

January 25, 1988

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-88-06A

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: Wolf Creek Nuclear Operating Corp.
Wolf Creek Generating Station
Coffey County, Kansas
DN: 50-382

Licensee Emergency Classification:
 Notification of Unusual Event
 Alert
 Site Area Emergency
 General Emergency
 Not Applicable

SUBJECT: REACTOR VESSEL FLANGE LEAKAGE

During plant startup after the last refueling outage (Mode 1 was attained on January 5, 1988), Wolf Creek determined that the reactor vessel flange inner O-ring was leaking. The inner leakoff monitor tube was then isolated to contain the leakage. As a result of concerns raised at that time by NRC Region IV and NRR technical staff, the licensee committed to closely monitor for leakage from the outer O-ring and commence an immediate reactor shut down if any was identified. Subsequently, at 6:30 p.m. CST on January 21, 1988, the licensee determined that the reactor vessel outer O-ring was leaking, and at 6:58 p.m. CST, began a shutdown from 100 percent power. An outage of approximately 21 days is expected in order to replace both O-ring seals.

On January 22, 1988, the licensee was in the process of entering the RHR mode of cooling. As a result of CCW flow being throttled down excessively, cooling water was boiled in the RHR heat exchanger causing a rising level in the CCW expansion tank. Operators then increased CCW flow which led to a waterhammer in the component cooling water system. Preliminary walkdowns disclosed no physical damage and the utility is currently conducting an engineering evaluation.

During the process of preparing to remove the vessel head, on January 24, 1988, a tygon tube used for vessel level indication indicated vessel water level as being 1 foot below the level of the flange. This indication dropped 18 to 20 inches in 30-40 seconds upon the disconnection of a CONO seal (incore thermocouple seal) on the vessel head. The containment was subsequently evacuated due to the resultant release of radioactive gas. The maximum level recorded was 14 MPC and two individuals received an exposures of 0.14 and 0.06 percent body burden which equates to a low level of exposure. It was subsequently concluded that the valve at the head vent connection was plugged and a small pressure above atmospheric was present in the reactor vessel. This caused the level in the tygon tube to be higher than in the reactor vessel.

The SRI received an inquiry from members of the Nuclear Awareness Network concerning the events that are described herein at his home on January 24, 1988.

RIV:DRP
LJCallan:gb
01/25/88

RA
RDM:ptn
01/25/88

(Transmitted via 5520 - 125388
@4:25p - jc)

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PDR I&E
PNO-IV-88-006A PDR

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The SRI is continuing to monitor the situation and four members of the Region IV technical staff are arriving on site today to assist the SRI.

The licensee has issued a press release relating to the outage.

The state of Kansas will be informed.

This information has been confirmed with a licensee representative.

CONTACT: J. I. Tapia, (FTS 728-8158)

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