Enclosure 12

Memo from Donald G. Naujock
to
Terence L. Chan
Dated August 26, 2008

PDI/NRC Meeting

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Spring Industry Dissimilar Metal Weld Examination Update

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Senior Program Manager
Appendix VIII Performance Demonstration
EPRI NDE Center

Objective

- Provide overview of Spring 2008 examination results
- Provide overview of current industry actions

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PWR Spring 2008 Examination Findings

- Davis Besse
  - While applying pre-emptive weld overlay on a decay heat dissimilar metal weld an existing flaw opened to surface
    - Overlay machined off
    - Full qualified phased array manual examination performed in order to size and characterize
    - Examination concluded that flaw was axial in orientation and contained in the weld and butter and had characteristics indicative of stress corrosion cracking (SCC)
    - Full structural overlay applied

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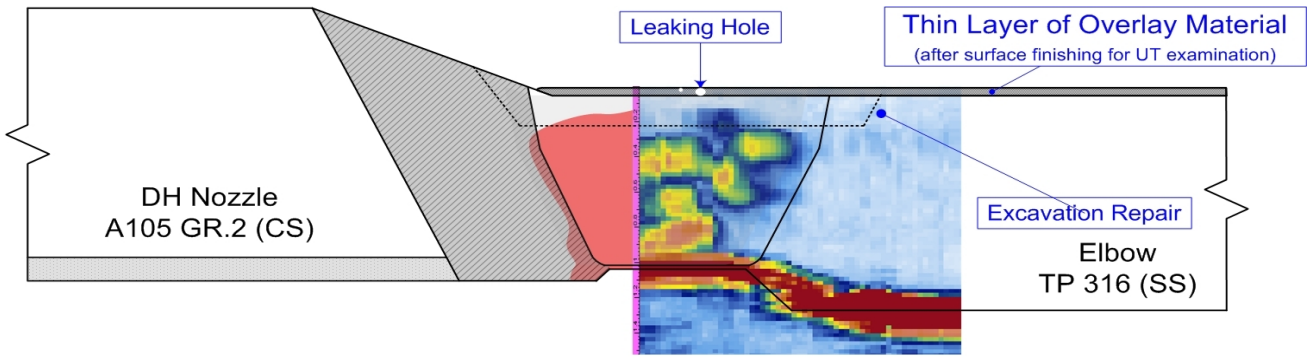
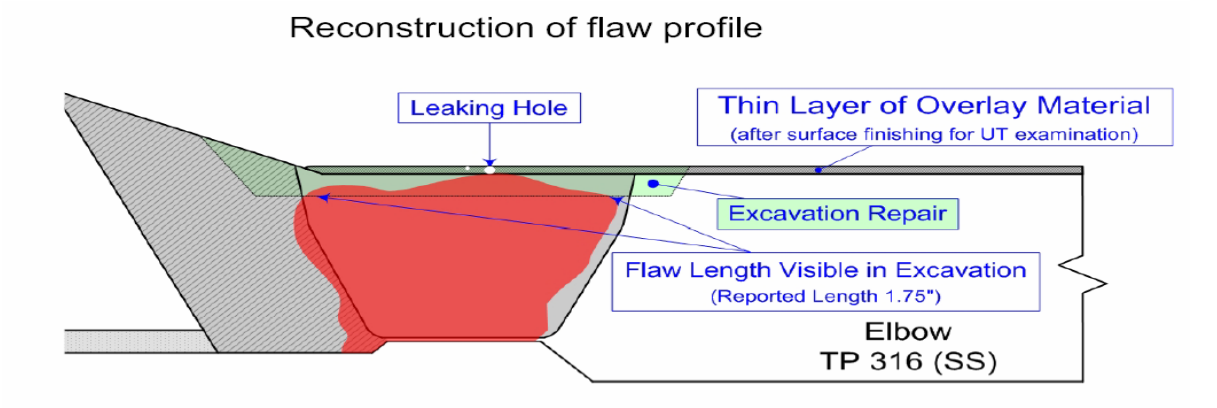
PWR Spring 2008 Examination Findings

- Davis Besse





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PWR Spring 2008 Examination Findings

- Crystal River
  - During the spring of 2008 Crystal River performed an examination on a decay heat dissimilar metal weld
  - The examiners reported an ~15” long circumferential flaw with a remaining ligament of ~0.40”
  - Flaw was characterized as stress corrosion cracking
    - Weld had been repair extensively during fabrication
  - The weld had previously been examined in November of 2007, but the amount of coverage obtained was less than the required 90% due to weld crown limitations
  - Prior to the 2008 examination the weld crown was conditioned allow better access of the examination volume
    - Manual Phased Array also applied during this examination in an effort to maximize coverage
  - The flaw was ultrasonically characterized and a full structural overlay was applied to this weld

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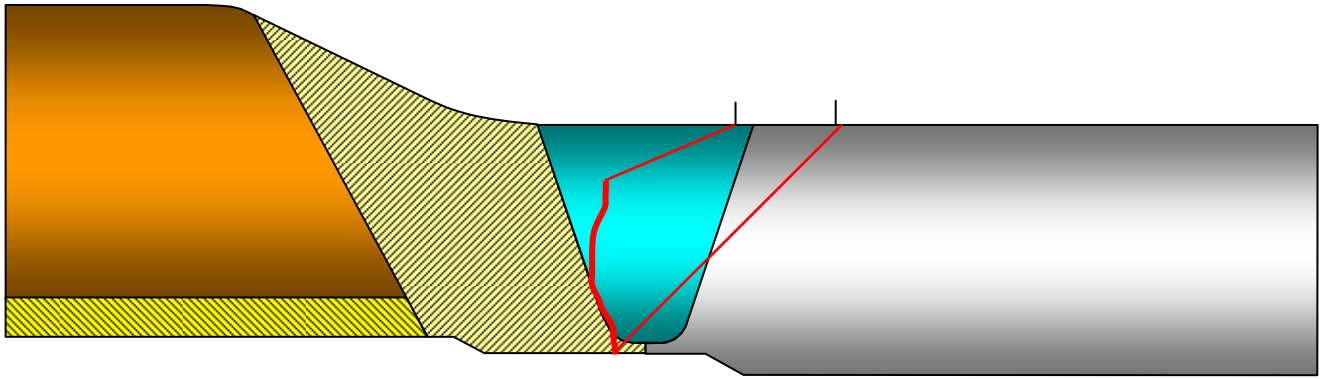
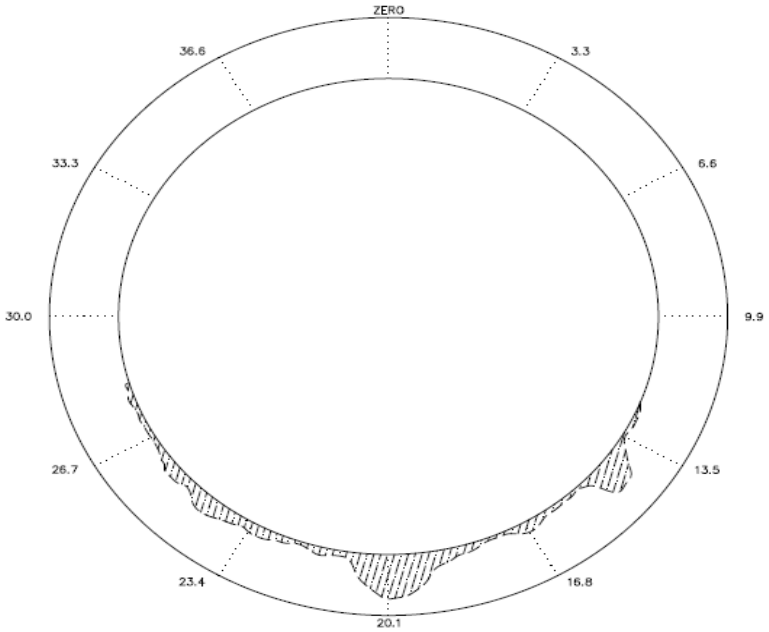
PWR Spring 2008 Examination Findings

- Report Flaw Profile





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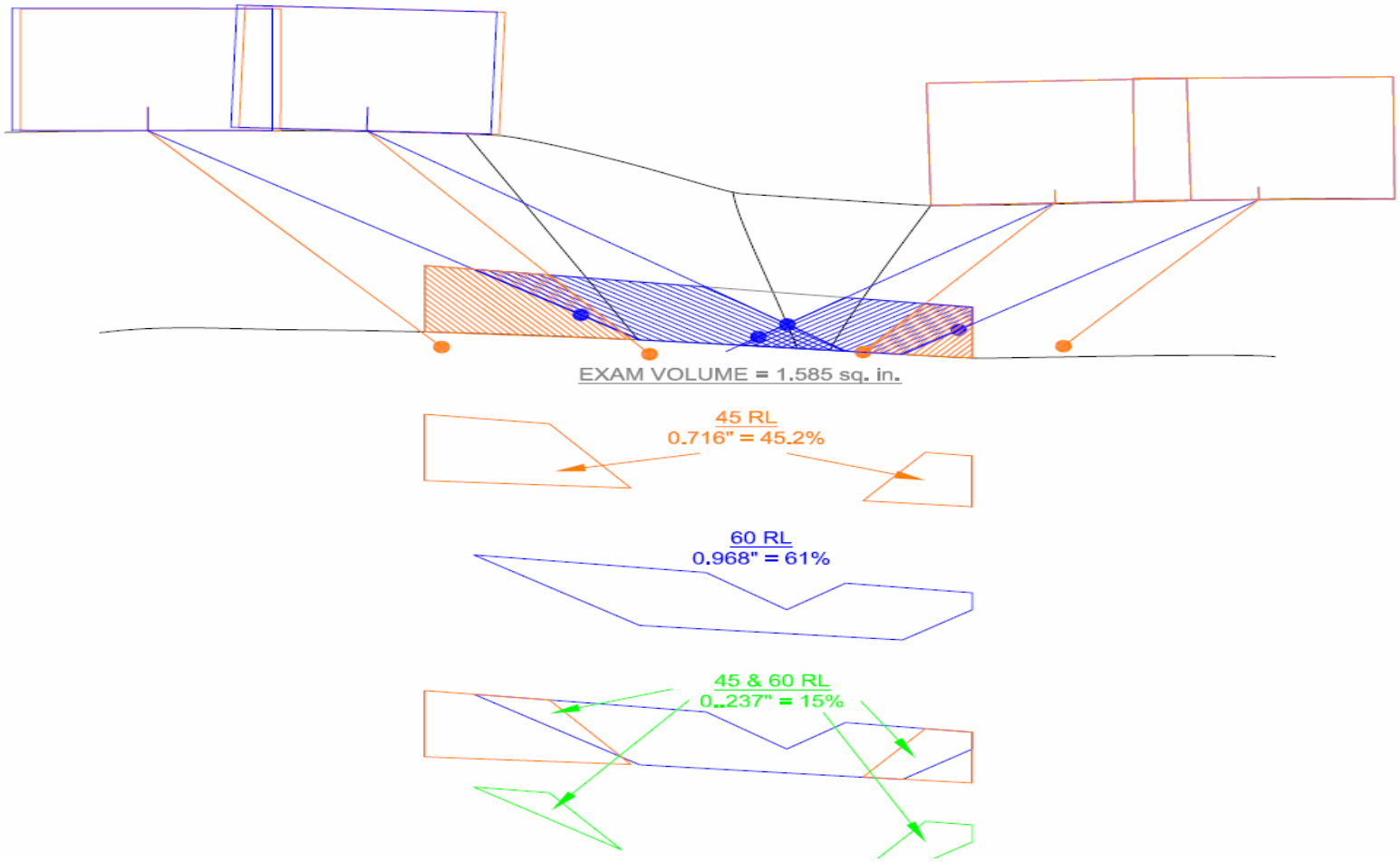
PWR Spring 2008 Examination Findings

- Coverage Prior to Weld Crown Preparation



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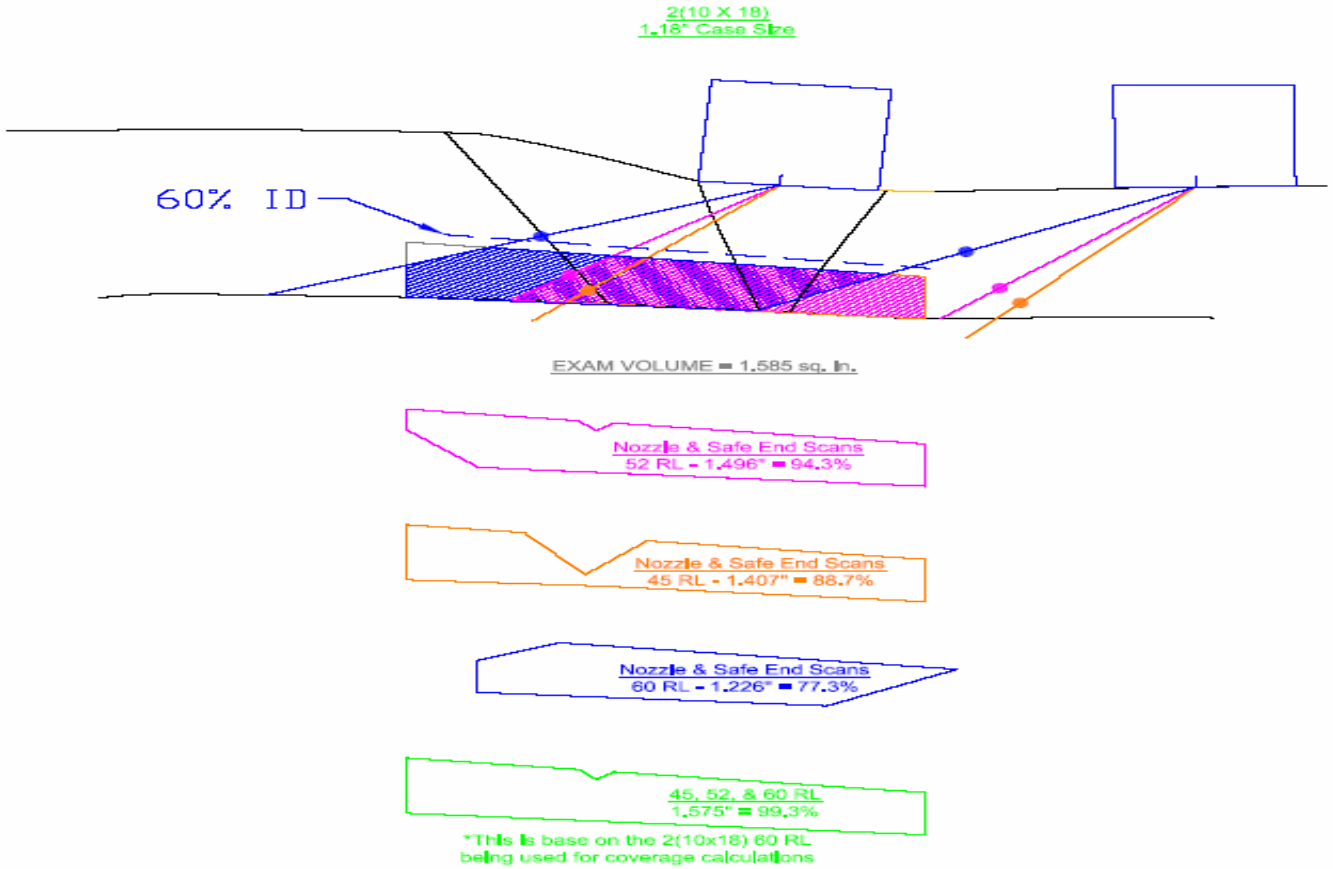
PWR Spring 2008 Examination Findings

- Coverage Obtained After Contouring



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BWR 2008 Examination Findings

- BWR experience will be covered by Mr. Tom Roberts of PSEG

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Dissimilar Metal Weld Inspection Guidelines

- Specifics on the Dissimilar Metal Weld Inspection Guideline will be covered by Mr. Ronnie Swain (EPRI)

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