

**POLICY ISSUE
(Information)**

October 19, 2009

SECY-09-0152

FOR: The Commissioners

FROM: Roy P. Zimmerman, Director
Office of Nuclear Security and Incident Response

SUBJECT: ANNUAL UPDATE ON THE STATUS OF EMERGENCY
PREPAREDNESS ACTIVITIES

PURPOSE:

This second annual Emergency Preparedness (EP) paper provides the Commission with an update on activities within the EP Program. This paper provides a status and self-assessment; it does not contain new commitments, recommendations, or request for resources.

BACKGROUND:

In the staff requirements memorandum (SRM) for SECY-05-0010, "Recommended Enhancements of Emergency Preparedness and Response at Nuclear Power Plants in Post-9/11 Environment," dated May 4, 2005, the Commission directed the staff to provide a semiannual report on important EP activities. In SECY-07-0182, "Semi-Annual Update on the Status of Emergency Preparedness Activities," dated October 19, 2007, the staff asked the Commission to approve changing the frequency of this report from semiannual to annual. In the SRM to SECY-07-0182, the Commission approved the request, adding that:

The annual paper should become more of a self-assessment and communication tool, perhaps summarizing accomplishments and providing a status on improvement initiatives within our EP programs. Such an assessment should be

CONTACT: Rollie Berry, NSIR/DPR
(301) 415-6119

coordinated with and not overlap the Reactor Oversight Process self-assessment of the EP cornerstone, and should be designed to aid the staff in effecting continuous and coordinated improvements to the overall EP program, as well as to inform the Commission and public of progress. (W200500137)

DISCUSSION:

This paper provides key insights from a self-assessment of the EP Program and highlights activities either in-progress or planned for staff implementation. The EP staff, through its accomplishments, positively contributes to the Nuclear Regulatory Commission's (NRC's) strategic goals and overall ability to ensure adequate protection of public health and safety. The enclosure provides supplemental information on accomplishments, ongoing initiatives, challenges, and upcoming activities for significant EP initiatives.

The staff used lessons learned and feedback from rulemaking, public meetings, technical studies, Reactor Oversight Process assessment activities, and hostile action-based (HAB) EP drills as part of its self-assessment activities. Two significant items identified through its self-assessment are the need to re-evaluate risk communication strategies and guidance on protective action recommendations. For clarity, the paper is divided into five areas: Rulemaking and Guidance, Outreach, New Reactor Licensing, HAB EP Drills, and Federal Emergency Management Agency (FEMA) Coordination.

Rulemaking and Guidance

Through the proposed EP rule, as well as other initiatives, the staff continues to develop, maintain, and implement licensing and regulatory programs. The staff continues to progress as scheduled with the EP rulemaking. On May 18, 2009, the proposed rule and associated draft guidance were issued for stakeholder review and comment. The NRC and FEMA have used innovative and prolific methods for outreach and solicitation of stakeholder comments, which have generated positive feedback. The staff expects substantive public interest during the rulemaking comment period resulting in numerous comments. The staff will closely coordinate its comment resolution activities with FEMA. Both agencies have arranged for contract resources to support the comment collection, sorting, tracking, and resolution process. In addition, both agencies are identifying changes to other documents, such as inspection procedures and training materials, which will be needed to support implementation of a revised EP program following publication of the EP final rule.

Based on technological and threat environment considerations, the staff has identified the need to re-evaluate risk communication strategies and messaging associated with protective action recommendations. Using results documented in Volumes 1 and 2 of NUREG/CR-6953, "Review of NUREG-0654, Supplement 3, 'Criteria for Protective Action Recommendations for Severe Accidents'," and the lessons learned from staff observation of HAB EP drills, the staff is proposing alternate evacuation strategies. These strategies consider the impacts of a large early release on evacuation decision-making, impediments to evacuation, use of staged evacuations, and consideration of near-site evacuation times. The staff expects to provide the Commission with the proposed Revision 1 of Supplement 3 to NUREG-0654/FEMA-REP-1 in February 2010.

The staff will develop updates to existing EP guidance documents, including a revision to NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants." The staff will evaluate these updates in coordination with FEMA, as applicable.

In response to direction provided in the SRM for SECY-06-0200, "Results of the Review of Emergency Preparedness Regulations and Guidance," dated September 20, 2006, the staff is preparing to study the benefits of implementing a performance-based system of EP regulation. This work is scheduled to begin in Fiscal Year (FY) 2010.

Outreach

In line with the Strategic Plan objectives of openness and effectiveness, the staff has worked diligently to enhance communications with stakeholders. For example, NRC and FEMA staff jointly conducted 11 public meetings in June 2009 to support EP rulemaking. The staff explained and fielded questions regarding the proposed NRC EP rule and draft NRC and FEMA guidance documents. The staff piloted the use of a new, Web-based video conferencing technology at these public meetings to enhance stakeholder participation. Stakeholders responded very positively to the use of Web-based technology, as it permitted greater participation from those who could not be physically present at the meetings due to conflicting work commitments or travel cost considerations. The staff has conducted a review of lessons learned from the video conferencing pilot, which has been shared with other NRC offices to support future decision-making on wider application of such tools.

The staff's ongoing outreach activities to ensure the involvement of State and local organizations, industry, non-governmental organizations (NGOs), and the public have received consistently positive feedback. In addition to support for the EP rulemaking public meetings, the staff's outreach efforts received positive feedback at national and regional conferences and forums to educate stakeholders on the following:

- The process for the submittal and review of early site permits and combined license (COL) applications for new reactors, including clarification of NRC and FEMA responsibilities and the status of reviews;
- Outcomes from regional focus groups conducted to engage stakeholders on preliminary draft changes to enhance exercise scenarios realism to minimize preconditioning of exercise participants and avoid negative training;
- Proposed offsite guidance being considered by FEMA to adopt a national standardized exercise program and to identify methods for State and local organizations to obtain credit for capabilities demonstrated in events, exercises, or drills held outside the Radiological Emergency Preparedness program; and
- Preliminary changes under consideration for protective action recommendation guidance.

The staff facilitated the observation of exercises from the Headquarters' Operations Center by State counterparts before a planned exercise in their home State. State officials are able to gain a better understanding of the NRC's role during an event involving the NRC's licensees. During the past year, three States have observed exercises, with the overall feedback from State participants being positive and leading to a better understanding by State representatives

of the NRC's mission. The staff also gained an understanding of how the NRC can best interact with State decision-makers.

New Reactor Licensing

The staff has worked effectively with the Office of New Reactors and FEMA to establish a consistent and well-managed process for new reactor licensing reviews. This preparation for new reactors supports the safety goal strategy to oversee existing reactors, while preparing for and managing reviews for new reactors. To address previously identified challenges, the staff achieved alignment with FEMA regarding the development of requests for additional information, the COL review process, and the scheduling of new reactor reviews. This coordination resulted in increased schedule integrity and improved consistency of reviews for COL applications. The staff continues to work closely with FEMA to develop processes, as needed, to further enhance coordination and effectively meet schedule milestones.

The NRC staff has evaluated and endorsed Revision 0 to Nuclear Energy Institute (NEI) 07-01, "Methodology for Development of Emergency Action Levels for Advanced Passive Light Water Reactors," for new reactors. This endorsement represents the culmination of interactions with industry representatives and staff experts from multiple disciplines in creating a framework for new reactor Emergency Action Levels submittals.

HAB EP Drills

In an effort to further support Federal response plans that integrate the efforts of licensees, and Federal, State, local, and Tribal authorities, the EP staff has continued to coordinate HAB EP drills. As of October 15, 2009, the industry has conducted voluntary HAB EP drills at 56 of 64 sites. During the past year, the NRC staff observed 19 drills in coordination with FEMA. NEI has been effectively engaged to ensure consistent application of industry guidelines contained in Revision 1 to NEI 06-04, "Conducting a Hostile Action-Based Response Drill." The HAB EP Drill Working Group, consisting of representatives from the NRC staff, FEMA, and NEI, supported an industry-sponsored forum following the April 2009 National Radiological Emergency Preparedness Conference. This forum allowed industry, States, and locals the opportunity to share lessons learned and good practices pertaining to HAB EP drills. The Working Group also piloted proposed changes to FEMA's exercise evaluation criteria to address the unique challenges posed by a hostile-action event to offsite response organizations. In addition, the staff took the opportunity in three HAB EP drills to begin development of an inspection procedure to evaluate exercises initiated by hostile actions, which would be required under the proposed EP rule. NRC Headquarters and the respective Region Incident Response Organizations participated in HAB EP drills at the Three Mile Island Station on October 16, 2008, and at the Turkey Point Station on June 24, 2009, to demonstrate the NRC's response to a scenario initiated by a hostile action.

Voluntary HAB EP drills will conclude in late Calendar Year (CY) 2009. However, a joint NRC and FEMA working group was formed to identify options to allow licensees to demonstrate HAB elements in scheduled biennial exercises before formal evaluation would be required. This transitional working group will work to develop a path forward that will address the issues surrounding the period between the end of HAB EP drills at the end of CY 2009 and the implementation of a final EP rule.

FEMA Coordination

NRC and FEMA interactions and alignment continue to improve. Recently, both organizations agreed to the creation of a charter for a joint EP Steering Committee. This committee has been designated executive oversight responsibilities to guide working group activities aimed at further enhancing interagency cooperation.

The recent confirmations of the new FEMA Administrator, W. Craig Fugate, and the Deputy Administrator for National Preparedness, Timothy Manning, have enabled staff to re-establish efforts to maintain senior management alignment and assure effective working relationships focusing on Commission and FEMA priorities. Administrator Fugate and Chairman Jaczko met on July 23, 2009, to discuss many topics, among them EP. To further this coordinated effort, senior NRC staff and Deputy Administrator Manning held an initial meeting on August 3, 2009, to strengthen relations and alignment. Subsequently, Deputy Administrator Manning visited the NRC Operations Center and observed the Comanche Peak exercise on April 7, 2009.

RESOLUTION OF PRIOR COMMITMENTS:

The Joint NRC and FEMA Exercise Scenario Task Force completed its charter on February 5, 2009, after summarizing recommendations on improving the challenging aspects of EP exercise scenarios in response to the Commission SRM issued on June 29, 2006. The Task Force successfully engaged State, local, NGO, and industry stakeholders in various national forums regarding proposed recommendations to vary the quantities and types of releases, include rapid escalation in event classifications, and incorporate events initiated by hostile actions. Task Force input was used to develop the proposed EP rule and draft guidance documents.

RESOURCES:

No additional funds are required in FY 2010 and FY 2011.

COORDINATION:

The Office of the General Counsel reviewed this package and has no legal objection. The paper was coordinated with the Office of the Chief Financial Officer for resource implications.

/RA/

Roy P. Zimmerman, Director
Office of Nuclear Security and Incident Response

Enclosure:
As stated

ENCLOSURE TO THE ANNUAL UPDATE ON THE STATUS OF EMERGENCY PREPAREDNESS ACTIVITIES

PURPOSE

This enclosure provides the background for the annual paper on emergency preparedness (EP) activities in the following categories:

- EP regulations and guidance
- EP inspection initiatives
- existing reactor licensing
- new reactor licensing
- EP outreach
- EP security interface

Where appropriate the categories have four subareas:

- (1) accomplishments
- (2) ongoing initiatives
- (3) challenges
- (4) upcoming activities

EP REGULATIONS AND GUIDANCE

Accomplishments

The Nuclear Regulatory Commission (NRC) issued NUREG/CR-6953, Volume 2, "Review of NUREG-0654, Supplement 3, 'Criteria for Protective Action Recommendations for Severe Accidents,' Focus Groups and Telephone Survey," in October 2008. This study contained the results from a national telephone survey of residents living within nuclear power plant emergency planning zones. The study was conducted to obtain data for use in developing an understanding of public tendencies towards EP. The conclusions of this research support the planned revision to Supplement 3, "Criteria for Protective Action Recommendations for Severe Accidents," to NUREG-0654/FEMA-REP-1, Revision 1 (Refer to Initiative 2).

On May 18, 2009, the staff published in the *Federal Register* (FRN NRC-2008-0122), a notice of the proposed EP rule and notices of the availability of draft onsite guidance documents. The proposed rule addresses higher-priority EP rulemaking issues identified in SECY-06-0200, "Results of the Review of Emergency Preparedness Regulations and Guidance," dated September 20, 2006. The public comment period for each of the rulemaking and guidance documents closed on October 19, 2009 (Refer to Initiative 1).

Ongoing Initiatives

Initiative 1—Proposed EP Rule

To continue to promote openness in the rulemaking process and to encourage stakeholder participation, the Commission approved an extension of the public comment period for the proposed EP rule and draft onsite guidance documents from August 3, 2009, to October 19, 2009, in response to external stakeholder requests for additional time.

On May 18, 2009, in conjunction with the proposed EP rule, the staff made available for public comment a draft NUREG/CR providing proposed guidance for evacuation time estimates (ETEs). This document provides criteria for addressing the format, content, review, and updating of ETEs. This includes the development of ETEs for staged evacuation protective actions to support the consistent application of ETE methodology and its use in onsite and offsite emergency response planning.

In addition, the Federal Emergency Management Agency (FEMA) issued two draft offsite guidance documents for public comment on May 18, 2009, in conjunction with the NRC's proposed EP rule and draft onsite guidance documents. The draft revision of the Radiological Emergency Preparedness Program (REPP) Manual and draft Supplement 4 to NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1, would provide a consolidated source of FEMA REPP policy and guidance for State and local governments, align the REPP with other national EP and response initiatives, and align FEMA's offsite EP activities with the NRC's proposed EP rule. (W200900089)

The staff requirements memorandum (SRM) for SECY-07-0182, "Semi-Annual Update on the Status of Emergency Preparedness Activities," dated October 19, 2007, directed the staff to provide updates on FEMA's actions to reduce the burden on State and local organizations and provide alternate methods for verifying offsite capabilities. Proposed changes to the FEMA guidance would specifically address integration of the REPP with the national Homeland Security Exercise and Evaluation Program (HSEEP) to reduce schedule duplication and the burden on States and local response organizations. These changes establish a protocol for State and local agencies to receive credit for actual events and nonradiological EP drills and exercises conducted. (W200900088)

The staff is developing recommendations for resolving the remaining eight medium and low priority EP rulemaking issues identified in SECY-06-0200. Based on an initial analysis, most issues would not require rulemaking and could be addressed through NRC generic communications or guidance documents. (W200900090)

SECY-06-0200 Medium Priority EP Issues

- Emergency Response Organization (ERO) Call-In and Report-In Drills: This could be emphasized through guidance or a generic communication without the need for rulemaking. Additional criteria for periodically conducting ERO call-in and report-in drills to demonstrate the licensee's ability to augment shift staffing in accordance with its

emergency plan can also be provided in guidance, such as NUREG-0654/FEMA-REP-1. The time frame for revising NUREG-0654/FEMA-REP-1 is approximately 3-4 years.

- EP Corrective Action Program: Rulemaking would not be required. Resolution of corrective actions identified in drills and exercises is already addressed in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.47(b)(14) and Appendix E to 10 CFR Part 50. Corrective actions involving other aspects of a licensee's EP program can be addressed through other existing NRC requirements for licensee's corrective action programs. Therefore, no additional action to address this issue is planned.
- EP Staff Training: Rulemaking would not be required. Additional criteria for EP staff training to provide an adequate level of knowledge of NRC EP requirements so that an effective emergency program is developed and maintained can be provided in guidance, such as NUREG-0654/FEMA-REP-1.
- Use of Systematic Approach to Training (SAT) for EROs: Rulemaking would not be required. Additional criteria for designing and conducting ERO training using the SAT process can be provided in guidance, such as NUREG-0654/FEMA-REP-1.
- Notification of Alert System Major Loss: Rulemaking would not be required. Additional criteria to clarify what constitutes a major loss of a licensee's alert and notification system and reporting guidelines can be provided in guidance, such as NUREG-1022, "Event Reporting Guidelines 10 CFR 50.72 and 50.73." The time frame for revising NUREG-1022 is approximately 1-2 years.
- Clarification of Consideration of Potassium Iodide Use and Other Protective Action Recommendations (PARs): Rulemaking would be recommended to clarify the wording and intent of 10 CFR 50.47(b)(10). The current language is not clear on the need for licensees to include sheltering as a PAR option in their emergency plans and to provide a range of protective actions for individuals onsite and in the owner controlled area. This would require coordination with FEMA, since it also impacts offsite response organizations. The time frame for this activity is approximately 2-3 years.

SECY-06-0200 Low Priority EP Issues

- Joint Information Center (JIC) Enhancements: Rulemaking would not be required. A new NUREG/CR document is being developed under a separate initiative, which would adequately address JIC enhancements to account for changes in media practices, advances in communications technology, and changes in public access to information. The proposed NUREG/CR document discussed in Initiative 3 is expected to be issued by the end of Calendar (CY) 2009.
- License Transfer: Rulemaking or other action to address this issue is not recommended, since this could be done by means of a Regulatory Issue Summary (RIS) or other generic communication. Changes to a site's emergency plan due to a license transfer should be evaluated under 10 CFR 50.54(q) and any reduction in effectiveness submitted for prior NRC approval per 10 CFR 50.90.

Initiative 2—Revision to Supplement 3 to NUREG-0654/FEMA-REP-1, Revision 1

The staff has drafted a preliminary revision to Supplement 3, “Criteria for Protective Action Recommendations for Severe Accidents,” to NUREG-0654/FEMA-REP-1, Revision 1, and has presented it in several public forums to obtain feedback from stakeholders. The staff is coordinating this effort with FEMA. The staff currently expects to publish a draft for public comment in CY 2010.

Initiative 3—Proposed NUREG/CR Guidance on JICs and Risk Communication Techniques

The staff is preparing NUREG/CR guidance on JICs and risk communication techniques. The proposed guidance recognizes that communications technology has changed and that media response times, as well as the prevalence of blogs and citizen reporters with cell phones, have changed how news is delivered and received. Effective communications strategies and messages are extremely important to the successful implementation of the protective action guidelines and the protection of public health and safety. Effective communication is also paramount to maintaining public trust at a critical time. To assist users with the development of effective risk communication strategies, the staff is preparing NUREG/CR guidance. Additionally, the staff is working with FEMA/Department of Homeland Security (DHS), the Nuclear Energy Institute (NEI), and State representatives to develop a series of table top exercise scenarios designed to improve risk communication at various levels of the Federal government. The staff expects to issue the NUREG/CR on JICs and risk communication techniques by the end of CY 2009.

Challenges

The staff expects that the proposed EP rule and associated onsite and offsite draft guidance documents will generate numerous comments during the extended public comment period and is working with FEMA to coordinate comment resolution efforts. Both agencies have arranged for contract resources to support the comment collection, sorting, tracking, and resolution process. In addition, both agencies are identifying changes to other documents, such as inspection procedures and training materials, which will be needed to support the implementation of EP program changes following publication of the EP final rule.

The staff needs to maintain an awareness of the activities of other Federal agencies. DHS is the lead agency for the development of risk communication guidance for events involving radiological dispersion devices/improvised nuclear devices. The NRC is working closely with FEMA/DHS to ensure that the NRC-proposed NUREG/CR on JICs and risk communication for its licensees does not contradict, but rather supports, the current initiative by FEMA/DHS, which targets State and local officials.

Upcoming Activities

The staff will support the resolution of comments on the proposed EP rule and draft guidance documents. Preparation of a final rule for consideration by the Commission is currently scheduled for late spring 2010.

In 2010, the staff will develop recommendations for appropriate decision-makers regarding the comprehensive updates to existing EP guidance documents and incorporate staff guidance associated with the EP final rule into these documents. The staff will engage FEMA in determining the appropriate scope and timeline for a revision to NUREG-0654/FEMA-REP-1 to consolidate existing document supplements.

In response to direction provided in the SRM for SECY-06-0200, the staff is preparing to study the benefits of implementing a performance-based system of EP regulation. The staff will consider the benefits as well as the costs involved when developing and potentially implementing a regulatory oversight system which encompasses performance based EP both onsite and offsite. This work is scheduled to commence in FY 2010.

EP INSPECTION INITIATIVES

Accomplishments

The staff continued to provide technical support to Region I, which served as the lead office for issues related to the Indian Point Energy Center alert and notification system (ANS) mandated by the NRC in accordance with the Energy Policy Act of 2005. Since the October 31, 2008, annual update on EP activities, the new system had been placed into service. The staff observed the successful completion of the final reliability test on November 20, 2008. Based on inspections, which concluded on December 16, 2008, the staff determined Entergy had complied with the requirements of the NRC's January 31, 2006, and July 30, 2007, Orders, and the August 22, 2008, NRC Confirmatory Action Letter. Staff also determined that Entergy had performed a sufficient analysis of the root causes related to noncompliance with the Order and had identified corrective actions to address the issues. The ANS will receive normal NRC oversight as provided for in the Reactor Oversight Process. FEMA approved the proposed system for a 1-year testing period on August 14, 2008, and in August 2009, FEMA conducted an in-field review of the ANS. NRC staff observed the evaluation and FEMA's final report is in progress.

Ongoing Initiatives

Initiative 1—Assessment of the Drill and Exercise Performance Indicator

The staff has identified potential concerns regarding the implementation of the drill and exercise performance (DEP) performance indicator (PI) and has implemented a temporary instruction to gather the raw data used to generate the DEP PI from licensees. This temporary instruction is scheduled to be complete by December 31, 2009. The staff plans to review the information gathered to assess whether the DEP PI accurately reflects the licensee's performance in making event classifications, notifications, and protective action recommendations. Preliminary observation of the data collected to date suggests that licensee identification of performance opportunities for each of the three areas is not equally balanced. As an example, licensees have created more opportunities for classification and notification than they have protective action recommendations. This imbalance could affect the quality of the DEP PI as an indicator of overall licensee performance, since the PI is reported as a single performance value. Should the final data analysis confirm these observations, the staff will work with industry and other stakeholders to effect necessary changes to the PI.

Initiative 2— Changes to Inspection Procedures to Conform to EP Rulemaking

As a result of the proposed EP rule, the staff will need to change EP inspection procedures and guidance, and provide training to regional inspectors in assessing licensee compliance with the new and revised provisions of the final rule. The staff has developed a matrix of necessary procedural changes and training. The procedure changes and training will be accomplished before the implementation of the final rule.

Initiative 3—Revision of Appendix B to Inspection Manual Chapter 0609

The staff has prepared a draft revision to Appendix B, “EP Significance Determination Process,” to Inspection Manual Chapter 0609, “Significance Determination Process.” The staff initiated this activity before the EP rulemaking effort to address needed improvements identified by staff in implementing the EP significance determination process (SDP) since its last revision in March 2003. The document received extensive reformatting to increase usability and clarity, improve consistency in terminology, and, where feasible, replace narrative text with step-by-step procedures. The more significant technical changes include: (1) providing new guidance on the treatment of findings under 10 CFR 50.54(q) under traditional enforcement and/or the Reactor Oversight Process; (2) providing new guidance on crediting compensatory and mitigative actions in assessing significance (but not noncompliance); (3) providing new guidance on assessing the significance of findings related to the over-classification of emergency conditions during actual events; (4) replacing the significance logic for findings related to emergency action level (EAL) deficiencies, and (5) providing clarification on soliciting FEMA input on findings associated with the ANS. As part of the resolution of public comments received on the rule, the staff will review the proposed EP SDP revision against the proposed EP rule and adjust the proposed EP SDP as necessary for consistency. Following comment resolution, the staff will incorporate the proposed revision into Inspection Manual Chapter 0609 for further processing, stakeholder review, and approval.

EXISTING REACTOR LICENSING

Accomplishments

On August 24, 2009, proposed generic communication RIS 2005-02, Revision 1, “Clarify the Process for Making Emergency Plan Changes,” was published in the *Federal Register* for public comment. Staff closely coordinated the guidance in this RIS with draft guidance used to support the proposed EP rule. The process for changing an emergency plan is addressed in 10 CFR 50.54(q). Based upon feedback from the nuclear power industry, the research and test reactor community, and experience gained by the NRC staff as a result of reviewing emergency plan changes, the NRC staff identified the need to further clarify the process for making changes to an emergency plan. The staff is planning to issue the final RIS in November 2009, pending resolution of comments received.

The Nuclear Management and Resources Council, Inc. document, referred to as National Environmental Studies Project-007, “Methodology for Development of EALs,” provided an alternative methodology to the EAL guidelines contained in Appendix 1, “EAL Guidelines for Nuclear Power Plants,” to NUREG-0654/FEMA-REP-1. Based on the lessons learned from the

use of NESP-007, the industry and NRC identified improvements resulting in NEI 99-01, "Methodology for Development of EALs." The staff has completed the review of eight full changes by licensees of EAL schemes based on NEI 99-01 guidance, as well as technical reviews of 23 licensee emergency plan changes. Of the 65 sites, 38 now use NEI 99-01, another 22 use NESP-007, and only 5 use Appendix 1 to NUREG-0654/FEMA-REP-1.

The staff revised Regulatory Guide 1.101, "Emergency Planning and Preparedness for Nuclear Power Reactors," to endorse Revision 0 to NEI 07-01, "Methodology for Development of Emergency Action Levels for Advanced Passive Light Water Reactors," issued March 2008, and Revision 5 to NEI 99-01, issued February 2008. Endorsement of these two documents allows current licensees and applicants for the new passive reactor designs to improve EALs by taking advantage of relevant staff and industry experience related to EALs.

Ongoing Initiatives

Initiative 1—Revision to Regulatory Guide 2.6

The staff will update Regulatory Guide 2.6, "Emergency Planning for Research and Test Reactors," issued March 1983, which currently endorses the American Nuclear Society 15.16-1982, "Emergency Planning for Research and Test Reactors." The revision will endorse an update to the American Nuclear Society standard. The staff published the draft version for public comment in September 2009 and a final revision is expected by the end of CY 2009.

Upcoming Activities

The staff will continue to support the industry's commitment to upgrade EAL schemes based on NEI 99-01, Revision 5.

NEW REACTOR LICENSING

Accomplishments

The staff provided testimony for the Vogtle early site permit hearings; participated in the public meeting regarding the inspections, tests, analyses, and acceptance criteria (ITAAC); and participated in numerous design center working group meetings.

The staff achieved alignment with FEMA regarding improved processes for offsite EP reviews including the development of requests for additional information, the combined license review process, and the scheduling of new reactor reviews. This increased schedule integrity and the consistency of combined license application reviews.

Ongoing Initiatives

Initiative 1—Applications

The staff continues to support the review of design certifications (3), design certification amendments (1), and combined license applications (18).

Initiative 2—Guidance Document Development

As a lesson learned from using the new reactor review template, the staff has worked with Sandia National Laboratories and Pacific Northwest National Laboratory to establish a living guidance document to assist in the development of requests for additional information, open items, confirmatory items, and the safety evaluation report. In addition, the staff holds periodic meetings with the contractors to ensure consistency in the new reactor EP review process.

Initiative 3—Development of New Reactor Inspection Procedures

The staff is developing inspection procedures that will be used to review, confirm, and evaluate the EP program. This includes the EP ITAAC and EP programmatic procedures associated with new reactor construction. The EP ITAAC procedures have been completed by the staff and are currently being reviewed by the staff. The EP programmatic procedures should be completed during CY 2010.

Challenges

While challenged to hire and train the in-house resources needed to conduct EP licensing reviews due to agency-wide external hiring constraints, the staff continues to use the resources available within NSIR to ensure the timely and efficient completion of reviews, and will continue to evaluate resource allocations to assure the ability to meet further review schedules.

EP OUTREACH

Accomplishments

In July 2009, the staff implemented a formal charter for the NRC and FEMA EP Steering Committee on Emergency Preparedness Issues to establish the protocols and processes for day-to-day operations. This steering committee fulfills the functions established by a memorandum of understanding (MOU) between the NRC and FEMA. The charter identifies NRC and FEMA division directors as steering committee co-chairs, which were previously filled at the level of branch chief. The executive focus will provide more effective methods for management oversight of joint NRC and FEMA projects and working groups, and improve coordination with other Federal agencies.

To strengthen the NRC's focus on stakeholder involvement, the staff created a quarterly EP newsletter to enhance communications with both internal and external stakeholders on important EP issues and initiatives. When appropriate, the newsletter has included articles from FEMA counterparts on such timely topics as the integration of the REPP and HSEEP. Non-governmental organizations (NGOs) have expressed appreciation for the effort to increase transparency, and the distribution of the newsletter is growing.

In line with the Strategic Plan objectives for openness and effectiveness, staff has worked diligently to enhance communication with, and outreach to, various stakeholder groups. For example, NRC and FEMA staff jointly held 11 public meetings in June 2009 to provide an overview of and to answer questions regarding the proposed EP rule and draft guidance

documents. The meetings were held in each of the NRC regional communities and at NRC Headquarters with afternoon and evening sessions to accommodate both the emergency response professional community and members of the public who might not be able to attend daytime meetings. Because of the timing of the proposed EP rule's publication, the NRC held a similar public meeting in the evening during the NEI EP and Communication Forum in Florida.

To further enhance openness of the public process and engage external stakeholders, the staff piloted the use of video conferencing technology, with the Office of Information Services (OIS), to improve remote participation in public meetings conducted on the proposed NRC EP rule and associated NRC and FEMA guidance documents. The use of this technology directly addressed the lack of travel funds identified by various stakeholders as a barrier to their involvement. In addition, the use of this technology allowed the remote involvement of large groups of State and local Radiological Emergency Preparedness staff who displayed the live meeting broadcast at emergency operations centers and other facilities. The NRC's use of this Web-based technology was very positively received by external stakeholders.

To facilitate public participation as part of the Limited English Proficiency Program, the staff partnered with the NRC Office of Small Business and Civil Rights to provide all NRC documents related to the NRC-proposed EP rule and associated guidance in the Spanish language. Translators also attended all of the public meetings held in June 2009.

The staff continues to expand its interactions with a broader sector of the public by attending national and regional meetings, which attract a diverse group of stakeholders interested in EP. These meetings included the National Radiological Emergency Preparedness Conference; the annual and midyear conferences for the National Emergency Managers Association for State Emergency Management Directors; the annual conference for the International Association of Emergency Managers for State, local, and tribal emergency managers; and regional conferences to support NRC Regions.

Ongoing Initiatives

Initiative 1—NRC and FEMA MOU Relating to Radiological Emergency Planning and Preparedness

In the SRM to SECY 06-0101, "Emergency Preparedness for Daycare Facilities within the Commonwealth of Pennsylvania: Update on Staff Actions and Request for Commission Approval for Related Staff Actions," dated June 21, 2006, the Commission directed the staff to do the following:

"The staff should specifically pursue an increased NRC participation in defining the extent of play for FEMA exercises during revision of the NRC and FEMA Memorandum of Understanding (MOU). The staff should inform the Commission of the outcome of its efforts related to revision of MOU."

An MOU working group, formed under the NRC and FEMA EP Steering Committee, continues to engage in consolidating and identifying proposed changes to existing NRC and FEMA MOUs. In a 2009 mid-year meeting of the joint NRC and FEMA Steering Committee, FEMA indicated that resources to continue work on this MOU would not be available in FY 2009. FEMA

rulemaking would be needed to revise this MOU and given the ongoing NRC and FEMA staff commitment to support the proposed NRC EP rule and associated guidance changes, the staff does not anticipate completing the MOU revision until FY 2011. In the interim, staff is partnering with FEMA to identify possible changes to their proposed revision to the REPP Manual, associated with the proposed EP rule, as an alternate method to address the Commission's direction. (W200600294)

Initiative 2—Openness

In advancing the Strategic Plan objectives of openness and transparency, the staff appropriately informs and involves stakeholders throughout the regulatory process. This openness by the staff is conveyed through work with other NRC offices and FEMA to inform and involve stakeholders, as demonstrated by the conduct of extensive public meetings in support of the proposed EP rule and piloting new Web-based video conferencing technology. The staff has shared insights from the video conferencing pilot with other offices and will continue to support implementation of an overall agency solution to interactive Web-based meetings.

Initiative 3—Regional Interface

The staff conducted monthly conference calls with the NRC regional EP inspectors to exchange information, discuss various inspection and licensing topics, and resolve issues related to the EP cornerstone of the Reactor Oversight Process. Through these calls, the participants have identified and acted upon opportunities to share or reallocate resources to assist the Regions with inspections, exercises, and drills as needed. The staff also hosted an annual counterpart meeting with NRC Headquarters and Regional EP inspectors on April 24-27, 2009, to discuss issues in greater depth, promote teamwork, and share information among EP specialists.

The staff also maintained a proactive engagement with Regional State Liaison Officers to discuss regional EP issues, requests, and concerns raised by State and local response organizations.

Hostile Action-Based (HAB) EP drills involve new concepts for inspectors to consider. In addition to communications through monthly calls and counterpart discussions, the staff has published articles in the Inspector Newsletter and NSIR EP Newsletter, and individually engaged Regional staff prior to HAB EP drills to communicate lessons learned and discuss application of appropriate guidance. This communication and preparation has allowed Regional staff to understand the unique challenges posed by HAB EP drills, and better understand how hostile actions may affect event response.

Challenges

The NRC proposed EP rule resulted from a thorough review of EP requirements, and will also require associated changes to NRC and FEMA guidance documents and the completion of the voluntary HAB drill initiative. The staff must continue to identify further means to ensure the stakeholders are kept informed and involved. Staff will also continue to ensure communications to external stakeholders are effectively coordinated with FEMA and other NRC offices.

Upcoming Activities

To further enhance the engagement of external stakeholders, the staff is proposing to conduct an annual public meeting focused on involving NGOs with a broad range of issues. The staff is currently interacting with these organizations to determine their interest and the range of possible discussion topics, which will serve to inform a proposal for consideration by NRC management.

EP SECURITY INTERFACE

Accomplishments

As of October 15, 2009, the industry has conducted voluntary HAB EP drills at 56 of 64 sites. During the past year, staff observed 19 drills in coordination with NEI and FEMA. In support of this initiative, NRC Headquarters and respective Region Incident Response Organizations participated in HAB EP drills at the Three Mile Island Station on October 16, 2008, and at the Turkey Point Station on June 24, 2009, to demonstrate the NRC's response to a scenario initiated by hostile action. These drills built upon the lessons learned from NRC Headquarters and Region III participation during the previous year at Byron Station.

The staff, in coordination with FEMA and NEI as part of a HAB EP Drill Working Group, piloted proposed changes to FEMA's exercise evaluation criteria during three HAB EP drills over the past year. The changes address the unique challenges posed by a hostile action event to offsite response organizations. Staff also took the opportunity in three separate HAB EP drills to begin development of an inspection procedure to evaluate exercises initiated by hostile actions, which will be required pending approval of the proposed EP rule.

To ensure the effective communication to various stakeholders of staff observations and industry lessons learned, the HAB EP Drill Working Group also supported the NEI-sponsored open forum at the National Radiological Emergency Preparedness Conference, entitled, "Hostile Action-Based EP Drills: Improving Coordinated Stakeholder Response Through Discussion of Preparation Techniques and Key Observations." In addition, the staff attended various regional EP forums and site tabletop exercises to discuss staff observations, focusing on identified good practices and lessons learned. These efforts have resulted in a greater understanding of the unique challenges posed by a hostile action event and greater consistency in the application of industry drill guidelines contained in Revision 1 to NEI 06-04, "Conducting a Hostile Action-Based Response Drill."

In CY 2009, the staff will issue Information Notice 2009-19, "Hostile Action-Based Emergency Preparedness Drills." This generic communication captures significant industry good practices and lessons learned based on staff observations from HAB EP drills conducted to date.

Ongoing Initiatives:

Initiative 1—Implementation of Scenarios Initiated by Hostile Actions

Eight HAB drills remain under Phase III of a 3-year industry voluntary initiative, which will conclude at the end of CY 2009. The staff continues to engage stakeholders to ensure the

consistent application of industry guidelines and the identification and application of lessons learned. The staff is currently working in coordination with FEMA to address the effective transition from this voluntary industry initiative to the periodic demonstration of hostile action event elements as part of an evaluated biennial EP exercise, pending approval of the proposed EP rule.

Challenges

Due to the time interval between the completion of the industry voluntary HAB EP drills and implementation of the proposed EP rule, the potential exists for stakeholders not to have an opportunity to build upon lessons learned from this drill initiative. The staff has formed a joint working group with FEMA, under the direction of the joint EP Steering Committee, to identify options for the demonstration of hostile action event elements by licensees prior to implementation of a final EP rule containing HAB elements similar to those in the proposed EP rule.

Upcoming Activities

NRC Headquarters and Region IV incident response organizations are scheduled to participate in a HAB EP drill with the River Bend Station in November 2009. NRC Headquarters will have participated with each Region following the completion of this drill.

As part of the conclusion of the industry voluntary initiative and completion of the activities of the HAB EP Drill Working Group, the staff will revise communication tools, such as internal and external HAB EP Drill Web pages and outreach materials to support continuation of scenarios initiated by hostile actions as part of future biennial EP exercises.

RESOURCES:

No additional funds are required in FY 2010 and FY 2011. The resources required to update NUREG-0654, Supplement 3, have been budgeted. For this effort, 0.2 FTE and \$120,000 have been budgeted in FY 2010, and 1.5 FTE and \$120,000 have been budgeted for FY 2011. The resources required to complete work in response to direction provided in SRM for SECY-06-200, have also been budgeted. For this effort, 0.5 FTE and \$250,000 have been budgeted in FY 2010, and 0.5 FTE and \$221,000 have been budgeted in FY 2011. These resources are included in Operating Reactors business line/Rulemaking product line/111165-EP Reg Infrastr PA for FY 2010 and FY 2011. Funding requirements for FY 2012 and beyond will be addressed through the Planning, Budgeting, and Performance Management process of respective fiscal years.