

PRIORITY ATTENTION REQUIRED MORNING REPORT - REGION V MARCH 30, 1994

Licensee/Facility:

Notification:

Washington Public Power Supply System  
Washington Nuclear 2  
Richland, Washington  
LL  
Dockets: 50-397  
BWR/GE-5

MR Number: 5-94-0030  
Date: 03/30/94  
RESIDENT INSPECTOR TELEPHONE CA

Subject: DEGRADATION OF RUBBER DIAPHRAGMS IN CONTROL ROD SCRAM SOLENOI  
D  
PILOT VALVES

Reportable Event Number: N/A

Discussion:

AT 1:43 P.M. (PST), SATURDAY, MARCH 26, 1994, WITH THE REACTOR AT 75  
PERCENT POWER AND WNP-2 LICENSED OPERATORS CONDUCTING CONTROL ROD SCRA  
M  
TIME TESTING ON A 10 PERCENT SAMPLING OF CONTROL RODS, CONTROL ROD 06-  
39  
FAILED TO INSERT. AT 1:52 P.M., THE OPERATORS FULLY INSERTED THAT  
CONTROL ROD, DE-ENERGIZED THE CONTROL ROD ELECTRICAL COMPONENTS AND  
DECLARED THE ROD INOPERABLE PER WNP-2 TECHNICAL SPECIFICATIONS. BASED  
ON  
THE FAILURE OF THE ROD TO INSERT, CONSERVATIVELY THE LICENSEE CONDUCTE  
D  
SCRAM TIME TESTING ON ALL OF THE 185 CONTROL RODS. THE TESTING  
IDENTIFIED THAT FOUR CONTROL RODS INSERTED AT SLOWER THAN NORMAL TIMES  
BUT WITHIN TECHNICAL SPECIFICATION TIME REQUIREMENTS. ONE OF THE RODS  
COULD NOT BE SCRAM TIME TESTED DUE TO A FAILED ELECTRONIC CARD IN THE  
TEST CIRCUIT.

SUBSEQUENT LICENSEE INVESTIGATION DETERMINED THAT THE DIAPHRAGM, A

COMPONENT MADE OF BUNA-N RUBBER, OF THE SCRAM SOLENOID PILOT VALVE FOR CONTROL ROD 06-39 HAD THERMALLY AGED AND FAILED DUE TO EMBRITTLEMENT. THE LICENSEE ALSO EXAMINED THE DIAPHRAGM OF A SCRAM SOLENOID PILOT VALVE THAT HAD FAILED IN DECEMBER 1993 AND FOUND SIMILAR DEGRADATION. THE LICENSEE HAS PERFORMED AN OPERABILITY ASSESSMENT OF THE SCRAM SOLENOID PILOT VALVES AND DETERMINED THE VALVES TO BE OPERABLE BASED ON LOCALLY PERFORMED TESTING. THE LICENSEE HAS INITIATED A PROGRAM TO REPLACE THE DIAPHRAGMS OF ALL THE SCRAM SOLENOID PILOT VALVES WITHIN THE NEXT 30 DAYS. THE LICENSEE'S ASSESSMENT IS THAT IF AN ACTUAL PLANT SCRAM HAD OCCURRED, ROD 06-39 WOULD HAVE INSERTED DUE TO THE FUNCTIONING OF THE BACKUP SCRAM SOLENOID VALVES, ALTHOUGH THESE VALVES ARE NOT QUALITY CLASS.

THE NRC ISSUED INFORMATION BULLETIN 78-14 IN 1978 TO NOTIFY LICENSEE'S ABOUT THERMAL AGING OF SCRAM SOLENOID VALVE DIAPHRAGMS. ADDITIONALLY, GENERAL ELECTRIC HAS ISSUED SERVICE INFORMATION LETTERS (SILs) ABOUT THERMAL AGING OF THESE DIAPHRAGMS.

Regional Action:

THE NRC IS CLOSELY MONITORING THE LICENSEE'S ACTIONS ASSOCIATED WITH THIS ISSUE. A CONFERENCE CALL BETWEEN THE NRC (REGION V/NRR/AEOD) AND THE LICENSEE WAS HELD ON MARCH 29, 1994, TO STATUS THE ISSUE. THE LICENSEE IS FURTHER ASSESSING THE OPERABILITY OF THESE VALVES. A FOLLOWUP CONFERENCE CALL IS PLANNED FOR MARCH 31, 1994.

ML020930271.txt

REGION V MORNING REPORT PAGE 2

MARCH 30, 1994

MR Number: 5-94-0030 (cont.)

Contact:	Robert Barr	(509) 377-2627
	David Corporandy	(510) 975-0319