

*Outside of Scope*

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**BRANCH 3  
DAILY  
STATUS**

4/19/10

Highlighted items were discussed at BR1/BR3 Coordination meeting  
**BOLD items are new**

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**SALEM ONE**

Weekend Coverage:

AL1=(9X)>0.07

AL2=(2of3)>0.11

AL3=(1X)>0.13

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**AFW Piping Degradation  
Background**

- Buried AFW piping to the 12 and 14 S/Gs appears to have significant degradation of the protective coating and piping. The preliminary guided wave inspection results indicate that the ASME Class 3? piping is degraded below min wall. The pipe is schedule 80 4" inside diameter carbon steel piping with a coal tar type coating that appears to been hand applied. The piping run of concern involves about 150 ft of pipe that is buried at depths ranging from 4 ft adjacent to the out side of containment to 17 ft deep in a covered area adjacent to the containment.

Information in this record was deleted in accordance with the Freedom of Information Act.  
Exemptions Outside of Scope  
FOI/PA 2010-0334

*032*

- EOC - Unit 2 has greater margin – it is a newer plant and is presumably in better condition; documentation exists that proves the piping was opened and inspected ~16 years ago and found to be in pristine condition; ISI code gives more allowance to an operating unit (they can take credit for up to 90% of the yield stress). DRS reviewed photographs and has no immediate safety concerns. There were no similar inspections of Unit 1 AFW piping.
- On each unit there are three safety-related systems with buried piping (ASW, SW and control air)
  - Control air coating in tact, PSEG will document the inspection.
  - Control air small leak. PSEG cut out and replaced. Will evaluate the failure mechanism (believe it was repeatedly stepped on).
  - No previous UT inspections for service water piping, previously focused on seals for bell and spigot joints (as of end of outage all will have been replaced). Based on SW piping OE the current concern would be groundwater corrosion of the metal bands between concrete layers.
- PSEG evaluating past operability for Unit 1 using finite element analysis. Results will be used to determine if MC 0309 entry conditions are met (if piping was inop need to perform an MC 0309 review). PSEG determined they have an acceptable bounding analysis using 0.152" thickness at 1275 psig for Unit 1 and plan to implement an AFW design change through 50.59. PSEG expects the finite element analysis (FEA) to be completed and 3<sup>rd</sup> party reviewed on 4/19. PSEG will use the FEA results to support past operability for Unit 1, cycle operability for Unit 1, and to determine any need for additional review of the pipe condition at Unit 2.

**Update as of 4/19 at 0730**

- Following replacement of about 80 ft of shallow piping PSEG removed the supports for the piping that was not replaced and identified a section under a pipe support clamp that was well below minimum wall (.077). Based on the this discovery PSEG plans to replace all the deep pipe and the remainder of the shallow pipe on the 14 header

**Questions and Concerns**

- Design change to support 1275 psig
- Unit 2 EOC (operability based on differences)
- Replacement plan and schedule

**Information Needs**

- Finite element analysis
- Past operability review for Unit 1
- Operability determination for Unit 2
- Design records for as installed piping on Unit 1 & 2
- Previous ASME required flow or pressure drop tests for Units 1 & 2

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**Status Board Items:**

- Salem AFW buried piping (PRIORITY)

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