February 10, 2005

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-05-002

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, Arlington, Texas, staff on this date.

Facility	**Licensee Emergency Classification**
Palo Verde Nuclear Generating Station, Unit 1	___ Notification of Unusual Event
Buckeye, Arizona	___ Alert
Docket: 50-528	___ Site Area Emergency
License No. NPF-41	___ General Emergency
	_X_ Not Applicable

SUBJECT: Technical Specification Required Shutdown Due to a Partial Loss of Offsite Power

DESCRIPTION: On February 9, 2005, Arizona Public Service Co., the licensee for the Palo Verde Nuclear Generating Station, shutdown Unit 1 as required by the plant's Technical Specifications because of a fault affecting an electrical bus. This fault resulted in the loss of one engineered safety features (ESF) transformer, which constitutes a loss of one off-site power source to Unit 1. Units 2 and 3 at the site remain at 100 percent power.

The following discussion provides additional information regarding the nature of the electrical fault and its impact on the unit. On February 6, 2005, at 10:19 p.m. (MST), a fault on Bus 1-NAN-S06 caused an over-current condition which resulted in damage and loss of power to the bus. This resulted in a loss of power to the Unit 1, Train B ESF transformer and a loss of power to the Unit 1, Train B safety buses. The Train B emergency diesel generator started and loaded onto the bus as designed; thereby, serving as an emergency power source to the electrical loads on the affected safety buses. The loss of the ESF transformer represented a loss of one offsite power source to Unit 1; therefore, Technical Specification 3.8.1 required Unit 1 to be shutdown within 78 hours. Based on preliminary inspections of Bus 1-NAN-S06, the licensee concluded that repairs could not be completed within 78 hours. Consequently, a normal reactor shutdown was commenced at 1:04 a.m. (MST) on February 9, 2005.

On February 9, 2005, at 3:12 a.m. (MST), the reactor was manually tripped from approximately 20 percent power in accordance with normal operating procedures. The shutdown and post-trip recovery actions were complicated by a condition that required the reactor coolant pumps to be secured for a short period of time. This condition was resolved and the two reactor coolant pumps were returned to service at 5:05 a.m. (MST). Currently the plant is stable and a cool down to cold shutdown conditions is complete.

The Resident Inspectors were present in the control room during the plant shutdown and continue to monitor the licensee's ongoing investigation regarding the shutdown complications, as well as the cause of the fault on Bus 1-NAN-S06. The Unit 1, Train B emergency diesel generator remains running to supply the Unit 1, Train B safety buses.

The state of Arizona has been notified.

Region IV received notification of this occurrence by telephone from the licensee at 2:31 a.m. (CST) on February 9, 2005. The information presented herein has been discussed with the licensee and is current as of 7:00 a.m. (CST) on February 10, 2005.

ADAMS ACCESSION NUMBER: ML 050410047

CONTACTS: Scott Schwind, 817-860-8173, SCS@NRC.gov