

Surry Power Station, Unit No. 1
Docket No: 50-280
Report No: 78-047 3X-1
Event Date: 12-11-78

Title of Report: Steam Generator Primary to Secondary Leakage

1. Description of Event:

After achieving equilibrium full power operation, the primary to secondary leakage in "C" steam generator exceeded the allowable 0.3 gpm by approximately 0.02 gpm. This event is contrary to the Surry No. 1 Order of Modification of License, dated June 23, 1978 and is reportable per Technical Specification 6.6.2.b.(2).

2. Probable Consequences and Status of Redundant Systems:

Since the reactor was brought to cold shutdown as required by Technical Specifications, there are no probable consequences of this event. The health and safety of the general public were not affected.

3. Cause:

The cause of this event was determined to be leakage through five steam generator tubes. Combined leakage of all five tubes was approximately 0.32 gpm.

4. Immediate Corrective Action:

The unit was shutdown in accordance with the requirements of the license modification.

5. Subsequent Corrective Action:

Following the unit shutdown, a steam generator inspection program commenced which included inspection of all three steam generators. The results of this program were provided to NRC prior to Surry Unit 1 startup.

6. Action Taken to Prevent Recurrence:

The results of the S/G inspection program were used to develop a tube plugging pattern for all three steam generators. Prior to startup, all leaking tubes were plugged.

7. Generic Implications:

All steam generators at Surry are being monitored for leakage and periodically inspected for degradation. This program will continue until the steam generators are replaced.