

T1 Containment and Reactor Coolant System Pressure Boundary Materials Degradation

A panel session will be held by Engineering Divisions from NRR and RES. The presentation topics will include recent efforts by RES to incorporate probabilistic analysis tools for assessing degradation in reactor coolant pressure boundary components and emerging containment liner issues. This session will include insights from the recent Pressurized Thermal Shock (PTS) regulations (10CFR50.61a) and supporting technical bases along with the development of the Extremely Low Probability of Rupture (xLPR) tool for Leak-Before-Break (LBB) assessment of approved piping systems. The session will also include insights from the Crystal River Unit 3 containment delamination issue by Progress Energy and the NRC.

Session Co-Chairs: Patrick Hiland, Director, Division of Engineering, NRC/NRR

Michael Case, Director, Division of Engineering, NRC/RES

Speakers/Panelists:

Insights from the Pressurized Thermal Shock (PTS) Technical Basis

Presentation View

Handout View

Mark Kirk, Senior Materials Engineer, NRC/RES

Development of xLPR for Leak-Before-Break Systems

Presentation View

Handout View

David Rudland, Senior Materials Engineer, NRC/RES

Crystal River Unit 3 Containment Delamination Insights

Presentation View

Handout View

Garry Miller, General Manager, Nuclear Plant Development, Progress Energy

Assessment of Crystal River Unit 3 Delamination Issue

Presentation View

Handout View

Mark Franke, Branch Chief, NRC/Region II

Session Coordinators:

Kerby Scales, NRC/NRR, tel: (301) 415-1369, e-mail: Kerby.Scales@nrc.gov

Matthew Kerr, NRC/RES, tel: (301) 251-7968, e-mail: Matthew.Kerr@nrc.gov