

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 SOURCE /L/ (5) /0/5/0/0/0/3/3/8/ (7) /1/2/0/4/8/2/ (8) /1/2/3/1/8/2/ (9)
DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / On December 4, 1982, with Unit 1 at 17 percent of Rated Thermal Power, a mal- /
/0/3/ / function of the Turbine Control System caused it to suddenly increase load. A /
/0/4/ / Reactor Trip and SI resulted. All safety equipment responded as required. The /
/0/5/ / event was quickly terminated. The applicable LCO Action Statements were met. /
/0/6/ / The public health and safety were not affected. This event is reportable pursu- /
/0/7/ / ant to T.S. 6.9.2 and T.S. 6.9.1.9.b. /
/0/8/ / /

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

/0/9/ /H/A/ (11) /E/ (12) /G/ (13) /I/N/S/T/R/U/ (14) /C/ (15) /Z/ (16)
LER/RO EVENT YEAR SEQUENTIAL OCCURRENCE REPORT REVISION
REPORT NO. REPORT NO.
(17) REPORT NUMBER /8/2/ /- /0/8/3/ / / /0/3/ / / /- /0/

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

/A/ (18) /Z/ (19) /A/ (20) /C/ (21) /0/0/2/0/ (22) /Y/ (23) /N/ (24) /N/ (25) /W/1/2/0/
(26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

/1/0/ / A malfunction of a digital to analog converter in the turbine Electro-Hydraulic /
/1/1/ / Control (EHC) System caused the event. The plant was quickly stabilized and all /
/1/2/ / parameters restored to normal. All equipment was returned to normal status. /
/1/3/ / The Turbine EHC System has been repaired. /
/1/4/ / /

FACILITY STATUS %POWER OTHER STATUS METHOD OF DISCOVERY DISCOVERY DESCRIPTION (32)
/1/5/ /C/ (28) /0/1/7/ (29) / NA / (30) /A/ (31) / Operator Observation /

ACTIVITY CONTENT 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) / NA /

LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION (43)
/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 December 4, 1982 at 1650, with Unit 1 at 17 percent of Rated Thermal Power and 100 MWe, turbine control was transferred from "IMP OUT" (valve position reference control) to "IMP IN" (load or impulse pressure reference control). The turbine EHC System malfunctioned and the turbine started ramping up at approximately 50 to 75 MWe per second. The governor valves stopped opening at the "Valve Position Limiter" setting of 30 percent. The load increase terminated at approximately 260 MWe. The operator transferred to manual turbine control and an attempt was made to restore the governor valves to their original pretransient position manually; however the turbine transient was too severe to allow recovery. The reactor tripped on a low steam generator level coincident with a steam flow/feed flow mismatch signal.

The Post Accident Analysis Log (PAAL) indicates that 183 milliseconds after the reactor trip the turbine tripped. Automatic safety injection was initiated 350 milliseconds after the reactor trip from a high steamline flow coincident with low reactor coolant average temperature Si signal.

The reactor power increased from 17 to 23 percent prior to the reactor trip. The minimum pressurizer level obtained during the event was 14.5 percent. The lowest average reactor coolant temperature obtained during the event was 520 degrees fahrenheit. The lowest reactor coolant system pressure obtained during the event was 2148 psig. Steam generator narrow range level was maintained throughout the event. The primary system transient was mild.

All safety related equipment performed as designed. No safety related equipment failures occurred. Approximately eight minutes after the event began, all conditions required by emergency procedures to secure safety injection were met and safety injection was terminated.

An unusual event was declared at 1650 when the event began. By 1655 all parameters were within normal ranges for Mode 3 operation and preparations for returning equipment status to normal were being made. The unusual event was terminated at 1655. The NRC was informed of the unusual event within 15 minutes. All emergency plan state and local notifications were completed by 1742.

The Control Room bottled air system which discharged during the event as designed was restored to operable status by 1730 in compliance with the Action Statement of the LCO for T.S. 3.7.7.1. The Boron Injection Tank boron concentration was restored to T.S. 3.5.4.1 limits by 2145.

Unit 2 remained at 100 percent of Rated Thermal Power throughout the event and was not affected.

This event is reportable pursuant to T.S. 6.9.2 and T.S. 6.9.1.9.b. This is the seventh ECCS actuation reportable pursuant to T.S. 6.9.2.

Probable Consequences of Occurrence

All systems performed as designed. The Action Statements of all applicable LCO's were met. All parameters and equipment were quickly restored to normal. No personnel injuries or equipment damage occurred. The public health and safety were not affected.

Cause of Occurrence

Both the reactor trip and safety injection were caused by a malfunction of a digital to analog converter in the Turbine EHC System.

Immediate Corrective Action

The appropriate emergency procedures were implemented, the plant was stabilized, and all parameters restored to normal. All equipment was restored to normal status. The Turbine EHC System was repaired.

Scheduled Corrective Action

No scheduled corrective actions are required.

Action Taken To Prevent Recurrence

The Turbine EHC System has been repaired.

Generic Implications

This event has no generic implications.