Post Shutdown Emergency Plan and Emergency Action Level License Amendment Requests

NEI EP Decommissioning Workshop October 19 – 20, 2016

Raymond Hoffman

EP Specialist, Reactor Licensing Branch
Division of Preparedness and Response

U.S. NRC

Protecting People and the Environment

Session Goal: Attendees will gain a better understanding of the following:

- 1. The scope of changes to the licensee's (onsite) emergency plan (SEP) and emergency action levels (EALs) to address the permanently shut down and defueled condition of facility
- 2. Details required in submittal to support NRC's evaluation of proposed reduction to on-shift and augmented emergency response organization (ERO) staffing
- Expectation on evaluating potential impacts on offsite REP plans and State/local interface
- Expectations for a pre-implementation drill demonstration
- Lessons-Learned



Scope of Staffing Changes

- Staffing is reduced from normal operating conditions to levels that are commensurate with the need to safely store spent fuel at a facility
 - On-shift staffing
 - ERO (augmentation) staffing
- Must meet EP regulatory requirements for operating plants



Scope of EAL Changes

- Licensees will continue to use a standard EAL scheme
- Their current scheme should be modified to reflect the permanently defueled status
- Changes should be limited to those that reflect
 - Modes that are no longer applicable
 - Conditions that are no longer applicable
 - Equipment that is no longer required



Details Required to Support NRC's Evaluation of Proposed Reduction to ERO Staffing

- Provide sufficient information for the NRC reviewer to independently reach the conclusion made by the licensee.
 - If the licensee indicates that an evaluation was performed, then objective evidence should be provided that supports the licensee conclusion.
 - LARs tend to focus on EP functions as identified by site-specific staffing tables.
 - However, the NRC staff must also verify that spent fuel pool mitigation strategies can be promptly implemented as needed.



Details Required to Support NRC's Evaluation of Proposed Reduction to ERO Staffing

- For a proposal to remove the on-shift maintenance position(s):
 - The on-shift operator performs this function
 - The on-shift operator has the required training to perform all potential normal and off-normal procedural tasks related to maintaining or restoring the key safety functions



Details Required to Support NRC's Evaluation of Proposed Reduction to ERO Staffing

- For a proposal to remove the radwaste operator position
 - The on-shift operator performs this function
 - The radwaste operator is not required to perform any normal and off-normal procedural tasks related to maintaining or restoring the key safety functions
 - The radwaste operator is not assigned any other ERO responsibilities
 - If needed, a radwaste operator would be called in to process waste as needed



Recent LAR Input

- We will develop procedures
- We will develop training
- We have provided an ERO Task Analysis
- We have performed an on-shift staffing analysis



Staffing Analysis

- The post-shutdown OSA concluded that...
- The post-shutdown OSA indicates that...
- The post-shutdown OSA confirmed that...
- The post-shutdown OSA determined there...



Staffing Analysis

Line #	Function / Task	On-Shift Position	Task Analysis Controlling Method
1	Declare the emergency classification level	Shift Manager	Emergency Planning Training Program / EP Drills
2	Approve Offsite Protective Action Recommendations	N/A	N/A
3	Approve content of State/local notifications	Shift Manager	Emergency Planning Training Program / EP Drills
4	Approve extension to allowable dose	N/A	N/A
5	Notification and direction to on-shift staff (e.g., to assemble, evacuate)	Shift Manager	Licensed Operator Training Program / Emergency Planning Training Program
6	ERO notification	Shift Manager	Emergency Planning Training Program / EP Drills



Expectation for Evaluating Potential Impacts on Offsite REP Plans and State/local Interface

- The licensee should provide objective evidence that proposed changes will not impact the licensee's ability to interface with State and local officials.
- The licensee should provide documentation of discussions with State and local officials.
 - Not concurrence, unless proposed change impacts
 REP plan
- If REP plans may be impacted, FEMA review needed.

Expectations for a Pre-Implementation Drill Demonstration

- A regulatory commitment to perform an observed pre-implementation drill should be provided unless a drill was already performed.
- The NRC and FEMA should be provided with the opportunity to observe a pre-implementation drill.
- State, and local response organizations should be provided the opportunity to participate in a pre-implementation drill.



Lessons Learned

Licensees for decommissioning nuclear power reactors either:

- 1. Improperly used the 10 CFR 50.59 process to implement changes in their emergency plans under 10 CFR 50.54(q) (e.g., changes to ERO staffing)
- Were considering removing plant equipment or instrumentation no longer required for plant operation under 10 CFR 50.59 but required to implement emergency plan/emergency action levels (EALs) under 10 CFR 50.47(b)



Lessons Learned

RG 1.219, "Guidance on Making Changes to Emergency Plans for Nuclear Power Reactors." Revision 1 (ADAMS Accession No. ML16061A104)

 Addressed the use of the EP change process and related reduction in effectiveness considerations for decommissioning reactors.

