

December 18, 2002

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-02-078

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 IV staff on this date.

**Facility**

STP Nuclear Operating Company  
South Texas Project Electric Generating Station  
Unit 2  
Docket: 50-499  
License No. NPF-80

**Licensee Emergency Classification**

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

SUBJECT: SHUTDOWN AS A RESULT OF HIGH MAIN TURBINE VIBRATION

DESCRIPTION: On December 15, 2002, at 6:08 p.m (CST), South Texas Project Unit 2 was manually tripped because of high vibration on the low pressure turbines. Abnormal turbine noise confirmed that a turbine problem existed. During the initial part of the turbine coastdown, vibrations continued to increase so operators minimized the amount of time for the turbine to coast to a stop by breaking vacuum in the main condenser and shutting the main steam isolation valves. The licensee subsequently identified indications of condenser tube leakage into the waterbox directly below the low pressure turbine that had the highest vibration.

On December 6, 2002, Unit 2 restarted after a 65-day outage to replace steam generators and refuel. During this outage, work was performed on the high pressure turbine and the main generator, but no major work was performed on the low pressure turbines.

Site personnel are inspecting the turbine to determine the extent of damage and to determine the necessary repairs. Preliminary inspections of the affected low pressure turbines indicate several cracked blades, a missing blade in one turbine, and damage to several stationary blades in that turbine. The cause of the turbine failure is under review.

Region IV received notification of the shutdown by telephone from the resident inspectors on December 15, 2002. Region IV has informed EDO/NRR/PA. The state of Texas has been informed.

This information has been discussed with the licensee and is current as of 10:30 a.m. on December 18, 2002.

CONTACTS: William Johnson 817-860-8148  
Neil O'Keefe 361-972-2507