

May 24, 2004

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE PNO-II-2004-003

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.

Facility

Virginia Electric and Power Company
Unit 2
Surry, Virginia
Dockets/License: 50-281, DPR-37

Licensee Emergency Classification

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

Subject: Surry Unit 2 Reactor Trip and Auxiliary Feedwater System Issues Causing a Unit Shutdown to Cold Shutdown.

On May 21, 2004, at 9:08 p.m., a failure of the Surry Unit 2 phase "A" Coupling Capacitor Potential Device (CCPD) in the 500 kv switchyard caused a Unit 2 main generator differential lockout (EN 40768). This resulted in a Unit 2 turbine trip followed by a reactor trip from full reactor power. The CCPD failure (electrical fault) resulted in a fire in the switchyard. The licensee declared a Notice of Unusual Event (NOUE). The licensee dispatched the onsite fire brigade and extinguished the fire in less than an hour. All control rods inserted into the core and the unit was stable in hot shutdown condition. All safety systems functioned normally during the event.

Subsequently, at 9:46 p.m., Unit 2 entered a Technical Specification (TS) Action Statement to be in cold shutdown within 30 hours due to differing information between an existing operability evaluation on the Auxiliary Feedwater (AFW) system and a post trip recovery Emergency Procedure. This TS action statement was exited at 12:40 a.m., on May 22 following restoration of the AFW system to within the existing operability evaluation (EN 40770).

Later in the day on May 22, the control room operators noted a declining level trend in the Condensate Storage Tank. The licensee determined that the AFW system was inoperable due to a leak in the underground section of a two-inch min-flow recirculation line on the AFW system (EN 40771). This operability determination was based on not having reasonable assurance that the AFW piping could continue to perform its intended function under all design basis events including seismic events. Based on the inoperability of Unit 2 AFW due to the underground leak, the licensee placed Unit 2 in Cold Shutdown (<200F). Despite the underground leak estimated at 8 gpm, the licensee later concluded that the AFW system retained 95 percent of its design capability during this event.

Unit 2 remains in cold shutdown while the licensee performs a modification to bypass the min-flow recirculation line using an existing safety related alternate line for recirculation flow to restore AFW system operability.

Unit 1 operated at 100 percent power during this event and is effected during the modification while the AFW crossconnect from Unit 2 is not available. Unit 1 was placed in a 72 hour TS action statement because the Unit 2 AFW provides backup to the Unit 1 AFW system.

The Commonwealth of Virginia was informed by the Region II State Liaison Officer.

Region II received initial notification of this occurrence by telephone from Resident Inspector. This information presented herein has been discussed with the licensee and is current as of 3:00 p.m., May 24, 2004.

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