

U.S. NUCLEAR REGULATORY COMMISSION
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 SOURCE /L/ (6) /0/5/0/0/0/3/3/9/ (7) /1/0/0/9/8/0/ (8) /1/1/0/5/8/0/ (9,
 DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

/0/2/ / On October 9, 1980, with the unit at 49% power, at time 1030, sample analysis /
 /0/3/ / of SI accumulator A revealed the boron concentration to be 2179 ppm. At time /
 /0/4/ / 1520, accumulator 1C boron concentration was found to be 2168 ppm. This is /
 /0/5/ / contrary to T.S. 3.5.1 and reportable pursuant to T.S. 6.9.1.9.b. Upon dis- /
 /0/6/ / covery of high boron concentration, each accumulator was returned to within the /
 /0/7/ / limits of the specification within the time required by the action statement, /
 /0/8/ / thus the health and safety of the general public were not affected. /

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

/0/3/ /S/F/ (11) /X/ (12) /Z/ (13) /A/C/C/U/M/U/ (14) /Z/ (15) /Z/ (16)
 SEQUENTIAL OCCURRENCE REPORT REVISION
 LER/RO EVENT YEAR REPORT NO. CODE TYPE NO.
 (17) REPORT NUMBER /8/0/ /-/ /0/7/1/ / \ / /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) /N/ (25) /D/1/0/0/ (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

/1/0/ / The high sample concentration is believed to have been caused by stratification /
 /1/1/ / of the stagnant solution in the accumulator. Immediately upon discovery of the /
 /1/2/ / high boron concentration in SI Accumulator 1A, it was placed in recirculation /
 /1/3/ / with the Unit 2 RWST until boron concentration was within specification. Later, /
 /1/4/ / similar action was performed on Accumulator 1C when found out of Spec. /

FACILITY STATUS %POWER OTHER STATUS METHOD OF DISCOVERY DISCOVERY DESCRIPTION (32)

/1/5/ /E/ (28) /0/4/9/ (29) / NA / (30) /B/ (31) / Routine Sample /

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 (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 October 9, 1980, with the unit at 49% power, at time 1030 sample analysis of SI accumulator 1A revealed the boron concentration to be 2179 ppm. Accumulator 1A was immediately placed in recirculation with the unit 2 RWST which has a known boron concentration between 2000 ppm and 2100 ppm. At time 1345, accumulator 1A was determined to be within the required specification limits.

At time 1520 accumulator 1C was sampled and the boron concentration was found to be 2168 ppm. It was immediately placed on recirculation with the RWST and, at time 1640, was found to be within the limits of Technical Specification 3.5.1 which stipulates that the concentration be maintained between 1900 and 2100 ppm.

Probable Consequences of Occurrence

Since the boron concentration was brought back within specification in the time required by the action statement, the health and safety of the general public were not affected.

Cause of Event

The only source of borated water for the SI accumulators in the past has been the RWST, which contains a known concentration of borated water. No other sources of makeup or fill have been used for the SI accumulators. The samples obtained from these accumulators contain higher concentration of boron than that contained in the RWST. For this reason, the high sample concentration is believed to have been caused by stratification of stagnant boric acid in the accumulator.

Immediate Corrective Action

The accumulators were recirculated with the RWST until the proper boron concentration was achieved.

Scheduled Corrective Action

Technical Services has been requested to develop an analysis to support a wider tolerance band for accumulator boron concentration.

Actions Taken to Prevent Recurrence

It is believed that this is a sampling stratification problem. Therefore we have no reason to believe that the bulk accumulator concentration was out of spec. No action, other than pursuing a Technical Specification change, is required.

Generic Implications

Stratification of boric acid in stagnant tanks is a generic problem.