

February 06, 2006

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-III-06-003

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region Staff on this date.

**Facility**

Prairie Island Nuclear Generating Plant  
Nuclear Management Company  
Welch, MN.  
Docket: 50-282 and 50-306  
License: DPR 42 and DPR 60

**Licensee Emergency Classification**

Notification of Unusual Event  
 Alert  
 Site Area Emergency  
 General Emergency  
 Not Applicable

SUBJECT: TECHNICAL SPECIFICATION REQUIRED SHUTDOWN OF PRAIRIE ISLAND  
UNIT 2 FOR GREATER THAN 72 HOURS

DESCRIPTION:

Prairie Island Unit 2 was shutdown on February 5, 2006, at 11:42 p.m. due to an inoperable diesel generator. Specifically, during testing of diesel generator D6, elevated crankcase pressure was observed on engine 1, and the licensee determined repairs could not be completed in the Technical Specification allowed outage time. Prairie Island Unit 2 has two dedicated diesel generator sets. Each diesel generator set consists of two engines driving a common generator. The diesel generator sets were manufactured by Societe Alsacienne de Constructions Mecaniques de Mulhouse (SACM).

The licensee removed the D6 diesel generator from service and entered a seven-day Technical Specification Allowed Outage Time at 8:10 p.m. on January 29, 2006, for the planned replacement of four pistons and cylinder liners on engine 2. Following the replacement and completion of a 12-hour break-in run, the licensee commenced surveillance testing to demonstrate operability of diesel generator D6. During testing, operators observed high crankcase pressure on engine 1 and aborted the test. Licensee troubleshooting determined that the high crankcase pressure was caused by passage of combustion gases between the piston rings and cylinder liner to the crankcase (blow-by). The licensee evaluated the condition of all 16 cylinders on engine 1 and concluded that all the cylinder liners and piston rings should be replaced on both engines. The licensee determined that the required repairs could not be conducted within the Technical Specification allowed outage time due to expire at 8:10 p.m. on February 5, 2006, and commenced a shutdown of Unit 2 at 1:36 p.m. In compliance with the plant's Technical Specifications, the reactor was shutdown at 11:42 p.m. and is currently in Mode 3.

The cause of the high crankcase pressure identified on diesel generator D6 is currently under investigation. The licensee last replaced all of the cylinder liners, and piston rings on diesel

generator D6 in early 2001, to correct adverse conditions caused by an incompatibility between lubricating and fuel oils. Region III personnel will continue to follow the licensee's root cause investigation and monitor its recovery actions.

Region III received initial notification of this occurrence by discussion between the Senior Resident Inspector and Prairie Island Plant Manager at approximately 10:30 a.m. on Sunday, February 5. The information presented herein has been discussed with the licensee, and is current as of 7:00 a.m. EDT, February 6, 2006.

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