

POLICY ISSUE
(Information)

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SECY-05-0189

FOR: The Commissioners

FROM: Luis A. Reyes
Executive Director for Operations **/RA/**

SUBJECT: STATUS OF EMERGENCY PREPAREDNESS ACTIVITIES
IN THE POST-9/11 THREAT ENVIRONMENT

PURPOSE:

The purpose of this paper is to provide the Commission with a semiannual report on the status of important activities in the area of emergency preparedness (EP) and enhancements to nuclear power plant licensees' EP programs.

SUMMARY:

In Commission staff requirements memorandum (SRM) dated May 4, 2005, the staff was directed to provide the Commission with a semiannual report on important activities in the area of EP, and to include a progress report on the complete review of EP requirements and guidance in the post-9/11 threat environment. The staff was also directed to report the status of licensee responses to NRC Bulletin 2005-02, "Emergency Preparedness and Response Actions for Security-Based Events", inform the Commission of any impediments, and report completion of licensees' actions.

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DISCUSSION:

Based on the Commission's direction, the staff is providing the following status update on nine (9) EP initiatives. Additional details are described in the attachment(s) to this document.

While the 9 initiatives described below are important EP activities, they do not encompass all of the important activities in the EP area. For example, the staff is continuing to perform licensing activities including, reviews of emergency plan change submittals for current licensees, reviews of early site permits, and development of licensing infrastructure for advanced reactors. The staff continues to support the Department of Homeland Security (DHS) comprehensive review of nuclear power plants (NPPs), licensee biennial exercises, and force-on-force (FOF) inspections. The staff is also currently working with the Department of Health and Human Services (HHS) and DHS on potassium iodide (KI) distribution initiatives. This paper focused on those preparedness initiatives of greatest significance during the next 6 months. In subsequent reports, the staff plans to transmit updated bullets by memorandum consistent with Commission guidance to adopt a "least cost" approach. Attachment 1 provides additional information.

Initiative 1: NRC Bulletin 2005-02, "Emergency Preparedness and Response Actions for Security-Based Events"

The staff issued Bulletin 2005-02 to NPP licensees requesting information on five (5) areas of their EP program capabilities. The staff asked that this information be submitted as written statements signed under oath and affirmation to ensure the information is reliable and to preclude the need for validation through special inspections. The Bulletin issued on July 18, 2005, provided information for licensees to discuss provisions in place or planned to address the information in the Bulletin. Licensee responses in those areas have been received and are summarized as follows:

Emergency Action Levels*	NRC Notification	Onsite protective actions	Emergency Response Organization Augmentation	EP-Security Integrated Drill and Exercise Program
63 licensees ~ 180 days to implement	1 licensee Complete	4 licensees Complete	29 licensees Complete	9 licensees ~180 days to implement
1 licensee ~ 210 days to implement	9 licensees ~ 60 days to implement	1 licensee ~ 60 days to implement	34 licensees ~ 180 days to implement	55 licensees - awaiting NRC/DHS endorsement
	54 licensees ~ 90 days to implement	58 licensees ~180 days to implement	1 licensee ~ 210 days to implement	
		1 licensee ~ 210 days to implement		

* Implementation dates start Bulletin issuance date of July 18, 2005.

The staff analyzed the responses and in general, the recommended enhancements described in Bulletin 2005-02 will be adopted by licensees with the following exception:

- § EP-Security Integrated Drill and Exercise Program
 - ! Fifty-five sites indicated that adoption of these enhancements is contingent on NRC/DHS endorsement of the new evaluation process.

The staff has initiated discussions with DHS on the development and endorsement of the new evaluation process for the drill and exercise program.

Initiative 2: Development and implementation of a security-based drill program

In Bulletin 2005-02, the NRC requested information on whether the industry intended to integrate security-based scenarios into routine NPP drill and exercise programs. The Nuclear Energy Institute (NEI) convened a working group in late 2004. The group has made considerable progress in organizing the implementation of a security-based drill and exercise program. The industry, with staff oversight, is currently working on the integration and demonstration of emergency responses to terrorist events, including preparation and conduct of integrated drills exercising the emergency response organization=s (ERO=s) response to a range of terrorist events. The staff expects the licensees to enhance key skills and capabilities through drilling on the response to security events.

A successful tabletop drill was conducted at Diablo Canyon on July 13, 2005, and another tabletop is scheduled for November 7, 2005, at Duane Arnold. The Diablo Canyon drill was effective at identifying lessons learned, and the staff expects that future exercises will be beneficial in identifying both site-specific and generic issues. The staff provided feedback to Diablo Canyon personnel and industry observers during the July drill. As a result, NEI is making changes to the drill guidelines. The next phase is to perform NRC observed, non-evaluated pilot drills at all sites within 3 years. The staff notes that the first such drill is scheduled for March 1, 2006, at Callaway. The staff intends to observe these drills to ensure the pilot drill program results in appropriate changes to routine drill and exercise scenarios. The response to Bulletin 2005-02 indicates that most licensees desire DHS endorsement of the program before they will commit to implementing it.

The staff is currently working with DHS to develop exercise objectives which will address the response differences from the traditional radiological event drills and is working to obtain DHS endorsement prior to program implementation.

Initiative 3: Review of EP regulations and guidance for commercial nuclear power plants

The staff conducted a successful and well attended public meeting on August 31 and September 1, 2005. The purpose of the meeting was to obtain stakeholder input on selected topics related to the review of EP regulations and guidance in the post-9/11 threat environment for NPPs. The meeting was conducted as a roundtable discussion among participants who were invited to represent the spectrum of interests in the area of EP. The spectrum included representatives from State, local, and Tribal governments; DHS; NRC; advocacy groups; and the nuclear industry. A list of the roundtable participants and the agenda are provided in Attachment 2. The stakeholders raised issues on the following topic discussions:

- § Abbreviated notification to the NRC and the offsite response organizations (OROs), and the timing, sequencing, and technological means of the notifications
- § EP/security integrated drill and exercise program
- § Offsite protective actions, specifically the distinction between Asheltering@ and broadcast monitoring, often referred to as Aheightened awareness@
- § Licensee protective action recommendations (PARs) for security events during a Site Area Emergency
- § Backup power to siren systems

The staff is now analyzing comments from the meeting, and will provide a comment summary and analysis on the NRC website by January 17, 2006 (90 days after the close of the public comment period). The meeting transcripts are currently posted on the NRC public website. The next semiannual status report will provide a summary of the comment analysis, general comments and themes from the meeting.

Initiative 4: EP outreach

The staff outreach team has been working on initiatives to improve outreach in the areas of EP and incident response with both internal and external stakeholders. In early 2005, the outreach team began a dialogue with internal NRC stakeholders (OSTP, the regions, NRR, and EDO Communication Council) to develop and implement plans for enhancements to the agency's EP and incident response outreach efforts. Over the last year, DPR has conducted 64 outreach activities with State, local and Tribal governments, professional societies, other Federal government agencies, members of the public, and the nuclear industry.

The staff has met with international representatives from Brazil, Ukraine, Belgium, Indonesia, China, the United Kingdom and Japan to discuss EP in the post-9/11 threat environment. The staff observed a terrorist-based radiological exercise in Finland, February 2005. The staff participated in international EP forums, committees and meetings, as well as served as members of the International Atomic Energy Agency (IAEA) Operational Safety Review Team (OSART) in Russia and China.

Upon request, regional EP staffs outreach with State(s) and locals prior to exercises and for meetings with regional utility groups. Additionally, regions have conducted tabletop drills, including training, with Federal, State, and local government representatives and with utility groups.

In April 2005, the staff made presentations on several topics, including post-9/11 initiatives, at the National Radiological Emergency Preparedness Conference. This conference also included two joint presentations by NRC and the Chief of Natural and Technological Hazards Branch, DHS. The staff captured an extensive number of questions and comments raised by stakeholders at the conference and issued those in a publicly available document on the NRC external website. The staff also successfully engaged DHS to provide answers appropriate to subjects related to that agency.

The outreach team is part of the EDO Communication Council and is providing expertise in areas related to EP. In September 2005, the team met with regional management, as well as representatives from OSTP and NRR, to discuss the coordination of agency-wide resources in performing EP outreach activities. This meeting enabled headquarters and regional staff responsible for outreach to discuss activities performed by their respective division staffs. The attendees discussed best practices, challenges, and desired paths forward in outreach for EP and incident response. The staff=s efforts for the review of EP regulations and guidance in the post-9/11 environment included extensive stakeholder outreach, including Federal, State, local, Tribal and advocacy groups.

The outreach team is currently addressing initiatives previously recommended to the Commission in April 2005. Additionally, the staff is aggressively coordinating with DHS to ensure a common understanding of EP issues and is appropriately involving DHS in areas where joint responsibilities exist.

Initiative 5: Review of licensee responses on the EP aspects of NRC advisories and the NRC=s February 25, 2002, Order.

The staff reviewed licensees= responses and found that licensees generally adopted the EP guidance presented in the NRC advisories. However, there were some deviations in specific areas, which are described in Attachment 1. The staff attributed the deviations to the licensees= need for further information, which was subsequently provided in Bulletin 2005-02.

The staff is supporting the ongoing effort to review licensee responses describing their plans and schedules for addressing the staff=s guidance on complying with the February 2002 Order for interim safeguards and security compensatory measures. The staff will brief the Commission on the results of this review at a later date.

Initiative 6: Transition of the oversight for the EP component of force-on-force exercises to the regional offices.

Following September 11, 2001, NRC force-on-force (FOF) exercise activities were suspended because the conduct of such exercises would have been a significant distraction to licensee security forces that were already at the highest level of alert. In 2003, the NRC conducted a pilot program which evaluated the effects of the interim compensatory measures that were required by NRC's orders, expanded adversary characteristics, and the integration of the operations-EP-security interface. In 2004, the NRC conducted a transitional FOF exercise program during which the inspection processes were refined and the licensees completed physical protection enhancements and implemented their revised security plans. In November 2004, the NRC began conducting evaluated FOF inspections. EP staff participate as part of the inspection team to evaluate licensee response to simulated security events.

In 2005, the staff shifted the lead for EP inspection from headquarters to the regional offices. This transition will provide the following benefits:

- § Integrates the FOF exercises into the EP inspection program
- § Reduces the cost of travel to support the exercises
- § Raises the regional inspectors' level of awareness of EP procedures in response to terrorist events

The staff has developed a draft inspection procedure for the transition of the oversight for the EP component of the FOF exercises to the regional offices. This procedure has been piloted at an FOF exercise using the resident inspectors and seeking their feedback. The draft procedure was provided to the regions for their review and comment. The current goal is to complete the transition to the regional offices by the end of calendar year 2005.

Initiative 7: Progress of alert and notification system related activities

DHS advises the NRC on the status of offsite emergency planning, including the acceptability of the alert and notification system (ANS). DHS bases its finding of acceptability on the licensee's ANS design report and FEMA-REP-10, A Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants.⁶ The NRC relies on DHS's assessment of the licensee commitments in the facility ANS design report in finding that planning standard 10 CFR 50.47(b)(5) has been met. The staff is partnering with DHS in the development of updated regulatory guidance applicable to current siren technology.

On August 8, 2005, the Energy Policy Act of 2005 (Act) was signed into law. Section 651(b) of the Act states that:

for any licensed nuclear power plants located where there is a permanent population, as determined by the 2000 decennial census, in excess of 15,000,000 within a 50-mile radius of the power plant, not later than 18 months after enactment of this Act, the Commission shall require that backup power to be available for the emergency notification system of the power plant, including the emergency siren warning system, if the alternating current supply within the 10-mile emergency planning zone of the power plant is lost.

The Indian Point nuclear power plant located in Buchanan, New York, is the only plant affected by the Act. In response to the Act, and in light of recent siren testing and equipment problems associated with the Indian Point ANS, the staff is requesting the licensee to explain its corrective action plans, and develop appropriate and prompt improvement oversight strategies. The staff plans to impose the requirements by using a confirmatory order in compliance with the Act before the end of January 2006.

Initiative 8: Coordination of EP activities with DHS

DHS has initiated a re-alignment of functions of the Federal Emergency Management Agency (FEMA) and other DHS components. NRC staff has continued to maintain awareness of DHS re-organization activities and continues to coordinate with DHS to obtain input for agency deliverables which necessitate joint discussion and endorsement. This includes actions related to the Energy Policy Act of 2005 requirements discussed in Initiative 7, for revisions to the current Memorandum of Understanding (MOU) between NRC and DHS as a result of organizational changes, for the petition for rulemaking for 10 CFR Part 50 to require offsite emergency plan inclusion of nursery schools and day care centers, and DHS endorsement to revisions in emergency exercise program evaluation guidance.

As discussed in Initiatives 1 and 2, a majority of licensees responding to Bulletin 2005-02 indicated that adoption of security-based enhancements to the emergency preparedness drill and exercise program is contingent on NRC/DHS endorsement of the new evaluation process. NRC and DHS staff have engaged on a plan to address the evaluation criteria revisions which include NRC/DHS participation in licensee pilot drills to better understand evaluation opportunities resulting from the unique aspects of security-based drill scenarios.

The staff continues to work with DHS to ensure that regulatory action milestones remain on schedule, specifically, prospective early site permits and combined licenses, and the associated regulatory infrastructure (i.e., rulemaking, NRC/DHS joint guidance development, and preparation for inspection of implemented EP programs). Recent impacts on DHS resources

due to natural disaster recovery efforts have prompted additional interactions between DHS and NRC management to discuss priorities. The staff will continue to work with DHS to ensure EP issues are appropriately prioritized.

Initiative 9: Hurricanes Katrina and Rita Lessons Learned

After the 2004 hurricane season, NRC HQ and Region II identified the need to clarify internal and external agency interaction during the EP review for plant restart. Subsequently, the staff reviewed the FEMA/NRC MOU and revised the NRC internal guidance (NRC Inspection Manual Chapter 1601, "Communication Protocol for Assessing Offsite Emergency Preparedness following a Natural Disaster") in July 2005. Manual Chapter 1601 was used for post-event re-start decision making for Waterford 3, following Hurricane Katrina.

The staff is soliciting comments from NRC responders and the Agreement States regarding lessons learned from Hurricanes Katrina and Rita activities. Based on the comments received, identified lessons learned will be considered for improvement to incident response programs.

COORDINATION:

The Office of the General Counsel has no legal objection to this paper.

COMMITMENTS:

Listed below are actions or activities committed to by the staff in this paper:

- 1) In the next semiannual status report, provide a summary to the Commission of the comment analysis, general comments, and themes from the August 31, 2005 public meeting regarding EP regulations and guidance in the post-9/11 threat environment. This summary will be provided to the Commission no later than April 2006.
- 2) Brief the Commission on the review of licensee responses describing plans and schedules for addressing the staff's guidance on complying with EP aspects of the February 2002 Order for interim safeguards and security compensatory measures. This briefing will be provided to the Commission no later than December 2005 per commitment number W200500143.

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