

Attachment 1

Revised Unit 1 Technical Specification Pages

for the

Steam Generator Tube Support Plate

Interim Repair Criteria

Changed Page

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Revision

Replace

REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS (Continued)

- =====
- c. Degradation attributed to outside diameter stress corrosion cracking within the bounds of the tube support plate with a bobbin voltage greater than 2.0 volts will be repaired or plugged except as noted in 4.4.6.4.a.6.d below.
 - d. Indications of potential degradation attributed to outside diameter stress corrosion cracking within the bounds of the tube support plate with a bobbin voltage greater than 2.0 volts but less than or equal to 3.6 volts may remain inservice if a rotating pancake coil probe (RPC) inspection does not detect degradation. Indications of outside diameter stress corrosion cracking degradation with a bobbin voltage greater than 3.6 volts will be plugged or repaired.
7. Unserviceable describes the condition of a tube or sleeve if it leaks or contains a defect large enough to affect its structural integrity in the event of an Operating Basis Earthquake, a loss-of-coolant accident, or a steam line or feedwater line break as specified in 4.4.6.3.c, above.
8. Tube Inspection means an inspection of the steam generator tube from the point of entry (hot leg side) completely around the U-bend to the top support of the cold leg. For a tube that has been repaired by sleeving, the tube inspection should include the sleeved portion of the tube.
9. Tube Repair refers to mechanical sleeving, as described by Westinghouse report WCAP-11178, Rev. 1, or laser welded sleeving, as described by Westinghouse report WCAP-12672, which is used to maintain a tube in service or return a tube to service. This includes the removal of plugs that were installed as a corrective or preventive measure.

Changes from 12/9/93 Submittal Marked.

REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS (Continued)

- =====
- c. Degradation attributed to outside diameter stress corrosion cracking within the bounds of the tube support plate with a bobbin voltage greater than 2.0 volts will be repaired or plugged except as noted in 4.4.6.4.a.6.d below.
 - d. Indications of potential degradation attributed to outside diameter stress corrosion cracking within the bounds of the tube support plate with a bobbin voltage greater than 2.0 volts but less than or equal to ~~5.6~~ 3.6 volts may remain in service if a rotating pancake coil probe (RPC) inspection does not detect degradation. Indications of outside diameter stress corrosion cracking degradation with a bobbin voltage greater than ~~5.6~~ 3.6 volts will be plugged or repaired.
7. Unserviceable describes the condition of a tube or sleeve if it leaks or contains a defect large enough to affect its structural integrity in the event of an Operating Basis Earthquake, a loss-of-coolant accident, or a steam line or feedwater line break as specified in 4.4.6.3.c, above.
8. Tube Inspection means an inspection of the steam generator tube from the point of entry (hot leg side) completely around the U-bend to the top support of the cold leg. For a tube that has been repaired by sleeving, the tube inspection should include the sleeved portion of the tube.
9. Tube Repair refers to mechanical sleeving, as described by Westinghouse report WCAP-11178, Rev. 1, or laser welded sleeving, as described by Westinghouse report WCAP-12672, which is used to maintain a tube in service or return a tube to service. This includes the removal of plugs that were installed as a corrective or preventive measure.

Attachment 2

Voltage Repair Criteria
for the
Steam Generator Tube Support Plate
Interim Repair Criteria

Southern Nuclear Operating Company Proposal:

Voltage Repair Criteria

1. A bobbin inspection of 100% of the hot and cold leg steam generator tube support plate intersections will be performed.
2. Flaws within the bounds of the tube support plate with bobbin voltage less than or equal to 2.0 volts will be allowed to remain in service.
3. Flaws within the bounds of the tube support plate with a bobbin voltage greater than 2.0 volts will be repaired or plugged except as noted in 4.
4. Flaw indications within the bounds of the tube support plate with a bobbin voltage greater than 2.0 volts but less than or equal to 3.6 volts may remain in service if a rotating pancake coil probe (RPC) inspection does not detect a flaw. Flaw indications with a bobbin voltage greater than 3.6 volts will be plugged or repaired.
5. All flaw indications with bobbin voltages greater than 1.5 volts and less than 2.0 volts will be inspected by RPC.
6. A sample RPC inspection of a minimum of 100 tube support plate intersections will be performed. This sample RPC inspection will include intersections with a bobbin dent voltage exceeding 5 volts. Other intersections in the sample population will be based on inspecting intersections with artifact indications and intersections with unusual phase angles. Expansion of the sample plan, if required, will be based on the nature and number of the flaws discovered.
7. RPC flaw indications not found by the bobbin due to masking effects (due to denting, artifact indications, noise) will be plugged or repaired.

End-of-Cycle (EOC) Voltage Distribution

Acceptable methods for determining the end-of-cycle voltage distribution are as follows:

1. The methodology described in WCAP-12871, Revision 2. This involves sampling the cumulative probability distribution of NDE uncertainty and the voltage growth rate using Monte Carlo techniques and applying the results to the beginning-of-cycle (BOC) voltage distribution.
2. A simplified approach may be used as an alternative (to the WCAP-12871, Revision 2 approach) provided it allows for a conservative treatment of the tails of the cumulative probability distributions of NDE uncertainty and the voltage growth rate to the 100% cumulative probability values.