

**Utility Experience with EPRI
MAPC Initiatives and
Programs
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EPRI – MAPC

- **EPRI Nuclear Sector**
- **NEI 03-08 Oversight Role**
- **Forum to review and provide strategic guidance on RCS material issues and expectations**
- **Membership and underlying committees**

MAPC Technical Programs

- **BWRVIP - BWR internal components and primary systems materials**
- **MRP - PWR primary system materials**
- **SGMP - Tube integrity and performance**
- **CR - Fundamental corrosion research**
- **WCC - Chemistry control limits and methods**
- **WRTC - Welding technologies and solutions**
- **PWROG Materials Sub-Committee - PWR primary system materials tactical and operational issues**

Engagement and Experience

- **Expectations per NEI 03-08**
 - **Proactive approach**
 - **Technical and executive advisors**
 - **Funding of high priority and long term issues**
 - **Implementation of guidelines**
 - **Operating experience, lessons learned**

MAPC Deliverables

- **Strategic Plan – Issues, priorities, critical gaps, and objectives**
- **Guidelines - Beyond Code and regulatory requirements**
 - **Dis-similar metal weld inspections**
 - **RPV internals inspections**
 - **Zinc injection**
- **Mitigation methods and processes**

Guidelines Implementation

- **Active participants in guidelines development**
- **Implementation per NEI 03-08**
 - **Consistently and timely actions**
 - **Graded approach**
 - **Mandatory, Needed, Good Practice**
 - **Deviation process**
 - **Exceptions documented, reviewed, reported**
- **INPO – Critical role for compliance**

Delivering the Right Behaviors

- **Oversight and coordination**
- **Processes for project selection**
- **High priority projects and gaps**
- **Predictable funding**
 - **Over \$350M since 2004**
- **Sharing Operating Experience**
- **Emergent issues**
- **Positive interactions with NRC**

Summary and Conclusions

- **Proactively addressing RCS material issues with positive impact and benefits.**
- **Working relationships among technical programs is exemplary.**
- **Materials history is still being written.**

List of Acronyms

- **BWRVIP- Boiling Water Reactor Vessel Internals Program**
- **CR- Corrosion Research**
- **EPRI- Electric Power Research Institute**
- **INPO – Institute of Nuclear Power Operations**
- **MAPC- Materials Action Plan Committee**
- **MRP- Materials Reliability Program**
- **NEI- Nuclear Energy Institute**
- **PWROG- Pressurized Water Reactor Owner Group**
- **RCS- Reactor Coolant System**
- **SGMP- Steam Generator Management Program**
- **WCC- Water Chemistry Control**
- **WRTC- Welding Repair & Technology Center**