



RIC 2004: Emergent Technical Issues Session T-11

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Session Agenda

- Present a range of viewpoints on emergent technical issues
 - Mr. Chris Crane, President and Chief Nuclear Officer of Exelon Nuclear
 - Mr. Tom Jordan, Vice President, Engineering & Technical Services, South Texas Project (STP)
 - Mr. Wayne Lanning, Director, Division of Reactor Safety, USNRC Region I
 - Mr. Alex Marion, Senior Director, Engineering, Nuclear Energy Institute
- Open Discussion



Ensuring Openness

- Openness Is Critical To:
 - Ensuring transparency in our communications and early public involvement
 - Promoting two-way communication on emergent technical issues
 - Demonstrating respect for the role of the public and our stakeholders in the regulatory process



Communication

- The NRC is making communication an integral part of conducting business
 - Public Outreach
 - More NRC public meetings held within the local vicinity of the plant
 - Public Workshops
 - Press Releases
 - Newspaper Ads
 - Media Sheets
 - NRC Public Website



Emerging Technical Issues

- ❑ Materials Degradation
- ❑ Emergency Core Cooling Sump



Managing Degradation

- Summary
 - Materials exposed to reactor environment will continue to degrade with time and operation
 - National and international technical communities are involved
 - Programs addressing currently identified degradation – technical and regulatory
 - Research program addressing
 - Potential new degradation mechanisms
 - Inspection and monitoring techniques
 - Mitigation and repair strategies
 - NRC and industry are aware of need to aggressively handle degradation as it emerges



Materials Degradation Issues

- Reactor Pressure Vessel Head Degradation
 - Upper vessel head
 - Lower vessel head
- Cracking of pressurizer heater sleeves
- Boric Acid Corrosion
- Leak Detection



Emergency Core Cooling Sump

- Sump Clogging is a credible concern for PWRs
 - Technical Assessment Completed
 - Risk Assessment Completed
 - Bulletin 2003-01 Issued June 2003
 - Future Plans
 - Communications with Stakeholders
 - Generic Letter Issuance
 - Final Resolution of Issue
 - Communication Tools – Redesigned GSI-191 Webpage
 - <http://www.nrc.gov/reactors/operating/ops-experience/pwr-sump-performance.html>

PWR Sump Images





Summary

- ❑ The NRC is committed to keeping the public informed and believes that a responsible, effective regulatory process cannot succeed any other way.
- ❑ Managing challenging issues in a rapidly changing environment
- ❑ The NRC staff has high confidence that these emerging issues are on the path to resolution