

LICENSEE EVENT REPORT

CONTROL BLOCK: (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

V A S P S 1 | 0 0 - 0 0 0 0 0 - 0 0 | 4 1 1 1 1 |

REPORT SOURCE | L | 0 5 0 0 0 2 8 0 | 0 9 10 9 8 | 1 | 0 0 5 8 1 |

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)
With both units at power, it was determined that spray nozzles in the RWST's are not the most conservative for determining the potential for spray system plugging. This is contrary to the basis for T.S.4.5.A.7 and reportable per T.S.6.6.2.b(3). Several means are used to ensure the system remains clean, including filtration prior to the nozzles. Therefore, the health and safety of the public were not affected.

SYSTEM CODE | S H | CAUSE CODE | D | CAUSE SUBCODE | Z | COMPONENT CODE | X X X X X X | COMP SUBCODE | Z | VALVE SUBCODE | Z |

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)
A Field Change to Design Change 77-09 reduced the size of the spray nozzles for the crane wall spray header which then became the most limiting size. However, the field change did not address the RWST nozzles to reflect the limiting model. A Design Change Package has been prepared to replace the nozzles in the RWST.

FACILITY STATUS | E | % POWER | 1 0 0 | OTHER STATUS | N/A | METHOD OF DISCOVERY | B | DISCOVERY DESCRIPTION | Review of Periodic Test |

ACTIVITY CONTENT | Z | AMOUNT OF ACTIVITY | N/A | LOCATION OF RELEASE | N/A |

PERSONNEL EXPOSURES | 0 0 0 | TYPE | Z | DESCRIPTION | N/A |

PERSONNEL INJURIES | 0 0 0 | DESCRIPTION | N/A |

LOSS OF OR DAMAGE TO FACILITY | Z | DESCRIPTION | N/A |

PUBLICITY ISSUED | N | DESCRIPTION | N/A |

ATTACHMENT 1
SURREY POWER STATION, UNIT 1
DOCKET NO: 50-280
REPORT NO: 81-045/03L-C
EVENT DATE: 09-09-81

TITLE OF THE EVENT: RWST SPRAY NOZZLES NOT MOST LIMITING

1. DESCRIPTION OF EVENT:

With both units at full power, on September 9, 1981, it was determined that the spray nozzles installed in the Refueling Water Storage Tank (RWST) during the implementation of Design Change 77-09 are an incorrect model and do not represent the most limiting orifice size in the spray system. The incorrect nozzles were installed during the steam generator replacement outages for each unit.

The spray nozzles in the RWST provide means to ensure there is no particulate matter in the RWST and Containment Spray Subsystems which could plug or cause deterioration of the effectiveness of the spray nozzles. A monthly flow test provides indication of any plugging of the nozzles, by a reduction in flow.

Since the nozzles that are in the RWST have an orifice size that is larger than that of the nozzles on the crane wall spray header, they are not the most conservative. The event is contrary to the basis for Technical Specification 4.5.A.7 and reportable per Technical Specification 6.6.2.b(3).

2. PROBABLE CONSEQUENCES OF OCCURRENCE:

The nozzles installed in the RWST have an orifice diameter of 3/8 inch whereas the most limiting orifice size is 21/64 inch; therefore, some particulates that could pass through the RWST nozzles might plug the spray ring nozzles. However, an inlet strainer to the containment spray pumps is provided which has a perforation diameter of 3/16 inch and will filter out matter that could potentially plug the spray ring spray nozzles. Following the discovery of the event, one strainer per unit was inspected for plugging. No indications were found.

The station chemists report no sign of particulates from the RWST in the samples they take for their routine tests.

With system flush prior to installation of the Containment Spray Subsystems spray nozzles, and corrosion resistant nozzles and piping, it is not considered credible that significant number of nozzles would plug and reduce the effectiveness of the spray subsystems.

For these reasons, the health and safety of the public have not been affected.

3. CAUSE OF THE EVENT:

A field change to Design Change 77-09 changed the model of the spray nozzle being installed on the crane wall header to ones with a smaller orifice diameter (21/64 inch as compared 3/8 inch). The field change, however, did not address the RWST spray nozzles, which remained 3/8 inch in diameter.

Report No.: 81-045/03L-0

4. IMMEDIATE CORRECTIVE ACTION:

The immediate action was to notify the Project Engineer and request a design change package to replace the existing RWST spray nozzles with the most conservative nozzles. Also, one strainer per unit was inspected for signs of particulate matter.

5. SUBSEQUENT CORRECTIVE ACTION:

The subsequent corrective action will be to implement the design change for replacing the spray nozzles. The station chemists are looking for signs of particulate matter in their routine samples.

6. ACTIONS TAKEN TO PREVENT RECURRENCE:

After implementation of the new design package, no further actions will be required.

7. GENERIC IMPLICATIONS:

This event is common to Gurry Units 1 & 2.