



Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

OCT 13 2003

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Gentlemen:

In the Matter of) Docket No.50-390
Tennessee Valley Authority)

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - CYCLE 5 REFUELING OUTAGE
STEAM GENERATOR TUBE INSPECTION F-STAR (F*) REPORT

In accordance with the Technical Specification 5.9.9, this report provides the results of the WBN Unit 1 steam generator tube inspections for tubes having indications which may remain in service using the alternate repair criteria F*. The enclosure provides the required data which includes identification of these tubes, the uppermost elevation of the degradation, and the extent of the degradation.

There are no new regulatory commitments identified in this letter. If you have any questions about this report, please contact me at (423) 365-1824.

Sincerely,

P. L. Pace
Manager, Site Licensing
and Industry Affairs

Enclosure
cc: See page 2

AD47

U.S. Nuclear Regulatory Commission

Page 2

OCT 13 2003

Enclosure

cc (Enclosure):

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ENCLOSURE

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 ALTERNATE REPAIR CRITERIA F-STAR (F*) CYCLE 5 REFUELING OUTAGE REPORT

| SG | ROW | COL | TEST | LENGTH | VOLT | IND | LOCATION | CHARACTERIZATION |
|-------------------------|-----|-----|------|--------|------|-----|----------|------------------|
| 1 | 28 | 57 | ZPSN | 0.83 | 3.04 | SAI | HTS-5.59 | PWSCC TTS AXIAL |
| 1 | 40 | 59 | ZPSN | 0.48 | 1.7 | SAI | HTS-3.57 | PWSCC TTS AXIAL |
| TOTAL THIS GENERATOR 2 | | | | | | | | |
| 2 | 3 | 108 | ZPSN | 0.29 | 1.39 | SAI | HTS-4.01 | PWSCC TTS AXIAL |
| TOTAL THIS GENERATOR 1 | | | | | | | | |
| 3 | 19 | 23 | ZPSN | 0.29 | 1.62 | SAI | HTS-4.06 | PWSCC TTS AXIAL |
| 3 | 19 | 75 | ZPSN | 0.24 | 1.75 | SAI | HTS-4.17 | PWSCC TTS AXIAL |
| 3 | 22 | 67 | ZPSN | 0.18 | 0.63 | SAI | HTS-3.96 | ODSCC TTS AXIAL |
| 3 | 35 | 58 | ZPSN | 0.31 | 0.35 | SVI | HTS-2.55 | VOLUMETRIC |
| 3 | 35 | 84 | ZPSN | 0.18 | 1.03 | SAI | HTS-4.37 | PWSCC TTS AXIAL |
| 3 | 38 | 18 | ZPSN | 0.27 | 0.18 | SVI | HTS-1.89 | VOLUMETRIC |
| TOTAL THIS GENERATOR 6 | | | | | | | | |
| 4 | 16 | 18 | ZPSN | 0.2 | 0.53 | SAI | HTS-5.97 | PWSCC TTS AXIAL |
| 4 | 17 | 32 | ZPSN | 0.2 | 0.65 | SAI | HTS-2.16 | PWSCC TTS AXIAL |
| 4 | 18 | 35 | ZPSN | 0.42 | 2.74 | SAI | HTE+.45 | PWSCC TTS AXIAL |
| 4 | 19 | 32 | ZPSN | 0.43 | 3.16 | SAI | HTE+.48 | PWSCC TTS AXIAL |
| 4 | 22 | 31 | ZPSN | 0.46 | 2.12 | SAI | HTE+.49 | PWSCC TTS AXIAL |
| 4 | 22 | 37 | ZPSN | 0.26 | 2.69 | SAI | HTE+.52 | PWSCC TTS AXIAL |
| 4 | 27 | 87 | ZPSN | 0.27 | 1.03 | SAI | HTS-4.55 | ODSCC TTS AXIAL |
| 4 | 35 | 14 | ZPSN | 0.13 | 0.53 | SAI | HTS-4.86 | PWSCC TTS AXIAL |
| 4 | 35 | 15 | ZPSN | 0.23 | 0.85 | SAI | HTS-7.08 | PWSCC TTS AXIAL |
| 4 | 36 | 36 | ZPSN | 0.35 | 2.22 | SAI | HTS-5.87 | PWSCC TTS AXIAL |
| 4 | 38 | 20 | ZPSN | 0.41 | 2.56 | SAI | HTS-4.81 | PWSCC TTS AXIAL |
| 4 | 39 | 19 | ZPSN | 0.27 | 1.11 | SAI | HTS-5.00 | PWSCC TTS AXIAL |
| 4 | 42 | 55 | ZPSN | 0.29 | 0.21 | SVI | HTE+9.50 | VOLUMETRIC |
| TOTAL THIS GENERATOR 13 | | | | | | | | |

ACRONYMS:

PWSCC Primary Water Stress Corrosion Cracking
 ODSCC Outside Diameter Stress Corrosion Cracking
 HTS Hot Leg Top of Tube Sheet
 HTE Hot Tube End
 TTS Top of Tube Sheet
 SAI Single Axial Indication
 SVI Single Volumetric Indication
 ZPSN Top of Tube Sheet +Point Probe