

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-I-10-004AFacility

Susquehanna Steam Electric Station  
PPL, Susquehanna, LLC.  
Berwick, PA  
Docket: 50-387

Licensee Emergency Classification

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

SUBJECT: (UPDATE) SUSQUEHANNA UNIT 1 MANUAL SCRAM AND SHUTDOWN GREATER THAN 72 HOURS DUE TO AN INTERNAL FLOODING EVENT

At 4:41 p.m. on July 16, 2010, Susquehanna Unit 1 operators manually scrammed the reactor due to a non-isolable circulating water leak in the main condenser bay. On August 2<sup>nd</sup> Susquehanna Unit 1 was restarted and at 6:09 am on August 4, the operators synchronized Unit 1 to the electrical grid.

PPL Engineering personnel identified the source of the circulating water system leak to be from two large gasketed manway hatches. The 'B' and 'D' inlet water box access manway gaskets were found to have been dislodged and significantly extruded from the manway joints. The main condenser access manways consist of a 20" diameter pipe (manway) that is sealed with a bolted metal hatch secured by four large bolts. To ensure a watertight seal, a gasket is installed on the manway. Tension on the bolts that secure the hatch ensures the gasket forms a water-tight seal. In addition, an epoxy coating applied on the manway overlapped onto the gasket seating surface in several locations.

PPL management concluded that the smooth and non-uniform coat of epoxy on the gasket seating surface, as well as insufficient tightening of the manway bolts, allowed the gaskets to dislodge and leak when a system pressure spike was experienced. Cleaning of the cooling tower intake screen was in process during this event and may have caused a pressure spike in these two inlet water boxes. Corrective actions taken included: 1) replacing the manway gaskets on all of the water boxes; 2) increasing the torque applied to the manway bolts; 3) roughening the epoxy coating on the manway where it contacts the gasket; and 4) conducting additional pre-installation inspections recommended by the gasket vendor.

PPL personnel inspected and repaired, as necessary, equipment impacted by this internal flooding event. Approximately a million gallons of river water have been removed from the main condenser bay. The water was processed, tested, and discharged in accordance with plant procedures ensuring all NRC regulatory limits were met.

The NRC inspectors onsite observed PPL's troubleshooting and repair actions; attended plant restart readiness meetings; monitored PPL's dewatering and plant discharge activities; and observed plant startup events. The NRC's inspection results will be documented in the next quarterly integrated inspection report.

The information presented herein has been discussed with the Susquehanna Plant Manager and is current as of August 4, 2010, at 9:00 a.m.

Region I Public Affairs is prepared to respond to media inquires.

ADAMS Accession Number: ML102160675

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**SUNSI Review Complete: AAR (Reviewer's Initials)**

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