

LICENSEE EVENT REPORT

CONTROL BLOCK: 1

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

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 LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT 58

CONT

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7 8 60 61 68 69 74 75 80
 REPORT SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES 10

02 While performing maintenance on the Unit No. 2 service water system with the unit
03 shutdown for a short maintenance outage, average primary coolant temperature reached
04 approximately 212°F with primary containment not act. A similar event occurred on
05 December 9, 1980 (LER-2-80-112).
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LER ATTACHMENT - RO# 2-80-107

Facility: Unit No. 2

Event Date: 12-8-80

EVENT 1 DESCRIPTION

At 2030 on December 7, 1980, RHR service water was secured in the "A" loop to repair a leak on a one-inch pipe to the RHR service water radiation monitor. Shutdown cooling was lined up to the "A" loop with an RHR pump running to recirculate the vessel and both reactor recirculation pumps secured. At 2330, shift turnover, the primary coolant temperature was 165°F with approximately a 20°F per hour heatup rate, and the estimated time for completion of the repairs was 0015 on December 8, 1980.

Difficulties were encountered during the work and temporary repairs to the pipe were completed at approximately 0230. Average coolant temperature at this time approached 212°F with a local maximum of 217°F. The reactor head vents were open during this time with zero pressure in the reactor vessel. Shutdown cooling was initiated and primary coolant temperature decreased to normal levels by 0301.

Shutdown cooling was not lined up to loop "B" because it was expected that loop "A" would be back in service prior to approaching 212°F and due to the length of time required to line up that loop for operation. Loop "B" was not initially used because of potential salt water leaks on a room cooler and inoperative pump suction valve motors. Primary containment could not be quickly established due to cables going through the personnel access hatch and the torus hatch being removed.

EVENT 2 DESCRIPTION

At 1420 on December 9, 1980, the conventional and nuclear service water systems were secured to repair the 2A conventional service water pump discharge check valve. Primary coolant temperature at this time was less than 120°F. At 1615, RHR pumps ("A" loop) were secured to reduce coolant heat input from the pumps. Primary coolant temperature at this time was approximately 150°F. Due to unexpected problems, repairs to the valve took longer than anticipated. At 2015, the conventional and nuclear service water systems were returned to service following the check valve replacement. Primary coolant temperature at this time as read at the vessel bottom head drain was 147°F. At 2033, shutdown cooling was initiated with the "B" loop of RHR and the average coolant temperature reached approximately 212°F with a local maximum of 256°F. Primary containment could not be quickly established due to cables going through the personnel access hatch and the torus hatch being removed.

The reactor head vents were open during this time with zero pressure in the reactor vessel. Primary coolant temperature was reduced to normal levels by 2336.

CAUSE DESCRIPTION

The causes for the above events are as follows:

1. Maintenance in both events was not completed in the estimated time due to unexpected problems.
2. During the first event the "B" lbop, although available, was not used due to potential leaks on a room cooler and the requirement for manual valve operation due to inoperative pump suction valve motors.
3. Securing the RHR pumps while maintenance was in progress during the second event caused the loss of representative temperature indications. The temperature as read at the bottom head drain was not representative due to the low flow and the lack of vessel recirculation.
4. Failure of the control room personnel to fully recognize the heat up rate in the second event.
5. Failure to plan and promptly implement contingency plans for the possibility of unexpected delays in maintenance.

ACTION TO PREVENT REOCCURRENCE

The following actions have been or will be taken to prevent further events of this nature:

1. Appropriate licensed personnel were removed from licensed activities during the investigation of these events. These personnel were given special training on shutdown cooling, primary containment, and service water technical specifications.
2. Instructions were issued to all shifts to prohibit operating shutdown cooling in a degraded mode without PNSC review and General Manager approved procedures.
3. Operating procedures will be revised to provide operations personnel instruction for operating shutdown cooling in degraded modes.
4. All licensed personnel will be provided with special training on shutdown cooling, primary containment, and service water technical specifications.
5. Operating instructions will be revised to require prior PNSC review and approval prior to performing all new Operating Work Procedures.
6. These events were discussed with all licensed personnel by the Manager-Operations. The need for planning work, providing for contingencies, and maintaining good communications with maintenance personnel was stressed at these meetings.

7. Appropriate disciplinary actions have been taken with the personnel involved.