



**U.S. NRC**

UNITED STATES NUCLEAR REGULATORY COMMISSION

*Protecting People and the Environment*

# **Public Meeting on Subsequent License Renewal**

**November 14, 2012**



# Ground Rules

- Be respectful of and courteous towards all participants
  - Honor all comments and points of view as valid
- One person speaks (clearly) at a time
- Silence your cell phones and mute your lines
- Press \*1 to enter the speaking queue
  - Three-minute limit to start and can reenter queue
  - Begin with your name (spell out your last name) and affiliation

# Purpose of Today's Meeting

- Receive comments for consideration for subsequent license renewals
- Topic areas
  - Updating the current licensing basis (CLB)
  - Mandating equipment replacement or refurbishment
  - Identifying and implementing safety enhancements
  - Periodically assessing license renewal activities
  - Requiring PRA updates
  - Requiring review of 10 CFR Part 50 requirements



# Additional Commenting Opportunities

➤ By email to:

[SLR.Resource@nrc.gov](mailto:SLR.Resource@nrc.gov)

- **Basis for Rule**
  - NUREG-1362 “Regulatory Analysis for Final Rule on Nuclear Power Plant License Renewal” examined 4 alternatives for license renewal safety reviews
    - Alternative A, CLB with no additional requirements
    - Alternative B, Extension of Alternative A to require assessment and management of age-related degradation unique to license renewal. This is the alternative adopted for the current rule.
    - Alternative C, Extension of Alternative B to require assessment of design differences against selected new plant standards
    - Alternative D, Extension of Alternative B to require compliance with all new plant standards

- Basis for Alternatives A and B from NUREG-1362
  - Alternative A: Based on assumption that present and future NRC regulations and programs applying to a plant during its existing operating term are adequate to ensure safety during the renewal period
  - Alternative B: Based on 2 key principle, first that with the possible exception of age-related degradation unique to license renewal, the regulatory process provides reasonable assurance that the licensing basis provides and maintains acceptable level of safety and secondly that each plant's CLB must be maintained during the period of extended operation, in part through the management of age-related degradation unique to license renewal.

## ➤ Objective of Alternatives C and D from NUREG-1362

- Alternative C: To upgrade the safety of renewed license plants above the degree of safety that had been deemed acceptable for the original license term
- Alternative D: To seek the closest possible safety equivalence of the license renewal plants with new plants

- Consideration in NUREG-1362 given for each Alternative
  - Section 4 includes an analysis of each alternative with respect to their values (reductions in radiation exposure) and impacts (costs)
    - Table 4.12 provides results of the analysis
    - In summary the impact (cost) to value (reduction in radiation expose) going from Alternative A to Alternative B is cost-effective.
    - When comparing the impact to value ration of Alternatives C and D to Alternative B, NUREG-1362 concludes that these alternatives were not cost-effective.



- Consideration in NUREG-1362 given for each Alternative (cont.)
  - Also, Section 4.7.5 states that for:
    - Alternative A: with no separate process for license renewal, difficult to describe how license renewal issues addressed.
    - Alternative B: separating license renewal issues allows for explanation of license renewal programs more appropriately focused.
    - Alternative C: not clear why similar potential safety differences should not also be assessed for plants not applying for license renewal.
    - Alternative D: difficult to justify why new plant standards should not also be met by plants not applying for license renewal.

- Is the current requirement for license renewal adequate for subsequent renewal?
  - Yes, consider addressing if the analysis and policy position presented in NUREG-1362 is still valid, include any references you may be aware of that support this position.
  - No, consider addressing; which Alternative should be considered and why, if there is another option the should be considered, if there are parts of the analysis presented in NUREG-1362 that should be reconsidered; if the stated policy issues should be amended or revised.

## **Mandating equipment replacement/refurbishment**

- The current regulatory requirements do not prescribe the replacement or refurbishment of components.
- The Statements of Consideration for 1991 Part 54 rule states that:
  - replacement/refurbishment are attributes of an effective aging management program
  - applicant's are not expected to undertake plant modifications for license renewal.

## Mandating equipment replacement/refurbishment

- Should a requirement be imposed to replace or refurbish equipment?
  - No? Consider addressing what data supports component function for up to 80 years.
  - Yes? Consider addressing what specific components should be required to be replaced/refurbished or what criteria the NRC staff should consider if mandating replacement or refurbishment.



# Identifying and Implementing Safety Enhancements

- No requirement currently exists for applicant's to identify safety enhancements for license renewal
- Statements of consideration for 1991 rule stated that:
  - plants can be “backfitted” if need arises
  - review of current safety requirements would not add significantly to safety

# Identifying and Implementing Safety Enhancements

- Should a requirement be imposed for an applicant to identify and implement safety enhancements?
  - No? Consider addressing the basis for continued acceptance
  - Yes? Consider addressing the basis for changing the requirement and or what criteria the staff should consider for identifying what safety enhancements should be required.



## Periodic Assessment of License Renewal Activities

- No requirement currently exists for applicant's to do a periodic assessment of license renewal activities
- As noted previously, SOC for 1991 rule states that ongoing oversight sufficient to ensure safe operation of plants in renewal term

## Periodic Assessment of License Renewal Activities

- Should a requirement be imposed for an applicant to perform periodic assessments of license renewal activities?
  - No? Consider addressing the basis for continued acceptance
  - Yes? Consider addressing the basis for changing the requirement and or how frequent the assessment should be done or what criteria the NRC staff should consider in establishing the frequency.



## Updating PRAs

- Currently no requirement to update probabilistic risk assessments (PRAs) as part of license renewal.
- SOC for 1991 rule
  - PRA of limited use in scoping
  - PRA may assist in developing aging management approach, but can not be as basis for adequate aging management

## Updating PRAs

- Should a requirement be imposed to update PRA when applying for subsequent renewal?
  - No? Consider addressing how PRA justifications for aging management is adequate if PRA is not updated.
  - Yes? Consider addressing if entire PRA should be updated, or what criteria the staff should consider for updating PRA.

# Review of Part 50 Requirements

- Currently no requirement to submit for review periodically updated Part 50 required programs such as Emergency Plans (EPs) and Physical Security Plans (PSPs) as part of license renewal.
- 1991 SOC
  - EPs continue to apply during renewal
  - No need for review for license renewal
  - Age related degradation of safeguards equipment not an issue for license renewal

## Review of Part 50 Requirements

- Should a requirement be imposed to submit EPs, PSPs, or other Part 50 related requirements for review?
  - No? Consider addressing how these requirements are ensured for subsequent renewed licensing terms.
  - Yes? Consider addressing why a review is necessary for license renewal and or what requirements the NRC staff should consider reviewing.



## Conclusion

- Additional comments?
- Reminder:
  - E-mail comments to:  
[SLR.Resource@nrc.gov](mailto:SLR.Resource@nrc.gov)