

1RF11 NRR S/G Conference Call

Specific Questions

1. Discuss whether any primary to secondary leakage existed in this unit prior to shutdown.
 - None to date.
2. Discuss the results of secondary side pressure tests.
 - Secondary Side pressure tests are not scheduled to be performed in 1RF11.
3. For each SG, provide a general description of areas examined, including the expansion criteria utilized and type of probe used in each area. Also, be prepared to discuss your inspection of the tube within the tubesheet, particularly the portion of the tube below the expansion/transition region.
 - The following is the base scope inspection plan for the 1RF11 outage in October 2005. Expansion of the inspection will be based on Tech Spec and EPRI guideline criteria. Inspection will be performed in all four SGs and the inspection scope is the same in all four:
 - 1) 100% full length 0.61" bobbin examination in Rows 3 and greater and 100% 0.61" bobbin inspection in the hot and cold leg straight sections of Rows 1 and 2
 - 2) 100% +Pt examination of hard rolled tubes at the hot leg top of tubesheet (TTS +/- 3")
 - 3) 100% +Pt inspection of WEXTEx tubes at the hot leg tubesheet (TTS +3" thru tube end hot)
 - 4) U-bend mid-range +Pt examination of 100% of the tubes in rows 1 through 16
 - 5) 25% +Pt examination of tubes expanded at cold leg baffles B (C2) and D (C3)
 - 6) +Pt examination of dents, regardless of voltage, at AVB locations (+/- 1.0")
 - 7) Rotating probe examination of mixed residuals (> 1.5 volts as measured by bobbin) and hot leg dented intersections ≥ 5 volts (as measured by bobbin) according to the requirements of GL 95-05
 - 8) Rotating probe examination of preheater baffle plate indications and freespan bobbin coil indications for flaw confirmation and characterization
 - 9) 100% +Pt inspection of all dented TSP intersections at the H3 TSP ≥ 2 volts
 - 10) 20% +Pt inspection of freespan dings > 2 volts and ≤ 5 volts between TSH and H3
 - 11) 100% +Pt inspection of freespan dings > 5 volts

- 12) 20% +Pt freespan paired ding inspection between the top 2 TSPs (hot & cold legs)
- 13) 20% +Pt inspection of TIG sleeves installed in 1RF09 (inspection extent should be +/- 3" from sleeve ends including TIG weld, expansion in tubesheet, and the full length in between)
- 14) Full length inspection of 100% of the TIG sleeves installed in 1RF09 using 0.54 inch diameter bobbin probe to look for restriction (collapse or partial collapse) in the sleeve
- 15) 100% +Point inspection of Alloy 800 sleeves installed in 1RF10 (inspection extent should be +/- 3" from sleeve ends including expansion in tubesheet, highest expansion in the freespan, and the full length in between)
- 16) +Pt inspection of the hard rolled tubes selected for the installation of Alloy 800 sleeves during 1RF11, if any, in the region of lower roll joint (TTS - 7.0" to -10.0") to confirm that the tube is defect free at this location
- 17) Base line +Pt examination of all A800 sleeves installed (if any) during 1RF11
- 18) 100% tube plug video inspection in accordance with site desktop instruction
- 19) Tube bundle secondary side video inspection including a limited scope TTS in-bundle inspection and FOSAR at TTS and cold leg baffle plate B

4. Discuss any exceptions taken to industry guidelines.

- No exceptions to industry guidelines have been taken and none are planned.

5. Provide a summary of the number of indications identified to-date of each degradation mode and SG tube location (e.g., tube-support-plate, top-of-tubesheet, etc.). Also provide information, such as voltages, and estimated depths and lengths of the most significant indications.

- Later

6. Describe repair/plugging plans for the SG tubes that meet the repair/plugging criteria.

- All crack-like indications, sizable wear greater than 40% at AVBs and baffle plates will be plugged. Also, sizable loose part wear greater than 40% or loose part wear less than the repair limit and the loose part can not be removed in all areas will be plugged. Depending on the number of TTS repairable indications A800 sleeves will be installed in lieu of plugs.

7. Discuss the previous history of SG tube inspection results, including any "look backs" performed, specifically for significant indications or indications where look backs are used in support of dispositioning (e.g., manufacturing burnish marks).

- History look-ups are performed for all AVB and preheater wear, DFI, MBI, NQI, PLI, DSI, LPI, DEI DTI, FSD and DNI calls. History lookups are performed by both resolution analyst teams. History look-ups at CPSES are back to the first ISI.
8. Discuss, in general, new inspection findings (e.g., degradation mode or location of degradation new to this unit).
 - Later
 9. Discuss your use or reliance on inspection probes (eddy current or ultrasonic) other than bobbin and typical rotating probes, if applicable.
 - No other probes are planned for use to disposition indications.
 10. Describe in-situ pressure test plans and results, if applicable and available, including tube selection criteria.
 - Tube selection for in situ testing will follow the methodology prescribed by the EPRI guideline.
 11. Describe tube pull plans and preliminary results, if applicable and available; include tube selection criteria.
 - No tube pulls are planned.
 12. Discuss the assessment of tube integrity for the previous operating cycle (i.e., condition monitoring).
 - Assessment of tube integrity for the current operating cycle (cycle 11) will follow a methodology consistent with the EPRI tube integrity guideline.
 13. Provide the schedule for SG-related activities during the remainder of the current outage.
 - All activities as listed in response to question 3 during the period 10/12 – 10/29 .
 14. Discuss the following regarding loose parts:
 - a) What inspections are performed to detect loose parts,
 - Annulus and Tubelane of the TTS of all 4 SG's.
 - T-Slot and annulus region of B Baffle Plate (C2) for all 4 SG's.
 - In-bundle of TTS in response to +Pt inspection (100%).
 - As applicable response to +Pt inspection of B BP (25%).
 - b) Describe if any loose parts were detected and their location within the SG,
 - Later

- c) If loose parts were removed from the SG,
 - Later
 - d) Indications of damage associated with loose parts, and
 - Later
 - e) The source or nature of the loose parts if known.
 - Later
15. Discuss any changes to data analysis guidelines that will be implemented during the outage.
- Beyond selected enhancements and clarifications no data analysis guideline changes are currently planned.
16. Describe any actions (e.g., training) that have been implemented to ensure the quality of the data analysis and resolution will be as high as that ultimately reached during the last outage (1RF10).
- Actions and training enhancements implemented during 1RF10 are carried over into the 1RF11 outage. For example, analysts will be specifically instructed to closely scrutinize freespan regions using all differential and absolute channels and that a voltage threshold for reporting will not be applied.
17. Describe any plans for inserting 'Judas' ('cobra') tubes into the data stream.
- There are no plans to insert 'Judas' ('cobra') tubes into the data stream in 1RF11.