OUTSIDE SCOPE

Ziev, Tracey

From: Cline, Leonard
Sent: Wednesday, April 14, 2010 12:01 PM
To: Cline, Leonard; Burritt, Arthur; Balian, Harry; DeBoer, Joseph; Miller, Ed; Ennis, Rick; Johnson, Jonathan; Kern, Ludwig; Patel, Amar; Raymond, William; Schroeder, Daniel; Turilin, Andrey; Welling, Blake; Douglas, Christopher
Cc: Ennis, Rick; OHara, Timothy; Conte, Richard
Subject: RE: Branch 3 Status - 4/14/10
Attachments: B3-Status 4-14-10.doc

See attached.

OUTSIDE SCOPE

Updated information for the Salem Unit 1 AFW piping Outside of Scope

Outside of Scope

OUTSIDE SCOPE

D-40

Ziev, Tracey

From: Conte, Richard RJ
Sent: Tuesday, April 13, 2010 1:24 PM
To: Cline, Leonard; Burritt, Arthur; Balian, Harry; DeBoer, Joseph; Miller, Ed; Ennis, Rick; Johnson, Jonathan; Kern, Ludwig; Patel, Amar; Raymond, William; Schroeder, Daniel; Turilin, Andrey; Welling, Blake; Douglas, Christopher
Cc: Ennis, Rick; OHara, Timothy
Subject: RE: Branch 3 Status - 4/13/10

agreed

From: Cline, Leonard RJ
Sent: Tuesday, April 13, 2010 1:23 PM
To: Cline, Leonard; Burritt, Arthur; Balian, Harry; DeBoer, Joseph; Miller, Ed; Ennis, Rick; Johnson, Jonathan; Kern, Ludwig; Patel, Amar; Raymond, William; Schroeder, Daniel; Turilin, Andrey; Welling, Blake; Douglas, Christopher
Cc: Ennis, Rick; OHara, Timothy; Conte, Richard
Subject: RE: Branch 3 Status - 4/13/10

See attached.

- Updated information for the Salem Unit 1 AFW piping OUTSIDE SCOPE Outside of Scope

Outside of Scope

Ziev, Tracey

From: Cline, Leonard RI
Sent: Tuesday, April 13, 2010 1:23 PM
To: Cline, Leonard; Burritt, Arthur; Balian, Harry; DeBoer, Joseph; Miller, Ed; Ennis, Rick; Johnson, Jonathan; Kern, Ludwig; Patel, Amar; Raymond, William; Schroeder, Daniel; Turilin, Andrey; Welling, Blake; Douglas, Christopher
Cc: Ennis, Rick; OHara, Timothy; Conte, Richard
Subject: RE: Branch 3 Status - 4/13/10

See attached.

- Updated information for the Salem Unit 1 AFW piping and Salem Unit 2 tritium issues being reviewed by DRS.

Outside of Scope

Outside of Scope

BRANCH 3 DAILY STATUS

4/13/10

Highlighted items were discussed at DRP/DRS Coordination meeting
BOLD items are new

Outside of Scope

SALEM ONE | **Weekend Coverage:** | AL1=(9X)>0.07 | AL2=(2of3)>0.11 | AL3=(1X)>0.13

Outside of Scope

AFW Piping Degradation

- 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 2 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.

- The UT results confirmed the guided wave results. Engineering determined they could not support operability of the piping through the next cycle.

- 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 ~10 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 was provided access to the available information and completed its review. There are no immediate safety concerns.

- 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.
    - No recorded inspections of Unit 1 AFW piping

- 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).

Update as of 4/14 at 0730

- **Shallow pipe UTs (1"x 1" examination grid) on hold due to increasing rough pipe surface conditions in the remaining 9 of the 28 sections. Will be grinding to prepare surfaces for the UTs. Hope to complete UTs by end of 4/14.**
- **Finite element analysis expected to be completed 4/14 but is dependent upon completion of UTs; The FEA will be used to support bases for past operability of Unit 1, cycle operability of Unit 1, and to determine need for additional review of the pipe condition at Unit 2**
- **Acceptable bounding analysis using 0.152 thickness at 1275 psig for Unit 1.**
- **Evaluation of deep section of pipe completed – do not anticipate any piping replacements in this area:**
    - **UTs were completed around one elbow in deep section. Thinnest UT measurement in this area was 0.226" – Cycle operability requirement was 0.200".**
    - **Guided wave measurements for 20 ft of the deep straight run are better than the original guided wave results for the shallow pipe guided wave measurements. (30% wall loss vs 40% wall loss)**
    - **Excavated to a level below the ground water and identified that piping was coated. Areas of pipe above that level are currently uncoated but will be recoated.**
    - **Will perform hydrostatic test of the entire length of pipe – deep and shallow sections – to verify structural integrity.**
- **Engineering Director/Plant Manager/Site VP to discuss repair options at 11:00 am today (4/14).**

Outside of Scope

Outside of Scope

Additional Items

Status Board Items:

- Salem AFW buried piping (PRIORITY)

Outside of Scope

Outside of Scope

Outside of Scope