

GSI-191

PWROG Resolution Efforts

April 15, 2010

Amir Shahkarami

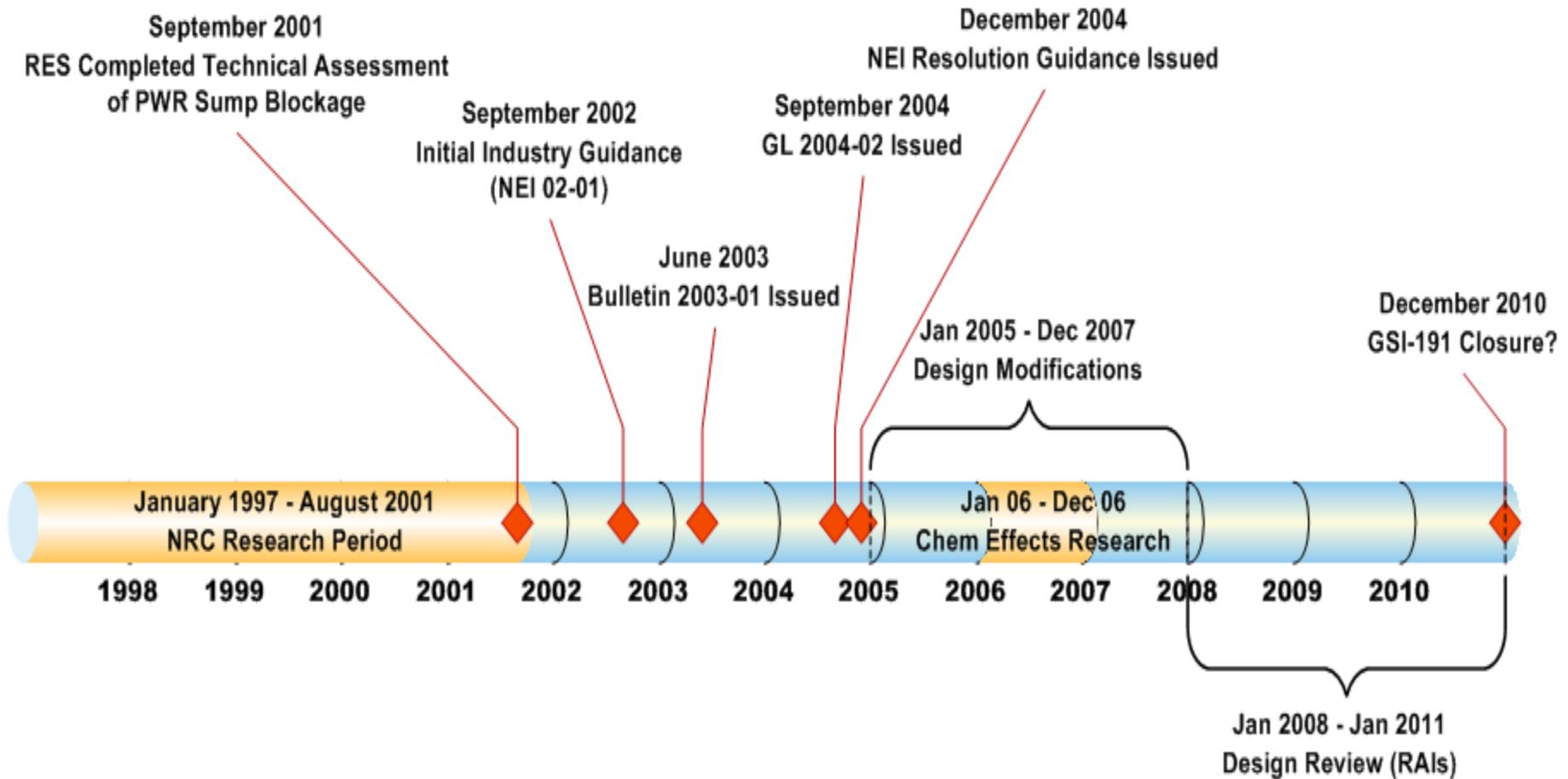
Chairman PWROG Executive Committee

Senior VP Exelon, Site VP Braidwood

Exelon Nuclear



GSI-191 Timeline



Resolution Actions

- A highly conservative, deterministic approach was developed to address GSI-191
- Plant modifications were based on the application of conservative tests and methods
- All PWR licensees have replaced their strainers and implemented numerous design and operational enhancements
- GSI-191 is no longer a safety issue for PWRs

Summary of Actions

- Median size of new screens is 4,000 ft²
 - On average, 32 times larger than original screens
- Additional design modifications include:
 - Replacement of fibrous insulation with Reflective Metallic
 - Changes to alternate buffering agents
 - Flow diversions and debris interceptors
 - Downstream modifications
- Enhanced operational and emergency procedures

Current Status

- Actions in last 24 months focused on attempts to respond to NRC review questions
- Efforts to remove overly conservative assumptions and view holistically have been unsuccessful
- A determination of reasonable assurance of compliance with current regulations is possible now
- Further plant modifications will not improve safety

Recommended Actions

- Permit application of GDC-4 exclusion of Leak-Before-Break qualified piping to local debris generation
- Industry margin recovery efforts will continue
- Continue efforts to develop models and analysis methods based on prototypical tests and research