>COMPLETED BY</b>	<u>4/16/14</u>
<b>4. CORRECTIVE ACTION BY:</b>	<u>Staff</u>	<b>COMPLETED BY</b>	<u>4/16/14</u>		
<b>5. ADVICE TO AFFECTED CLIENT RELATED TO THIS REPORT</b> <p>The customer should visually inspect this bearing for the bronze insert. See picture on page 3. If no insert is visible then the bearing should be replaced at the first opportunity.</p>					

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<b>Turbine S/N</b>	<b>Site</b>
T36674A	CALVERT CLIFFS
T36674B	CALVERT CLIFFS
T36674C	CALVERT CLIFFS
T36674D	CALVERT CLIFFS
T36700A	D.C.COOK 1
T36700B	D.C.COOK 2
T36988A	SALEM 1
T36988B	SALEM 2
T37009A	CRYSTAL RIVER
T37686A	DAVIS BESSE
F37273A	MILLSTONE 2
T37686B	DAVIS BESSE
T38498A	BUGEY
T38498B	BUGEY
T38587A	MILLSTONE 3
T38765A	SUMMER 1
T38880A	BUGEY
T38880B	BUGEY

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Correct bearing  
LSS-8 has a  
Brass or copper  
insert in this area