

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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / On October 5, 1982, with Unit No. 1 in Mode 6 the boron concentration in the /
/0/3/ / Refueling Water Storage Tank (RWST) fell below the T.S. 3.1.2.7 limit of 2000 /
/0/4/ / PPM. and the "A" Boric Acid Storage Tank (BAST) boron concentration went /
/0/5/ / above its T.S. 3.1.2.7 limit of 22,500. Therefore, no borated water sources were /
/0/6/ / technically operable. Since core alterations were stopped until a boron flow /
/0/7/ / path was restored, the public health and safety were not affected. This event is /
/0/8/ / contrary to T.S. 3.1.2.1 and reportable pursuant to T.S. 6.9.1.9.b. /

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

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

(17) NUMBER /8/2/ /-/ /0/6/4/ / / /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) /A/ (25) /Z/9/9/9/ (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

/1/0/ / The loss of all borated water sources was caused by the inaccuracies in constant- /
/1/1/ / ly making up to the RWST with a blended flow along with attempting to maintain a /
/1/2/ / consistent boron concentration in the "A" BAST while constantly batching and mak- /
/1/3/ / ing up to it. Upon discovery of the out of Limit Condition, core alterations /
/1/4/ / were halted until the "A" BAST chemistry was verified to be within its limits. /

FACILITY METHOD OF STATUS %POWER OTHER STATUS DISCOVERY DISCOVERY DESCRIPTION (32)
/1/5/ /H/ (28) /0/0/0/ (29) / NA / (30) /B/ (31) / Chemistry 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) / 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 October 5, 1982, while in Mode 6 during refueling, it was determined that the boron concentration of the RWST had fallen below its T.S. 3.1.2.7 limit of 2000 PPM (1978 PPM) and that the "A" BAST had gone above its T.S. 3.1.2.7 limit of 22500 PPM (22896 PPM). Therefore, no borated water flow paths were technically operable.

Probable Consequences of Occurrence

Upon discovering there were no borated water flow paths available, all core alterations were halted (core reload had just started). The "A" BAST was sampled and verified to be operable prior to resuming core alterations; consequently, the public health and safety were not affected. In addition, since the boron concentration of each source was so close to its T.S. limit, either source could have been used if required with no discernible difference in performance.

Cause of Event

There were several contributing causes to this event. Initially, there were two borated water flow paths available; one from the RWST through a charging pump to the core and one from the "A" BAST through a charging pump to the core. The RWST boron concentration was going in and out of specification because of the constant blending to the RWST being done in order to restore its level. This was necessary in order to make up to the refueling cavity. The boron samples taken of the "A" BAST were not representative because of the nearly constant batching that was necessary in order to make up to the RWST.

Immediate Corrective Action

The immediate action was to halt all core alterations. Subsequent actions included sampling the "A" BAST to verify the boric acid solution was within its limits. The proper boron concentration in the RWST was attained by blending to the RWST with water of a higher boron concentration.

Scheduled Corrective Action

No further corrective action is scheduled.

Action Taken To Prevent Recurrence

This is an isolated event; therefore, no further actions are required.

Generic Implications

There are no generic implications to this event.