



GEH

Chemical Effects Testing Update

October 24, 2007

Licensees Supported by GE for Chemical Effects Evaluation

Domestic PWRs	Status	Relative Fiber Loading	Chemical Effects Test Type
Farley 1 & 2	Testing Planned Q4 2007	Low	Module - CDI
Fort Calhoun	Testing Planned Q4 2007	Low	Module - CDI
Vogtle 1 & 2	Testing Planned Q4 2007 / Q1 2008	High	Integrated 30-day
Waterford 3	Testing Planned Q4 2007 / Q1 2008	High	Integrated 30-day
Diablo Canyon 1 & 2	Testing Complete	Low	Module - CDI

Chemical Effects Testing Precipitant Reduction

- Alion is conducting bench-top chemical effects formation tests to investigate reduction of the WCAP-16785 precipitant source term.
- Results of bench top testing will be used as input to module chemical effects testing at CDI in 4th Quarter, 2007.

Chemical Effects Testing Module/Large Scale

- For strainer installations with relatively low fiber loads, GE performs large scale head loss testing using a test strainer module with particulate and fiber debris loads and WCAP-16785 chemical precipitants prepared at the test site (CDI).
- Test results are used to determine plant strainer maximum debris and chemical effect head loss.
- Module chemical effects testing will be performed for Fort Calhoun Station and Farley Units 1 & 2.
- Module chemical effects testing is complete for Diablo Canyon; results were presented in the August GSI-191 meeting.

Chemical Effects Testing

Long-Term Testing

- For strainer installations with higher fiber loads, Alion will perform integrated 30-day chemical effects formation and head loss tests using plant specific debris loads, containment sump chemistry and post-LOCA temperature profile.
- Integrated 30-day test to be performed for Waterford Unit 3 and Vogtle Units 1 & 2.
- Results will be applied to module head loss test data to determine plant debris and chemical effect head loss.