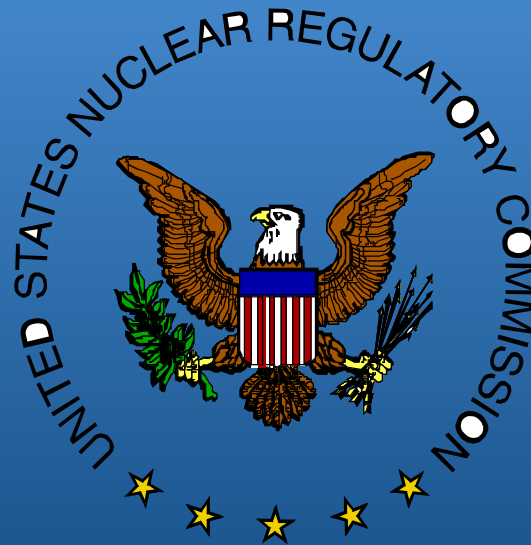


CONTROL ROOM HABITABILITY SINCE ISSUANCE OF GENERIC LETTER 2003-01



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Presentation Covers

- Generic Letter Responses
- Emerging Control Room Habitability Issues
- Future Actions

Generic Letter 2003-01 Request

1. Confirmation of Licensing Basis with System Design, Operation, Construction, & Performance
2. Confirmation of Control Room Envelope (CRE) Inleakage Characteristics for Radiological, Hazardous Chemical & Fire Challenges
3. Adequacy of Existing Technical Specifications (TS)
4. Elimination of Compensatory Actions
5. Confirmation of CRE Design to General Design Criteria (GDCs), draft GDCs or Principal Design Criteria

60 Days Response

1. Alternative Course of Action
2. Schedule for Completing Item 1 above
3. Basis for Acceptability of Item 1 above

60 Days Responses

- 68 Reactors Responded
- 65% of Reactors
- Number with Completed Responses to Generic Letter
_____ (_____ %)

60 Days Responses

Problem Areas

- No Commitment to Respond to Generic Letter
- Alternative Course of Action Undefined
- No schedule for Alternative Course of Action
- Alternative Course of Action Lacks E741 Testing
- Response to Generic Letter Dependent upon Satisfactory Completion of Actions with Uncertain Success Paths

180 Days Responses

Statistics

- 36 Reactors Responded
- 35% of Reactors
- Completed Responses to Generic Letter _____ (_____%)

180 Days Responses

Problem Areas

- Requested Information Not Supplied
- Design Confirmation Prior to E741 Testing
- Less Than Robust Assessment of Hazardous Chemical & Fire Challenges
- Absence of CRE Inleakage Characteristics in DBA Analyses
- Generic Letter Response Coupled to Actions Requiring NRC Approval

II. Emerging Control Room Habitability Issues

- Operability Following E741 Testing
- Technical Specification Resolution
- ΔP Surveillance Requirement

OPERABILITY Following E741 Testing

- Regulatory Guide 1.196 Guidance
- January 2004 Response to NEI White Paper on Use of Alternative Source Term for OPERABILITY Determination

Control Room Habitability Technical Specifications

Existing Options

A. Appendix B, Regulatory Guide 1.196

B. TSTF-448

Control Room Habitability TS Problems

- Appendix B, Regulatory Guide 1.196
- Formulation Inconsistent with Improved Standard TS
- Linkage of Inoperability of Control Room Envelope to Control Room Emergency Ventilation System (CREVS) Inoperability
- Inconsistent Treatment of Allowable Outage Time (AOT) with Other Risk-Informed TS
- Ambiguity between Inoperable CRE and 2 CREVS Trains Inoperable Due to Inoperable CRE Boundary
- Disparity of Treatment of CREVS & CRE If Either is Inoperable

Control Room Habitability TS Problems

TSTF-448

Potential Control Room TS Fixes

- Limiting Condition for Operation (LCO) Defined as Control Room and not CREVS
- Control Room OPERABLE Defined as 2 CREVS Trains & CRE OPERABLE
- Recognition Inoperable CRE Does Not Render CREVS Inoperable
- 30 Day AOT for Inoperable CRE
- ΔP Surveillance Linked to System Design & E741 Test
- Control Room Integrity Program (CRIP) Contents Specifically Stated

CRIP Contents

- CRE Inleakage Values Specified for Radiological & Hazardous Chemical Challenges
- Demonstration That Inleakage Characteristics of CRE Will Not Impact Reactor Control in Event of a Fire
- Demonstration of Consistency of Ventilation System Flow Rates & Damper Leakage with Licensing Basis
- Demonstration of Consistency of ΔP Surveillance Measurements with E741 Test ΔP Measurements
- Manner of Demonstrating ΔP Detailed
- Requirement to Include Control Room As Part of Configuration Control, Design & Licensing Basis & Maintenance Programs

ΔP Surveillance

- Value of Surveillance Openly Debated
- Value for ΔP to Control room Operators Debated
- Issue of CRE Integrity
- Dynamic Characteristics of CRE Integrity & Ventilation Systems Recognized

III. Future Actions

- A. Letters to 60 Days Responders
- B. Resolve Control Room Habitability TS Issues
(Appendix B, Regulatory Guide 1.196 & TSTF-448)
- C. Clarification of OPERABILITY Tools When E741 Testing
- D. Assessment of Generic Letter Responses
- E. RAIs
- F. TI
- G. Inspections
- H. Assessment of Overall Response to Generic Letter