

**PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE** PNO-II-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 Region II staff (Atlanta, Georgia) on this date.

<u>Facility</u>		<u>Licensee Emergency Classification</u>
Surry Power Station		Notification of Unusual Event
Units 1 and 2	X	Alert
Surry, Virginia		Site Area Emergency
Docket/License: 50-280/DPR-32, 50-281/DPR-37		General Emergency
		Not Applicable

**SUBJECT: PARTIAL LOSS OF OFFSITE POWER TO SURRY UNITS 1 AND 2 SAFETY SYSTEM EMERGENCY BUSES AND UNIT 2 MANUAL REACTOR TRIP**

On October 7, 2006 at approximately 5:11 p.m., Unit 2 was manually tripped based on perturbations in main steam flow, main steam pressure, and steam generator feedwater flow and level. At 6:01p.m., an ALERT was declared following a partial loss of offsite power to Unit 1 and Unit 2 safety system emergency buses caused by flying debris that impacted the 'A' and 'C' Reserve Service Station transformers' electrical conductors. A Unit 2 secondary system transient resulted in the safety relief valves on the moisture separator reheater cross-under piping to lift. The safety relief valves exhausted steam external to the Unit 2 turbine building, as designed. However, due to the force of the steam, turbine building structural debris was detached and projected into the 'A' and 'C' Reserve Service Station transformers electrical conductors. Both of the transformers automatically de-energized causing a loss of offsite power supply to both of the Unit 1 and one of the Unit 2 safety system emergency buses. The 'B' Reserve Service Station transformer was not affected and continued to supply power to the other Unit 2 emergency bus.

The dedicated Unit 1, number 1 emergency diesel generator, started and loaded its safety system emergency bus. The number 3 emergency diesel generator, shared between Units 1 and 2, started and automatically transferred to the other Unit 1 safety system emergency bus since that bus became de-energized before the Unit 2 safety system emergency bus de-energized. The alternate AC emergency diesel generator automatically started but was not manually loaded due to a generator output breaker lockout. This left the Unit 2, 2J, safety system emergency bus de-energized until the alternate AC emergency diesel generator output breaker was reset and closed at 9:54 p.m. The 'A' Reserve Service Station transformer was not damaged, as determined by licensee inspections, and was returned to service supplying power to the Unit 1, 1J, safety system emergency bus at 2:09 a.m. on October 8. The 'C' Reserve Service Station transformer bus bar experienced minor damage and was repaired. The 'C' Reserve Service Station transformer was returned to service at 2:47 p.m. and normal offsite power was restored to all safety system emergency buses at 5:27 p.m. on October 8. Unit 1 remained at power during the event and was stabilized at approximately 73 percent rated thermal power. Unit 2 was stabilized in Hot Shutdown. The Alert was exited at 5:40 a.m. on October 8.

Unit 1 had returned to 100% power at 10:42 a.m on October 8 and Unit 2 remained in Hot Shutdown while a root cause evaluation of the secondary system transient was being conducted.

Region II entered the monitoring mode at 6:40 p.m on October 7 and exited it at 7:00 a. m. on October 8. The resident inspectors responded to the site and monitored the licensee's actions.

Region II has evaluated this event and determined that criteria has been met to conduct an inspection of the circumstances surrounding the event. Region II will evaluate the significance of the event to determine the type of inspection that will be conducted.

Region II received initial notification of this occurrence from the licensee via telephone to the Senior Resident Inspector at approximately 5:27 p.m. This information presented herein has been discussed with the licensee and is current as of 9:00 a.m., on October 9, 2006.

CONTACT: Eugene Guthrie  
404-562-4662