

PRELIMINARY NOTIFICATION- REGION III

August 4, 2008

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-III-08-007A

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 III staff on this date.

Facility

Prairie Island Unit 1
Nuclear Management Company (NMC)
Welch, Minnesota
Docket: 50-282
License: DPR-42

Licensee Emergency Classification

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

**SUBJECT: UNPLANNED UNIT 1 SHUTDOWN GREATER THAN 72 HOURS (UPDATE)/
NOTIFICATION OF UNUSUAL EVENT DUE TO A RELEASE OF A TOXIC GAS
DEEMED DETRIMENTAL TO NORMAL OPERATION OF THE PLANT**

DESCRIPTION:

On July 31, 2008 at 8:17 a.m. (CDT), the Unit 1 reactor tripped due to a spurious overtemperature delta temperature signal concurrent with reactor trip system testing. After the reactor trip, the turbine driven auxiliary feedwater pump tripped on low discharge pressure. The reactor trip was due to a failed card in the reactor trip system during the system testing. The card was replaced and the system was returned to service. The turbine-driven auxiliary feedwater pump failure was due to an incorrect valve lineup associated with the pump discharge pressure instrumentation. Subsequently, the auxiliary feedwater pump lineup was corrected, and both the auxiliary feedwater pump and the installed card in the reactor trip system were successfully tested. A Special Inspection Team was dispatched to review the cause of the reactor trip and the auxiliary feedwater pump failure. The team also reviewed the licensee's corrective actions prior to restart and found them appropriate.

On August 2, 2008, at 3:42 p.m. the licensee began startup activities in accordance with station procedures. Early the morning of August 3, 2008, while Unit 1 was holding at approximately 30 percent power for secondary chemistry to stabilize, a technician reported the smell of hydrazine. Subsequent air samples taken in the vicinity of the condenser pit were positive for hydrazine. The licensee took actions to control access to these areas and at 3:52 a.m. declared a Notification of Unusual Event (NOUE) in accordance with its emergency plan for the release of toxic gases deemed detrimental to normal operation of the plant. The gas was confined to a few areas in the Unit 1 Turbine Building, and did not affect any areas with equipment vital to the safe operation of the plant. Unit 2 was not affected by the event and remained at full power. The resident inspectors responded to the site, and the Regional staff assessed the situation in accordance with the Agency's Incident Response Program but did not change the Agency Response Mode.

The licensee utilized extra ventilation in the affected areas to reduce the hydrazine concentration. The licensee continued to sample plant areas over the next 14 hours with concentration levels decreasing over this time period. Based upon acceptable hydrazine levels

in the plant, the licensee exited the NOUE at 10:20 p.m. on August 3, 2008. The resident inspectors and Region III staff remained onsite or in contact with the licensee until the NOUE was exited. Although investigation by the licensee continues, the hydrazine event appears to have been caused by a larger than normal addition of hydrazine into the feedwater system to counteract oxygen introduced following the reactor trip. The cause of the hydrazine release will also be assessed by the Special Inspection Team.

The States of Minnesota and Wisconsin, Region 5 FEMA, and the Prairie Island Indian Community were informed of the NOUE.

The information in this preliminary notification has been reviewed with licensee management.

This information is current as of 1:30 p.m. on August 4, 2008.

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