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## Impact of Natural Disasters on Emergency Preparedness

Recently, the devastating effects were felt in the northeast region of the United States from Hurricane Sandy and in Louisiana from Hurricane Isaac. Our best wishes goes out to the people effected by these storms and we hope for a speedy recovery.

These events highlighted the close cooperation between the NRC and the Federal Emergency Management Agency (FEMA) in determining the impact on offsite emergency preparedness (EP) capabilities. Natural disasters, such as a hurricane, tornado, or earthquake, may significantly damage major roads, communications, buildings, and other offsite infrastructure near a nuclear power plant, degrading the capabilities of offsite response organizations in the 10-mile plume exposure planning zone. In accordance with a memorandum of understanding between NRC and FEMA contained in Appendix A to Title 44, Part 353 of the Code of Federal Regulations (CFR), FEMA is responsible for evaluating the adequacy of State, local, and

tribal emergency plans and preparedness.

When a disaster results in significant damage to the area around an operating nuclear power plant, FEMA may initiate, independently or at the NRC's request, a preliminary assessment of offsite EP capabilities and the viability of the infrastructure. This initially involves discussions by FEMA at the Regional level with affected State and local government authorities and the respective NRC Region. The intent of these discussions is to promptly assess the damage, its impact on the ability to effectively implement offsite emergency plans, and the ability for

timely restoration of the infrastructure or implementation of compensatory measures.

If based on the preliminary assessment, FEMA questions the continued adequacy of offsite EP, they may conduct what is referred to as a Disaster Initiated Review (DIR) to reaffirm EP capabilities of affected offsite jurisdictions. Based on the impact to offsite resources already focused on post-event restoration, the decision to initiate a formal DIR is made by FEMA only after discussions with affected State and local government authorities and the NRC. A DIR is not intended to

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U.S. Nuclear Regulatory  
Commission  
Office of Nuclear Security  
& Incident Response  
Division of Preparedness  
& Response

Toll-Free: (800) 368-5642

Phone: (301) 415-7000

E-mail:

[emergencypreparedness.resource@nrc.gov](mailto:emergencypreparedness.resource@nrc.gov)

### Editor:

Carolyn Kahler

### Special Contributors to this Issue:

Roxanne Wray

Eric Schrader

Joe Anderson



### EP Rule Implementation Milestones Due on December 24, 2012

- **Evacuation time estimate updates**
- **On-shift staffing analysis**  
NOTE: If required, interim compensatory measures must be implemented within 30 days of completing the staffing analysis
- **Backup Alert and Notification System**



## Publication of Information Notice 2012-18 on ERO Staffing

NSIR's Technical Review Group (TRG) recently completed the annual review of licensee EP issues and trends from July 2010 to July 2011. The group used various sources, such as licensee reports, operating experience, and inspection findings to collect emergency preparedness data. The TRG assessment revealed performance issues concerning licensee ERO and EP staff training. This review resulted in the generation of an Information Notice (IN 2012-18 - [ML12178A010](#)), documenting several ERO staffing issues.

The investigation on performance issues concerning emergency preparedness for the 2010 TRG report noted that, for over one-third of the alert declarations made during this period, the licensee's capability to fully staff the emergency response organization (ERO) in the time re-

quired by their emergency response plan was challenged. It was further noted that over half of the EP findings and violations during this same time period were associated with inadequate evaluations of changes that impacted the effectiveness of the licensee's emergency plan.

A review of the specifics for each of these events, violations and/or findings showed an apparent link to training for the ERO and/or the EP staff who maintain the emergency plan. A site's EP staff should be trained, and fully understand what is required, to successfully meet regulatory requirements, and to ensure the effective implementation of the emergency plan and administration of the EP program.

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be a comprehensive review of offsite plans and preparedness, but rather provide validation that offsite emergency plans can be effectively implemented, if required.

The NRC will consider information provided by FEMA and pertinent findings from the DIR in making recommendations regarding the restart or continued operation of an affected operating nuclear power reactor.

The impact of Hurricanes Sandy and Isaac provided an opportunity for FEMA and the NRC to evaluate this

process. Because of the lessons that were learned from this event, NRC will be working in close cooperation with FEMA to further enhance respective protocols and procedures for EP reviews related to natural disasters. As with any natural disaster, immediate response to protect public health and safety is the responsibility of State and local responders. Thank you to the many volunteers and public service professionals who are committed to protecting their communities.

### **NRC is still collecting comments on the scope and process to revising NUREG-0654 / FEMA-REP-1**

- ◆ **Please submit all comments regarding the scope and process of the revision on [www.regulations.gov](http://www.regulations.gov) under the docket number FEMA-2012-0026.**
- ◆ **You have until January 31, 2013 to submit your comments.**
- ◆ **FEMA and NRC will review your comments and suggestions on the path forward.**
- ◆ **Comments should focus on the process and proposed scope of the revision. The opportunity for comments on specific changes will be available during the revision process itself.**