



Paul Lain, PE

Senior Fire Protection Engineer

Harold Barrett, PE

Senior Fire Protection Engineer

Fire Protection Branch

Division of Risk Assessment

Office of Nuclear Reactor Regulation

NFPA 805 Pilot Plant LAR Reviews

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Discussion Topics

- Background
- NFPA 805 LAR Review Process (Lessons Learned)
- NFPA 805 Pilot LAR Review Status
- NFPA 805 Pilot Plant LAR Issues
- NFPA 805 Related Issues
- Summary



Background



- NRC has designated two licensees as NFPA 805 Pilots
 - Duke Energy's Oconee Nuclear Site
 - Progress Energy's Shearon Harris Nuclear Plant
- Both Licensees submitted NFPA 805 License Amendment Requests (LARs) in May 2008



LAR Review Process

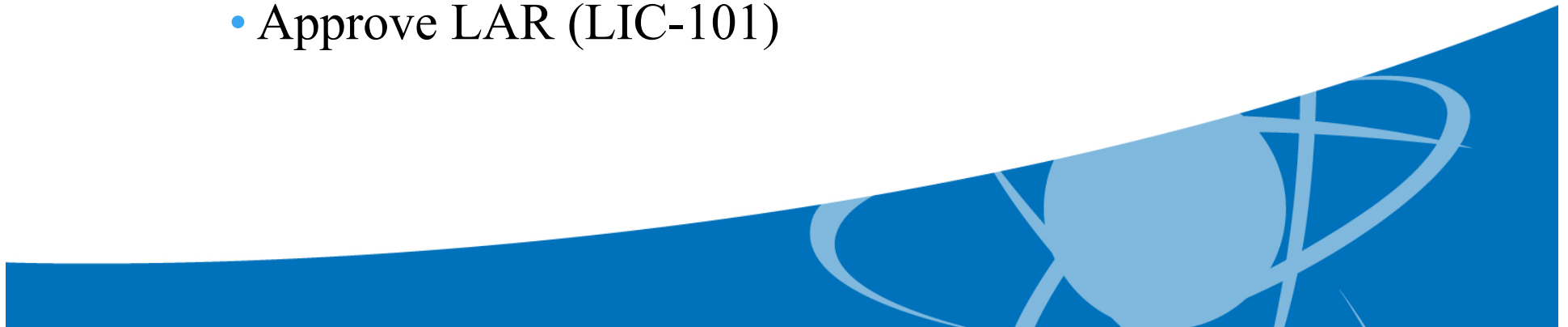


- **Prior to the LAR Submittal**
 - Licensee Complete Fire PRA Peer Review
 - Address F & O Resolution
 - Set-up SharePoint Site
 - Back-up Information
 - Reference Use Only



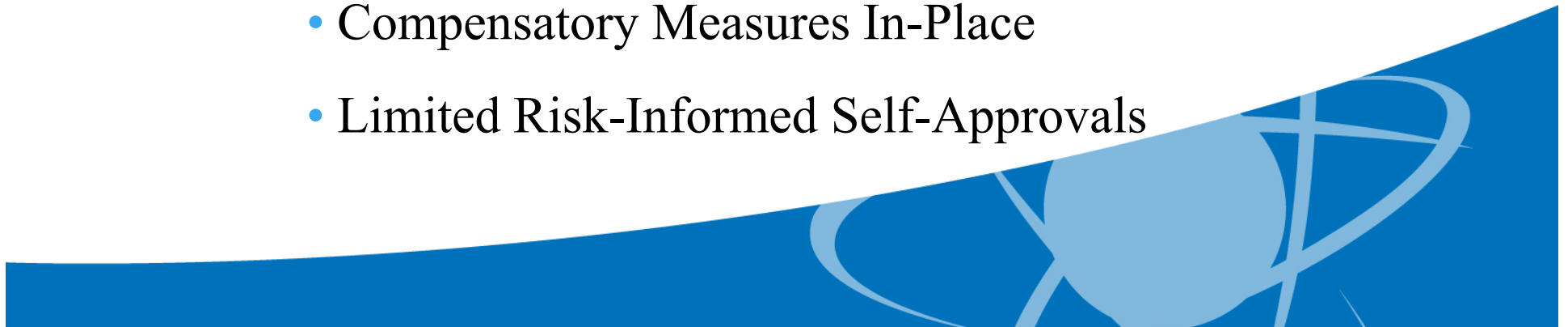
LAR Review Process

- **After the LAR Submittal**
 - Acceptance Review (LIC-109)
 - LAR Review (LIC-101)
 - Site Audit (LIC-111)
 - Discuss Draft RAIs w/ Licensee (LIC-101)
 - Issue RAIs (LIC-101)
 - Complete SE (LIC-101)
 - Approve LAR (LIC-101)



LAR Review Process

- **Post SER Approval**
 - Conditional NFPA 805 Plant
 - NFPA 805 Program Implementation Period
 - Monitoring Program
 - Develop Procedures
 - Conduct Training
 - NFPA 805 Modification Period
 - Compensatory Measures In-Place
 - Limited Risk-Informed Self-Approvals



LAR Review Process



- **Post NFPA 805 Modifications**
 - Compliant NFPA 805 Plant
 - Remove NFPA 805 Compensatory Measures
 - Self-Approval includes Risk-Informed Program Changes in accordance with License Condition



NFPA 805 Pilot LAR Status



- IT'S BEEN A VERY BUSY YEAR!
 - Pilots Submitted Supplements to LARs
 - NRC Staff performed Pilot Site Audits
 - NRC Staff generated Requests for Additional Information (RAIs)
 - Pilots responded to those RAIs



NFPA 805 Pilot LAR Status



- Shearon Harris
 - Fire PRA Staff Review on 2/8/08
 - Harris NFPA 805 LAR Submitted 5/29/08
 - LAR Acceptance Review Letter 9/26/08
 - NRC Staff Performed Site Audit 3/16 – 20/09
 - NRC Requested Additional Information on 8/6/09
 - NRC Reviewing RAI Responses
 - NRC Preparing SER



NFPA 805 Pilot LAR Status



- Oconee
 - Fire PRA Staff Review on 3/21/08
 - Oconee NFPA 805 LAR Submitted on 5/30/08
 - LAR Acceptance Review Letter 2/2/09
 - NRC Staff performed Site Audit 2/23 – 27/09
 - NRC Sent RAIs on 6/18/09
 - NRC Received RAI Responses 8/3/09
 - NRC Sending Supplemental RAIs 9/18/09
 - NRC Preparing SER

Pilot Plant LAR Issues

- Recovery Actions
 - Defense-in-Depth Recovery Actions
 - Feasibility and Reliability Reviews
 - Delta CDF/LERF Needed
- Incipient Detection (Harris)
- Declaration of “Safe & Stable” Condition (Oconee)
- Need Final Submittals and Calcs



Pilot Plant LAR Issues

- Fire PRA Quality
 - Peer Review Results (including Internal Events PRA)
 - Modifications
 - Calculation errors
 - “Deviations” from NUREG/CR-6850 (EPRI 1011989)
 - Fire PRA-related FAQs still ongoing
- Transition Report Quality (Attachments)
- Radioactive Release

Slide 12

rhg4

This could also be a bullet under Fire PRA Quality.
rhg, 9/9/2009

NFPA 805 Related Issues

- Recovery Actions
 - Additional Risk of Recovery Actions
 - Primary Control Station definition
 - Alternative/Dedicated Shutdown (III.G.3)
- Fire PRA Quality
 - “Approved Methods” vs. “Acceptable to AHJ”
 - Cause/Effect relationship
 - Fire PRA-related FAQs still ongoing
- Radioactivity Release

Summary

- We received the NFPA 805 LARs from the pilots
- We performed a Staff Review of the pilot Fire PRAs
- We completed acceptance review of the pilot LARs
- We are performing technical review of the pilot LARs
- We have audited the pilot plant sites
- We have issued formal RAIs
- We are evaluating RAI responses
- We are scheduled to complete pilot LAR Reviews in 1st Qtr '10