AREVA Methanol Injection Technology to Reduce IGSCC in BWR Plants

Increase asset protection and extend asset life by lowering investment costs.

Methanol extends IGSCC protection to all moisture-affected locations, including virtually all vessel internals.

Current Technology

- Typical IGSCC Protection
- Protection With HWC & OLNC

New AREVA Innovation

- Extended Protection
- Protection With Methanol, HWC & OLNC

Features

- Liquid form
- Protects all wetted surfaces
- Easy addition to your current chemistry program
- Low cost
- Protection
  - During startup
  - During shutdown
  - When HWC is offline

Benefits

- IGSCC protection when crack initiation and growth rates are the highest!
- Allows full cycle protection
- Projected reduction in frequency of vessel internals inspections
- Projected reduction in the number of repairs/replacements
- Projected reduction in the number of evaluations/JCO’s from new findings
- Projected dose reductions
More Innovative Outage Solutions

- RCP pumps and motor shop services
- Engineering and analysis
- Chemistry lab services
- PWR & BWR refueling services
- Safety-related machining and coatings
- Outage management and OCC support

When does methanol protect?

![Diagram showing startup and shutdown with methanol protection]

*Where does methanol add protection?*

- Dryer
- Shroud Head and Separators
- Core Spray Piping and Sparger
- Top Guide
- Upper Shroud

*BWRV1P-167NP Revision 3: “BWR Vessel and Internals Project Boiling Water Reactor Issue Management Tables”, Appendix B*