

Industry Comments on Draft Regulatory Basis for Proposed Onsite Emergency Response Capabilities Rule Change

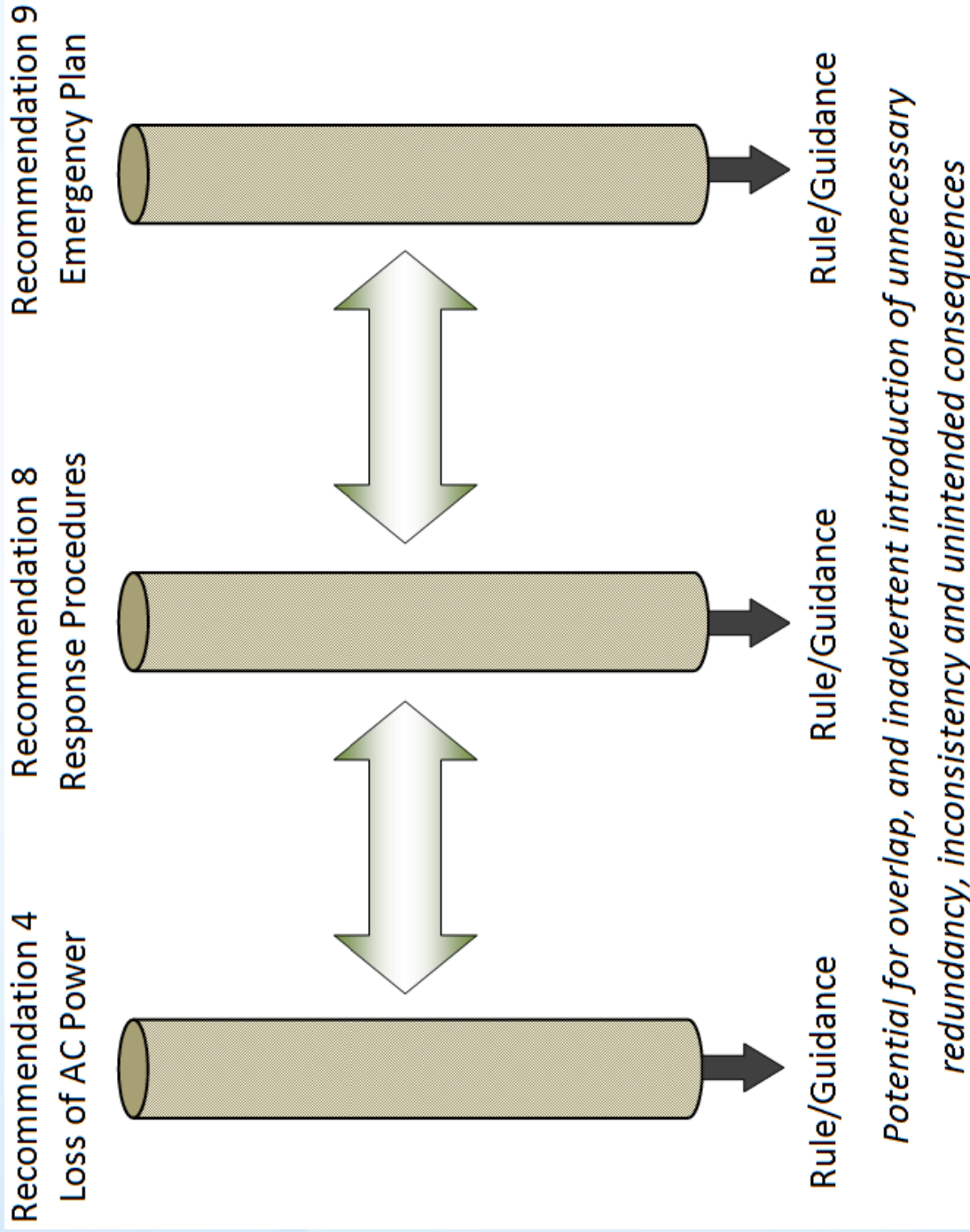
NEI

NRC Public Meeting – March 28, 2013

Presentation Topics

- Overview
- Discussion of generic level SAMGs by BWR and PWR owners group representatives
- Industry proposal for integrated approach
- Discussion of NEI comment letter on draft regulatory basis for Recommendation 8

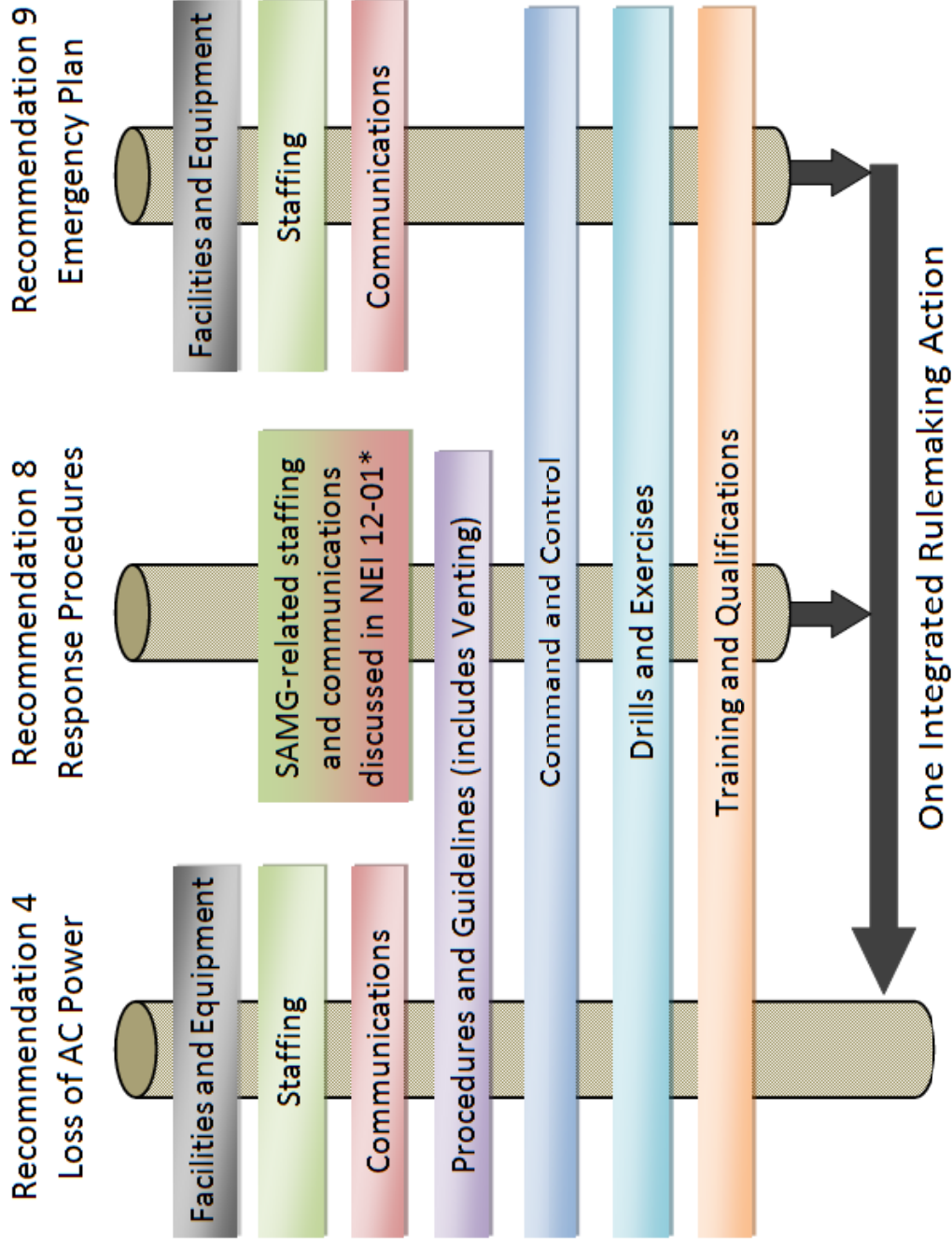
Overview – Current State



Generic Level SAMGs

- Discussion of generic level SAMGs by BWR and PWR owners group representatives

Overview – Integrated Approach



* Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities

Background - NEI Comment Letter Summary

- Summary of comments from NEI Letter, *Docket ID NRC-2012-031; 10 CFR Part 50 and 52, Onsite Emergency Response Capabilities; Draft Regulatory Basis (78 Fed. Reg. 1154), Pietrangelo to Vietti-Cook, dated March 19, 2013*

Scope of NRC's Preferred Option 1

- “High-level” rule language with accompanying guidance is appropriate
- Change would be subject to backfit rule
 - In our view, aspects of the proposed scope of Option 1 will add significant regulatory burden without providing measurable safety benefit
 - Will review these aspects in presentation
 - NEI comment letter Attachment 1 provides updated cost information; however, these are preliminary estimates and will need to be refined once a more detailed proposed rule is developed

Integration of Procedures and Guidelines

- US plants have a comprehensive set of mitigation strategies for accident responses
 - AOPs
 - EOPs (including alternate/contingency actions and functional restoration procedures)
 - FLEX Support Guidelines (under development)
 - SAMGs (core damage events)
 - EDMGs (threat-based events)

Integration of Procedures and Guidelines

- Rule should address “beyond-design-basis event response,” not just “severe accident mitigation”
 - A severe accident is a subset of a BDBEE¹ accident (i.e., one that involves core damage)
- Need to recognize distinction between “procedures” and “guidelines”
 - Responses to a BDBEE cannot be mechanistically prescribed in detailed procedures
 - Maintain flexibility to deal with uncertainties in accident progression

Command and Control

- Licensees have emergency response command and control structures in place
 - Reflects existing EP planning standards, requirements and related guidance (plus years of OE)
 - Includes implementing capabilities for SAMGs per applicable Owners Group guidance
 - Potential changes should consider existing capabilities
- Command and control structures should remain consistent so as not to complicate response efforts or confuse responders

Command and Control

- Licensees have a command and control structure for implementation of EDMGs
 - Developed in accordance with NEI 06-12
 - Interfaces with the site ERO are considered
- A command and control structure for implementation of FLEX strategies being developed per requirements of NRC Order EA-12-049 and related guidance documents

Training and Qualification Requirements

- Changes to SAMG training requirements should be based on a gap analysis of existing training programs
 - For both Control Room and TSC personnel
- Maintain balance of operator training program content
 - A core damaging event is highly unlikely
 - Do not dilute training focus from more likely plant transients and accidents (within scope of AOPs and EOPs)
 - Training provides operators with fundamental knowledge
 - Specific SAMG and EDMG job tasks are identified and trained using the SAT process

Training and Qualification Requirements

- Recognize significant response capabilities being added to address Mitigating Strategies Order (FLEX)
 - Core damage event will be even more unlikely
 - Training on FLEX strategies addressed in NEI 12-06
- Use of plant simulators to model BDBEE/SAMG scenarios is not warranted
 - Not required by 10 CFR 55.46 or ANSI-3.5-2009
 - Estimates range from \$1M to \$1.5M per simulator
 - Use of other simulation tools and drill venues

Drills and Exercises

- Industry supporting staff's proposed approach to address the related Tier 2 EP enhancement (from Rec 9.3) through integration with actions for NRC Order EA-12-049
 - A rule for BDBEE drills and exercises should reflect this approach, and the OE/lessons learned (similar to experience with HAB Exercises)
 - Premature to begin work on drill/exercise-related rule language, relative to Recommendation 8, at this time

Drills and Exercises

- Rulemaking for a new BDBEE drill or exercise requirement should consider existing wording in 10 CFR 50, Appendix E, IV.F.2.j concerning 10 CFR 50.54(hh)(2)
 - Would be redundant and should be deleted
- New BDBEE drill and exercise requirements should not be located in 10 CFR 50, Appendix E
- Provided updated cost information for staff analyses (Attachment 1)

EDMGs

- EDMGs address large-area explosions and fires, caused by certain beyond-design-basis attack threats, resulting in a loss of the Control Room and remote safe shutdown locations
 - See NEI 06-12 and related ISG
- Implementation of EDMGs would not be required in response to a BDBEE/ELAP unless caused by this type of event
 - Could be implemented on an ad hoc basis

EDMGs

- Equipment for implementing BDBEE response strategies (e.g., a portable pump) may be referenced in one or more of the governing guideline sets - FLEX Support Guidelines, SAMGs or EDMGs
- Response to a BDBEE like Fukushima would be performed in accordance with EOPs, FLEX Support Guidelines and SAMGs
 - The focus of EDMGs should remain on the governing of a responses to a threat-related event

Guidance Development

- Drill/exercise guidance should consider:
 - Enhanced safety capabilities and margins of advanced and passive reactor designs (e.g., EPR, AP1000, etc.)
 - Maintaining realistic/credible scenarios for use in drills and exercises consistent with the expected use of mitigation strategies and equipment
 - Potential dilution of organizational focus on practicing responses to more likely events such as those within the plant design and EOP bases

Guidance Development

- Drill/exercise guidance should consider:
 - Recognition of additional demands on licensee (e.g., Work Hour/Fatigue Rule limitations), NRC staff and Offsite Response Organizations resources
 - Using different venues, such as tabletop drills and out-of-sequence field demonstrations, to practice and evaluate some aspects of responses to beyond design-basis external events
 - Allowances for using non-simulator sources of data in beyond design-basis event response drills

Conclusion

- In summary, industry supports the rulemaking, but requests consideration of a temporary deferral to allow additional time to integrate this regulatory activity with other ongoing efforts, and to concentrate our resources on timely implementation of higher-priority safety improvements at the plants