

# Emergency Action Level (EAL) Change Submittals

April 26, 2004

Emergency Preparedness Project Office  
Office of Nuclear Reactor Regulation

# Agenda

- Opening Remarks:
  - Mr. Nader Mamish, Director EP Project Office/NRR
  - Mr. Alan Nelson, Chief, Emergency Preparedness, NEI
- Presentation, EAL Change Submittals:
  - Mr. Greg Casto, EPPO/NRR
- Question and Answer:
  - Industry/NEI/NRC
- Industry Comments:
  - NEI/Industry
  - NRC Comment Forms
- Public Comments
- Adjourn Meeting

# Logistics

- Bathrooms
- Refreshments
- Cell phones and pagers on “vibrate”
- Phones and messages - **(301) 415-1086**
- Breaks on the hour
- You need escort to leave/return to Auditorium area
- Additional Handouts
- Get comfortable!
- Ask questions!

# NRC Opening Remarks

- NRC welcomes industry representatives, NEI, and interested public
- Importance of Emergency Preparedness
- Goals of this meeting:
  - Protect public health and safety
  - Provide useful information
  - Reduce unnecessary regulatory burden

# NEI Opening Remarks

- Thank NRC
- Purpose of Meeting
- Importance of Following Consistent Process

# EAL Scheme Change History

- EAL Changes endorsed by NRC in RG 1.101
  - RG 1.101, Rev. 2 – endorsed NUREG-0654/FEMA REP-1
  - RG 1.101, Rev. 3 – endorsed NUMARC/NESP-007, Rev. 2
  - RG 1.101, Rev. 4 endorsed NEI 99-01, Rev. 4
- RIS 2003-18 discusses general protocol for submittal of changes
  - NUREG-0654 EALs to NEI 99-01
  - NESP-007 to NEI 99-01
  - Hybrid and/or partial changes

# Historical EAL Change Process

- Licensees submitted proposed changes to EALs for prior approval
  - Original (Rev. 0) EALs
  - EAL revisions/scheme changes
- Licensees revised EAL changes per 10 CFR 50.54(q)
  - Administrative level changes (typos, grammar)
  - 50.59 reviewed Tech. Spec. driven changes (eg. set points)
  - RG 1.101/EPPOS 1 allowed changes
  - EAL changes in response to NRC exercise and inspection findings
  - EAL modifications/upgrades via NRC negotiation (pre-1992)

# RG 1.101 Rev. 3 and EPPOS #1

- RG 1.101 Rev. 3 (Aug. 1992) cautions:
  - Change IAW 10 CFR 50, Apx. E, Section IV.B
  - May not use portions of both 0654 and 007 schemes
- EPPOS #1 (June, 1995) cautions:
  - RG 1.101, Rev. 3 “admonishes” mix and match of 0654 and 007 EALs
  - 0654 EALs can benefit from guidance in 007
  - Provides “some” acceptable changes
  - ALL EAL changes must be discussed and agreed upon by State and local officials (per Apx. E)



# RG 1.101, Rev. 4 and RIS 2003-18

- RG 1.101, Rev. 4:
  - NEI 99.01 guidance can be used with other schemes
  - EAL schemes must remain “internally consistent” (w/ definition)
- RIS 2003-18:
  - Notice of RG 1.101 endorsement of NEI 99-01
  - Guidance on seeking NRC approval for changes to EALs
  - Prescribes the use of 50.54(q) in some cases to make changes to EALs

# RIS 2003-18

## Revision Guidance

- Scheme change (0654 to NESP 007 or NEI 99-01) - requires NRC prior approval
- 0654 adding NEI 99-01 shutdown EALs – requires NRC prior approval
- 0654 adding ISFSI EALs – per 50.54 (q)
- NESP 007 to NEI 99-01 (all or in part) - per 50.54 (q)
- Decommissioning EALs – requires NRC prior approval
- Hybrid schemes – requires NRC prior approval
- All changes require prior state and local government agreement

# Expectations for Change Submittals/Justifications

- Both pre-approval (by NRC/NRR) and 50.54(q) change packages should have consistent, detailed documentation
- Justifications should be complete as a stand-alone document
- Supporting documentation (engineering calculations, drawings, etc.) should be included as part of the change package
- Pre-submittal conference between licensee and NRC recommended
  - Notice helpful for NRC staff resource adjustments
  - Dialog useful for understanding/agreeing on change process, documents, specific conditions, etc.

# NRC Actions

- EPPO/NRR
  - When Licensing request received:
    - Performs acceptability review
    - Determines estimated completion date
  - Performs initial review of package
  - Generates submittal questions
  - Discusses w/ licensee
  - Prepares RAIs
  - Reviews revised package
  - Writes safety evaluation (SE)
  - Management review/concurrence
  - Issue of SE (approval/dis-approval of EALs)

# NRC Region Actions

- 50.54(q) Implemented EAL Changes
  - Receives EALs
  - Reviews implementation package
  - Provides acknowledgment to licensee via inspection report
    - Screens for DIE and scheme adherence
    - This is not considered approval of EALs
  - May perform future EAL inspection based on other activities/occurrences
    - 95003 inspection
    - EP exercise findings related to classifications
    - Operator requal exam results

# RIS 2003-18

## Submittal Documentation

- Basis document for current and proposed scheme
- Agreement by state and local governments
- Cross-reference for EAL comparisons
- Detailed justification for each deviation from approved scheme, (including DIE for 50.54(q))

# Basis Document

- Comparison of endorsed guidance and the proposed EAL scheme
  - If “different” from proposed scheme, then specifically reference and justify
  - If “deviating” from proposed scheme, then specifically reference and justify **IN DETAIL**
- Definitions for “Difference” and “Deviation” should be included in submittal/change package and followed

# What is a “Difference”

- Definition – Instances where the guidance reference IC/EAL (007, 99-01) differ in wording, but agree in meaning and intent
- Examples:
  - IC nomenclature (RU, RA, etc. used instead of AU, AA) or renumbering
  - Omission of IC AA1, EAL 4 and/or 5 where not applicable
  - Site specific terminology for equip., TS referenced SSCs, or generally understood operator terms



# What is a “Deviation”

- Definition – Instances where the guidance reference IC/EAL (007, 99-01) differs in wording from proposed revision and is altered in intent, such that classification of event could be specifically different between guidance reference and licensee proposed EAL.
- Examples:
  - Using other than a factor of “200 times TS” for IC AA1
  - Changing physical areas of reference (exclusion area vs. site boundary)
  - Altering key words or time limits (removing “UNPLANNED”)
  - Altering Mode applicability or definition
  - Not including an IC or EAL (other than “if equip. exists” difference)
- CAUTION: Deviations can occur in Basis w/o altering IC/EAL
- 50.54(q) revisions should have no deviations (prior approval for deviations)

# Lessons Learned

- Basis document references not specifically or consistently referenced (either in cover letter or IC/EAL change package)
- “Differences” are actually “deviations”
- Level of justification is insufficient, or does not stand-alone

# State/Local Agreements

- Documentation of all applicable State/Local government agency concurrence of EAL changes
  - Identification of applicable agencies
  - Documentation of concurrence
    - Signed documents
    - Documentation of specific discussion, including clear review evidence for EALs which result in lower/higher level classifications per proposed scheme

# Lessons Learned

- Reference to State/Local review and agreement missing
  - Agreement not referenced in oath and affirmation letter
- Support documentation missing or insufficient
  - Specific documentation for review of EALs which alter classification levels (ex. Loss of annunciation) not provided
  - General approval letter provided without detail
- Explanation of applicable State and Local approving officials missing
  - Rules are different for licensees

# Cross-reference of EALs

- Clear cross-reference to show comparison between each proposed IC/EAL and the basis document
  - Letter/Number reference for ICs
    - AU1 (99-01) = RU1 (Site)
  - IC/EAL reference
    - AU1, #1 (99-01) = RU1, #4 (Site)

# Lessons Learned

- Cross-reference missing from package
- ICs/EALs missing from cross-reference
- IC/EAL in reference document incorrect or mislabeled

# Detailed Justification

- **Each difference and deviation should be fully explained**
- **The difference/deviation should stand alone in the explanation**
  - Separate document from the Basis section in the classification procedure
  - Documentation of sufficient detail to reproduce justification at a later date, if necessary
- **Supporting information should be included (especially for deviations)**
  - Could include drawings, sections from EOPs, engineering calculations, etc.
- **Site specific additions should be fully supported**
  - Same as support of deviation, use of TS justification, calculations, etc.
- **Basis section in EAL should agree with justification**
  - EAL basis in EAL guidance modified to agree with site specific difference/deviation.

# Lessons Learned

- Detailed justifications missing or insufficient
- Stand-alone necessary documentation missing, such as procedure references, calculations, drawings (elec.), area maps, etc.
- Review process in justification for change not included
- Specific inclusion of State or local support group preference and reason not included
- Use of precedent (sister site, utility, State) not fully explained to justify stand-alone applicability



# End Results

- Clear definition of conditions that represent increasing risk to public
- Consistency within the industry for classification of similar events
- Provide improvements from industry experience

# Question and Answer

Industry/NEI/NRC

# Industry Comments

# Public Comments

Adjourn