



U.S.NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

RIC 2007
Duane Arnold Cracking Issues

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Duane Arnold Cracking Issues

- Circumferential indications in 2 dissimilar metal welds in the jet pump riser safe end-to-reactor vessel nozzle weld (Alloy 82/182)
 - 7-inches long, 56% through-wall
 - 6-inches long, 74% through-wall
- Industry/Licensee analysis
 - Both flaws present in 1999 ultrasonic examination data
 - Cracking observed at Duane Arnold is consistent with past operating experience
 - Flaws had substantial margin to failure

Duane Arnold Cracking Issues (cont'd)

- Industry is assembling data regarding the status/quality of past inspections
- NRC staff evaluating licensee and industry conclusions
- Assessing generic implications and need for regulatory action