

Rulemaking Comments

From: Leuer, Kevin (DPS) [kevin.leuer@state.mn.us]
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To: Rulemaking Comments
Cc: Leuer, Kevin (DPS); Logaras, Herral
Subject: Docket ID NRC-2011-0299

March 21, 2012 (3:20 pm)
OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

The following comments are being submitted based on the questions being asked from the NRC by the State of Minnesota Homeland Security and Emergency Management Agency in regards to the request for public comment on "station blackout" rule Docket ID NRC-2011-0299.

- **Should SBO equipment be designed to withstand severe natural events the facility is not already designed for?**
 - The plant should be re-evaluated to ensure that the design basis is still adequate based on a current Threat-Hazard Identification and Risk Assessment (THIRA). OROs should be, or have the opportunity to be involved in the development and review of a current THIRA. The THIRA should include the severe natural events based on the regional risks. It is important for the plants to be designed to withstand severe natural events because severe natural events will consume ORO resources quickly and limit availability to ORO support resources. Also in severe natural events access to the site by OROs and contractors will likely be impeded and delay access to off-site contractor support and ORO support equipment.

- **Should SBO mitigation strategies consider such severe natural events?**
 - Yes, it is important for mitigation strategies to include severe natural events because those events will have the greatest impact on OROs and contractors ability to provide support on-site.

- **Should SBO analysis consider a flood greater than the plant is designed for, and if so, what criteria should be used to determine that higher flood level?**
 - All designs should be for floods of greater than record levels and should consider the impact of a wide spread rain event of record for the regional area at the same time as the record flood level in the river. We continue to see large (record level) rain events occurring over larger scale areas creating significant flooding in areas that have never flooded before and river levels reaching heights never anticipated before. The modeling for a flood event should include a record rainfall event in the regional area impacting the entire watershed area during a period of record high river water levels. This would provide a more probabilistic event modeling than just using previous record levels or selecting an arbitrary flood level above the record level.

- **How should plant coping times for SBO conditions account for the time to 1) identify and determine the need to take mitigative actions and 2) implement SBO strategies under worst case conditions? And**
 - It will most likely need to be a staggered timeline based on the priority of protecting life and property. The time to identify the issues and start mitigative actions should be within a two hour window and the implementation of SBO strategies will depend on the scenario. As an example if it takes a total of 6 hours for a plant to restore power to critical systems through backup means then the battery backup capability should be at least that long. If another site indicates it will take 12 hours then the battery backup should be designed for the longer timeframe. Coping time will always be an estimate and there should be a significant buffer added to the requirements. As an example the time that is estimated to make the repairs should be doubled

under the severe natural disaster events because of obstructions and other unknown events that will impact coping times.

- **How long should plants expect to rely on mitigation strategies before offsite help arrives?**
 - The timeline for support from contractors off-site will be significantly delayed in severe natural events where roads are destroyed or impassable due to debris in the roadway. In past events we have seen areas cut off for 12 to 24 hours before assistance can arrive. The utility and their contractors would need protocols in place for notifying OROs that off-site contractor assistance is needed and that OROs may need to provide assistance getting contractors to the site as soon as possible.
 - The minimum timeline for off-site response in severe natural disaster events should be 12 hours for minimal support and 24-hours for more extensive support. Many areas use National Guard for extended support missions and specialized equipment resourcing. When you take into account mission development, activation, mobilization, equipment preparation, and deployment to the site a 24-hour timeframe is more realistic.

Thanks for your consideration.

Kevin C. Leuer
Director, Preparedness Branch
Minnesota Homeland Security and Emergency Management
444 Cedar Street Suite 223
St. Paul MN 55101-6223
Office 651-201-7406
Fax 651-296-0459

kevin.leuer@state.mn.us

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