



Meeting
U.S. Nuclear Regulatory Commission
Nuclear Energy Institute
Electric Power Research Institute
Westinghouse Owners Group

Risk-informed Inservice Inspection
(ISI)

October 3, 2001



Agenda

- Introduction and Opening Remarks
- High Energy Line Break / Break Exclusion Requirements
- RI-ISI Living Program Process Philosophy
- Plans for Future Meetings



Introduction

- Introduction and Opening Remarks
 - NEI
 - ◆ To continue open dialogue on issues related to risk-informing ISI and extension of this successful application
 - NRC





High Energy Line Break / Break Exclusion Requirements



Generic Issues

- Regulatory Process
- Relationship of BER Exam Application to a RI-ISI Application
- Inspection Sample
- Schedule



High Energy Line Break / Break Exclusion Requirements

■ Regulatory Process

- ◆ High energy programs typically defined in UFSARs
- ◆ Intend to implement under 50.59
- ◆ Notification via periodic 50.59 summary report and SAR update per 50.71(e)
- ◆ Approved revisions to EPRI and WOG Topical Reports, reviewed against NEI-96-07 (NEI-99-04), will provide technical basis for changes to be completed through existing regulatory framework
- ◆ No exemption to GDC-4 or rulemaking is required



Relationship of BER Exam Application to a RI-ISI Application

- Potential Application Scopes
 - RI-ISI application to ASME XI exams alone
 - RI-ISI application to ASME XI and BER exams together
 - RI-ISI application to BER exams alone
- NRC Notification



Inspection Sample

- EPRI Method - per EPRI Topical Report TR-112657 Revision B-A
- WOG Method - per WOG Topical Report WCAP-14572, Revision 1-NP-A



Schedule

- EPRI Submittal - February 2001
 - August 2000 - NRC meeting to review process/ preliminary results
 - February 2001 - EPRI Report - Volume 1 Break Exclusion Requirements including:
 - ◆ Nine Mile Point Unit 2 Example
 - ◆ Calvert Cliffs Units 1 and 2 Example
 - Review Requested by December 31, 2001
- WOG Addendum Submittal - 12/99 & 5/00
 - Beaver Valley Unit 2 Example to be provided with revised Addendum, as required - 1stQ 2002
 - Review Requested by June 30, 2002





RI-ISI Living Program Philosophy



Living Program Criteria (LPC)

- Purpose of RI-ISI Template Submittal Process
- LPC Criteria
 - Three Tier Approach
- NRC Notification



Purpose for RI-ISI Template Submittal Process

- Reasonable Assurance Licensees Conducted the Evaluations Consistent with a Topical & NRC Safety Evaluation (SE)
- Change in Risk Within Acceptance Criteria (i.e., R.G. 1.174)
- SE and/or Template Identifies Plant-Specific Exceptions by Licensee (i.e. not generic)
- SE Identifies Plant-Specific Exceptions by NRC (i.e. not generic)



LPC - Three Tier Approach

- Generic LPC
 - Common NRC/Industry Understanding
- Methodology-Specific LPC
 - Specific to Individual Methodology
- Plant-Specific LPC
 - Consistent with existing plant processes



Generic LPC Criteria

- Applies to “Pilots” and “Follow-on” Plants
- Template provides a fixed snapshot in time of the RI-ISI program, that is:
 - Delta Risk Numbers
 - Number of Inspections
 - Allocation of Inspections



Generic LPC Criteria

- Scope Changes
- Length of Safety Evaluation
- NRC Notification
 - frequency, timing, content, format
- Updates consistent with regulatory requirements



Methodology-Specific LPC

- Two Approved Topical Reports
- NRC Approval Entails Methodology, Report and Safety Evaluation
- Methodology-LPC Needs to Address Basis for NRC Approval
- Methodology-LPC Needs to Address any Additional Requirements (SE, Plant Specific Exceptions, etc.)



Plant-Specific LPC

- Two Aspects:
 - Maintaining the RI-ISI Program
Consistent with NRC Approval, that is:
 - ◆ RI-ISI evaluation, basis, exceptions, etc.
 - ◆ Requires agreement on previous slides
 - Maintaining the ISI Program, that is:
 - ◆ Traditional ASME XI practices



NRC Notification Examples

■ NRC Notification and Approval

- Changing from One Methodology to Another
- Changing “scope” of Application
 - ◆ Class 1 only to Class 1 & 2
 - ◆ Class 1 & 2 only to full scope
- Plant-Specific Impact of Revised Methodology or Safety Evaluations
- Significant Industry/Plant Event

■ NRC Notification Only

- Updates
- Reversing scope from full scope to Class 1 or Class 1 & 2





Plans for Future Meetings

