

LICENSEE EVENT REPORT

CONTROL BLOCK / / / / / / (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

/0/1/ /V/A/N/A/S/1/ (2) /0/0/-/0/0/0/0/0/-/0/0/ (3) /4/1/1/1/1/ (4) / / / (5)
 LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT

/0/1/ REPORT /L/ (6) /0/5/0/0/0/3/3/8/ (7) /1/1/1/0/8/2/ (8) /1/2/3/9/8/2/ (9)
 SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / On October 11, 1982, with Unit 1 in Mode 5, a pressurizer PORV that was previous-/
 /0/3/ / ly blocked open was found closed. Both pressurizer PORV's were inoperable. The /
 /0/4/ / RCS Overpressurization Protection Systems required by T.S. 3.4.9.3 were inoper- /
 /0/5/ / able. This event is reportable pursuant to T.S. 6.9.1.9.b. No overpressuriza- /
 /0/6/ / tion of the RCS occurred and the Action Statement of the applicable LCO, T.S. /
 /0/7/ / 3.4.9.3, was met. The public health and safety were not affected. /
 /0/8/ /

SYSTEM CAUSE CAUSE COMP. VALVE
 CODE CODE SUBCODE COMPONENT CODE SUBCODE SUBCODE

/0/9/ /C/J/ (11) /D/ (12) /Z/ (13) /V/A/L/V/E/X/ (14) /F/ (15) /B/ (16)
 LER/RO EVENT YEAR SEQUENTIAL OCCURRENCE REPORT REVISION
 (17) REPORT NO. NO.
 NUMBER /8/2/ /-/ /0/6/9/ /-/ /0/3/ /L/ /-/ /0/

ACTION FUTURE EFFECT SHUTDOWN ATTACHMENT NPRD-4 PRIME COMP. COMPONENT
 TAKEN ACTION ON PLANT METHOD HOURS SUBMITTED FORM SUB. SUPPLIER MANUFACTURER

/X/ (18) /X/ (19) /Z/ (20) /Z/ (21) /0/0/0/0/ (22) /Y/ (23) /N/ (24) /N/ (25) /M/1/2/0/
 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

/1/0/ / It appears that PORV block was not adequately secured when installed. During /
 /1/1/ / maintenance of the blocked open PORV, the block fell out. Inadequate administra- /
 /1/2/ / tive control allowed the event to occur. The block was immediately reinstalled. /
 /1/3/ / A procedure describing PORV block installation will be written. /
 /1/4/ /

FACILITY METHOD OF
 STATUS %POWER OTHER STATUS (30) DISCOVERY DISCOVERY DESCRIPTION (32)
 /1/5/ /G/ (28) /0/0/0/ (29) / NA / /A/ (31) / Operator Observation /

ACTIVITY CONTENT
 RELEASED OF RELEASE AMOUNT OF ACTIVITY (35) LOCATION OF RELEASE (36)
 /1/6/ /Z/ (33) /Z/ (34) / NA / / NA /

PERSONNEL EXPOSURES
 NUMBER TYPE DESCRIPTION (39)
 /1/7/ /0/0/0/ (37) /Z/ (38) / NA /

PERSONNEL INJURIES
 NUMBER DESCRIPTION (41)
 /1/8/ /0/0/0/ (40) / N/ /

LOSS OF OR DAMAGE TO FACILITY (43)
 TYPE DESCRIPTION
 /1/9/ /Z/ (42) / NA /

PUBLICITY

ISSUED DESCRIPTION (45) NRC USE ONLY
 /2/0/ /N/ (44) / NA / / / / / / / / / / / / /

NAME OF PREPARER W. R. CARTWRIGHT

PHONE (703) 894-5151

8212200037 821209
 PDR ADOCK 05000338
 S PDR

Description of Event

On October 10, 1982, with Unit 1 in Mode 5, PCV-1456, a pressurizer power operated relief valve (PORV), was mechanically "blocked" in the open position to provide a Reactor Coolant System vent path capable of preventing a low temperature Reactor Coolant System Overpressurization event. Blocking a pressurizer PORV open provides the 2.07 square inch RCS vent required by T.S. 3.4.9.3 and minimizes pressurizer PORV Nitrogen Supply System demand for nitrogen.

At 0930 on October 10, 1982 the pressurizer PORV Nitrogen Supply System was pressurized, the pressurizer PORV low temperature overpressurization control key switches were placed in auto, and the "block" was removed from PCV-1456 to allow pressurization of the Reactor Coolant System.

At 1112 on October 10, 1982, after experiencing heavy pressurizer PORV Nitrogen Supply System demand and discovering that the diaphragms on both pressurizer PORV's were leaking, the "block" was reinstalled on PCV-1456. Both pressurizer PORV's were subsequently tagged out to the Maintenance Department for diaphragm replacement. Maintenance on both pressurizer PORV's was completed at approximately 0400 on October 11, 1982.

At 0430 on October 11, 1982, while clearing tags on the pressurizer PORV's in preparation for returning them to service, operators noted that the PCV-1456 was no longer blocked open. The "block", a rectangular metal block with a locking wire attached, was found on the operating deck 17 feet below. The Reactor Coolant System vent provided by blocking a pressurizer PORV open was closed with both pressurizer PORV's inoperable. The Reactor Coolant System Overpressurization Protection Systems required by T.S. 3.4.9.3 were inoperable. This event is reportable pursuant to T.S. 6.9.1.9.b.

Probable Consequences of Occurrence

PCV-1456 was verified and documented as being open in the SRO/CRO Shift Turnover Check List at 2345 on November 10, 1982. The block was reinstalled on PCV-1456 at 0436 on November 11, 1982. The maximum time that PCV-1456 could have been closed is 4 hours and 51 minutes.

The RHR System was in operation throughout the event. Two relief valves located upstream of the RHR pumps have a combined capacity of 1800 gpm with 10 percent accumulation. Since the setpoint of the relief valves is 467 psig, the RHR System pressure at the design capacity of the relief valves would be limited to 514 psig. The RHR System auto isolation setpoint is set at 582 psig; therefore, when the RHR system is in service, it will provide pressurization protection for the Reactor Coolant System.

During the event the Reactor Coolant System pressure remained at atmospheric pressure. No reactor coolant pumps were started during the event and procedures do not allow a reactor coolant pump start until reactor coolant pressure is 320 psig and seal flow has been established. Prior to a reactor coolant pump start, procedures also require a check of steam generator secondary temperatures to ensure no reactor coolant thermal swells occur when a reactor coolant pump is started. During the event, a reactor coolant pump start was not a potential source of Reactor Coolant System pressurization.

The only potential source of reactor coolant overpressurization during the event was the make up system. Only one charging pump was operable during the event as required when reactor coolant temperature is less than 320°F. Run out flow of the charging pumps is less than 750 gpm. At this flow rate, the RHR System relief valves are capable of maintaining the reactor coolant pressure below the 500 psig limit shown in T.S Figure 3.4-2 and 3.4-3.

The Reactor Coolant System was protected from overpressurization by the RHR System, no overpressurization of the Reactor Coolant System occurred, and the Action Statement of applicable LCO, T.S. 3.4.9.3, was met. The public health and safety were not affected.

Cause of Event

The jumper used to install the block did not specify how the "block", a steel bar placed between the valve stem to operator connector and the base of the operator, should be installed. Normally, the valve is opened, the "block" is placed in position, and gas pressure is vented from the operator wedging the block in place. A wire is then wrapped around the valve stem and "block" to insure that the block does not move.

It appears that when the valve was blocked open on October 10, 1982 at 1112, it was not secured with wire. When the valve diaphragm was replaced by the maintenance crew, the valve operator spring was unloaded removing the wedging force on the "block". The valve block fell out unnoticed. The maintenance crew was unaware that the valve should have been blocked open to provide a reactor coolant vent as required by T.S. 3.4.9.3.

Inadequate administrative control allowed the event to occur.

Immediate Corrective Action

PCV-1456 was immediately blocked open. Both pressurizer PORV's were restored to operable status by 0616 on November 11, 1982.

Scheduled Corrective Action

A procedure to control blocking open of a pressurizer PORV will be written. Blocking open of a pressurizer PORV will not be accomplished by a jumper after the procedure is implemented. A more substantial PORV blocking device will be designed and manufactured.

Actions Taken to Prevent Recurrence

The scheduled corrective actions will prevent recurrence.

Generic Implications

This event has no generic implications.