



New Reactor Construction Lessoned Learned

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Purpose

- Present staff's views, from a structural engineering perspective, on recent construction inspection issues and license amendment requests

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Construction to Licensing Basis

- Changes to address construction realities are expected (access to reinforcement, cover, etc.)
- Compliance with the certified design
- Compliance with ACI 349 Code
 - Satisfying all relevant provisions
 - Structural expertise are essential
 - Use of engineering judgment
- Deviation from the code will require following appropriate regulatory processes

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License Amendment Requests - Technical Evaluations

- Structural LAR evaluations should assess impact to seismic analysis assumptions
 - Changes in mass, stiffness, damping, etc.
- Comparison of demands at key locations may be needed to justify conclusion
- Support general statements with quantitative assessments
 - Not necessary a re-analysis of detailed models
 - Simplified approaches are acceptable

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Going Forward....

- Provide quantitative technical justifications for LARs
- Adhere to codes and standards in all areas of the design
- Detailed design must satisfy both the DCD and code commitments
- Perform detailed engineering analysis sufficiently in advance of installation
- Institute consistency checks
- Balance specificity and flexibility in licensing basis

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