



## Status of Top Guide Evaluation for License Renewal

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EPRI

# Background

- NRC issued letter, dated June 10, 2003, to BWRVIP requesting additional evaluations of top guide for license renewal
  - Staff concerned that multiple failures of the top guide beams are possible when the threshold fluence for IASCC is exceeded
  - Staff requested analysis be provided to demonstrate that failures of multiple beams (all beams that exceed the threshold fluence) will not impact the safe shutdown of the reactor during normal, upset, emergency, and faulted conditions

# BWRVIP Scope

- Analyses will be performed to demonstrate that the top guide can tolerate multiple failures of the grid beams.
- The assumptions used in the original analyses will be refined where possible, including fluence, crack growth, fracture toughness, etc. based on research conducted by the BWRVIP in these areas.
- If necessary, inspection guidelines for the top guide grid beams will be developed.
- The work will be documented in a BWRVIP technical report and submitted to the NRC.

# Benefits

- Substantial savings can be realized by generically demonstrating that multiple failures of the top guide grid beams will not impact the ability to insert control rods and thus, justify elimination of inspections during the license renewal period.
- If inspections are needed, they will be established based on stress and/or fluence limits. This will potentially minimize the total number of plants that need to perform inspections.

# Schedule

- BWRVIP Executive Committee voted to defer work until 2005.
- Reasons for deferral
  - Issue limited to license renewal period
  - Other higher priority work must be initiated in 2004