

LICENSEE EVENT REPORT

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

/0/1/ /V/A/N/A/S/2/ (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) /0/5/0/0/0/3/3/9/ (7) /0/8/3/0/8/2/ (8) /0/9/2/2/8/2/ (9)  
 SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / On August 30, 1982 at 2133 with Unit 2 at 30 percent power, "B" steam generator /  
/0/3/ / steam flow channel IV failed high. The redundant channel, "B" steam generator /  
/0/4/ / steam flow channel III, remained operable. The failed steam generator steam flow /  
/0/5/ / channel was placed in the tripped condition as required by the Action Statements /  
/0/6/ / of the applicable LCO's, T.S. 3.3.1.1 and T.S. 3.3.2.1. The public health and /  
/0/7/ / safety were not affected. This event is reportable pursuant to T.S. 6.9.1.9.b. /  
/0/8/ /

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

/0/9/ /I/B/ (11) /X/ (12) /Z/ (13) /Z/Z/Z/Z/Z/Z/ (14) /Z/ (15) /Z/ (16)  
 LER/RO EVENT YEAR SEQUENTIAL OCCURRENCE REPORT REVISION  
 REPORT NO. REPORT NO.

(17) /8/2/ /-/ /0/5/9/ / / /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) /Z/ (19) /Z/ (20) /Z/ (21) /0/0/0/0/ (22) /Y/ (23) /N/ (24) /Z/ (25) /Z/9/9/9/ (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

/1/0/ / The cause of the event is unknown. The failed channel was placed in the tripped /  
/1/1/ / condition as required by the Action Statements of the applicable LCO's. The /  
/1/2/ / problem cleared during troubleshooting. After the problem cleared during /  
/1/3/ / troubleshooting, a channel check was made and the channel was returned to ser- /  
/1/4/ / vice. The problem has not recurred. /

FACILITY STATUS %POWER OTHER STATUS (30) METHOD OF DISCOVERY DISCOVERY DESCRIPTION (32)  
/1/5/ /E/ (28) /0/3/0/ (29) / NA / (30) /A/ (31) / Operator Observation /

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

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

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

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

PUBLICITY ISSUED DESCRIPTION (45)  
/2/0/ /N/ (44) / NA /

NRC USE ONLY

/ / / / / / / / / / / / / / / /

NAME OF PREPARER W. R. CARTWRIGHT PHONE (703) 894-5151

Description of Event

On August 30, 1982, at 2133 with Unit 2 at 30 percent power, "B" steam generator steam flow channel IV failed high. The redundant channel, "B" steam generator steam flow channel III, remained operable. This event is reportable pursuant to T.S. 6.9.1.9.b.

Probable Consequences of Occurrence

The steam generator steam flow channels provide steam line break and loss of heat sink protection by providing input to the following protection logic:

- 1) Safety injection and steam line isolation from 1 of 2 high steam flow channels in 2 out of 3 steam generators, coincident with either low steam line pressure in 2 of 3 steam lines or Lo-Lo Tavg in 2 of 3 reactor coolant loops.
- 2) Reactor trip from 1 of 2 steam flow/feed flow mismatch channels coincident with low steam generator level from 1 of 2 channels in the same steam generator.

Steam generator "B" steam flow channel failed conservatively in the high direction.

The failed steam generator "B" steam flow channel was placed in the tripped condition within one hour as required by the Action Statements of the applicable LCO's, T.S. 3.3.1.1 and T.S. 3.3.2.1. The public health and safety were not affected.

Cause of Event

The cause of the event is unknown. When the failure occurred, the Instrumentation Department immediately dispatched an Instrumentation Technician to investigate and place the channel in trip. Prior to placing the channel in trip, the Instrument Technician measured the voltage across a 250 ohm resistor which is in series with the channel IV "B" steam generator flow transmitter. A voltage reading of 7 volts indicated that the flow transmitter output was 28 milliamps. Full scale transmitter output is 20 milliamps. At existing plant conditions the transmitter output should have been approximately 4.9 milliamps.

The Instrument Technician placed the channel in trip in accordance with the applicable Abnormal Procedure and Instrument Calibration Procedure. Placing the channel IV "B" steam generator feed and steam flow bistables in the tripped condition caused a relay to actuate which removes power from the "B" steam generator channel IV flow transmitter. The output of the loop power supply card (Westinghouse NLP card) to the protection circuitry dropped to zero volts as soon as the transmitter connection to the power supply card was removed. This indicated that the loop power supply card was responding normally.

Suspecting a malfunction of the flow transmitter, the Instrument Technician repowered the transmitter by placing the master test switch in the "TEST" position. A check of the voltage drop across the 250 ohm resistor in series with the flow transmitter showed that the transmitter output had returned to normal. A channel check of the "B" steam generator channel IV steam flow indicator showed that it was within the required tolerance and responding normally. With the channel responding normally, no further investigation of the problem was possible. The Instrument Technician returned the channel to service after waiting a few minutes for the problem to recur. To date the problem has not recurred.

Immediate Corrective Action

The "B" steam generator channel IV steam flow channel was placed in the tripped condition within one hour. After the problem cleared during troubleshooting, the channel was returned to service at 2209, 36 minutes after the failure.

Subsequent Actions

The "B" steam generator channel IV steam flow transmitters are Rosemount Model 1153DD6PA differential pressure transmitters. Rosemount Incorporated was contacted and asked if they had encountered any problems with their transmitters that could have caused the event described above. Rosemount personnel, after discussing the event with their engineering group, stated that Rosemount was not aware of any problem with the transmitter that could have caused the event described above.

Scheduled Corrective Action

No scheduled corrective action is required.

Action Taken To Prevent Recurrence

No further action is required.

Generic Implications

This event does not have generic implications.