

NRC Emergency Response Readiness Issues

RI-15 and RI-16

09/21/2017

Rick Hasselberg
Sr. Emergency Response Coordinator
Office of Nuclear Security and Incident Response

AP1000 Readiness Issues

Background:

NRC's AP1000 Integrated Transition Working Group identified two Readiness Issues related to NRC's Emergency Response Program:

RI-15 relates to *response-related training* for NRC Operations Officers and emergency responders on the unique aspects of the AP1000 design, passive core and containment systems, and accident response characteristics.

RI-16 originally related to Emergency Response Data System (ERDS) screens, but has been expanded to include all design and site-specific information needed to support *NRC incident response software*:

- Emergency Response Data System (ERDS)
- Incident Response Electronic Library (E-Library)
- Response Technical Tools for Core Damage Assessment (RTT)
- Radiological Assessment System for Consequence Analysis (RASCAL)

AP1000 Readiness Issues

Related to RI-15:

NSIR and our Technical Training Center (TTC) staff are preparing a short, refresher-style training program, targeted at experienced responders, titled:

AP1000 Emergency Response Topics:

- *Review of AP1000 Design Features for Emergency Response*
- *AP1000 Instrumentation Used During Emergency Response*
- *AP1000 EOPs (Emergency Operating Procedures)*
- *AP1000 FRPs (Functional Recovery Procedures)*
- *AP1000 EALs (Emergency Action Levels)*
- *AP1000 SAMGs (Severe Accident Management Guidelines)*
- *Contents of the NRC's E-Library Related to Vogtle 3 and 4*
- *ERDS Parameters and Display Screens for Vogtle 3 and 4*

What do we have?

Draft documents (we can update E-library and training modules as needed).

What do we need?

We need to identify the key parameters that will be transmitted to NRC during a response. This will allow us to train NRC responders on what parameters to expect via ERDS and what parameters we will need to request via telephone.

AP1000 Readiness Issues

Related to RI-16:

Emergency Response Data System (ERDS):

What do we have?

We have developed draft ERDS display screens for Vogtle 3 & 4 based on our review of Unit 3 and 4 Unified Safety Analysis Report Table 7.5-1, *Post Accident Monitoring System*, draft Emergency Action Levels (EALs), and other response-related documents.

What do we need?

We need to see the proposed list of ERDS parameters for Vogtle 3 & 4 in order to continue development of unit-specific ERDS display screens and to prepare NRC incident response training materials related to ERDS.

AP1000 Readiness Issues

Related to RI-16:

Incident Response Electronic Library (E-Library) (RIS 2006-21):

E-Library provides NRC emergency responders with ready access to site photos, building arrangement drawings, systems diagrams, and response-related plans and procedures.

What do we have?

We have compiled draft copies of most of the available (or proposed) documents.

What do need?

Updated site photos, EOPs, EALs, FRPs, SAMGs, etc. as they become available.

AP1000 Readiness Issues

Related to RI-16:

Response Technical Tools for Core Damage Assessment (RTT):

RTT provides an easy-to-use set of tools for assessing reactor core and containment conditions during an accident.

What do we have?

We believe that we currently have all of the design and site specific information needed to add Vogtle Units 3 & 4 to our RTT data base.

What do need?

If we find that we need a particular system volume or flow rate in order to complete the RTT data base, or if we need to validate a number, we'd request a point of contact (POC) to help us obtain or validate the needed information.

AP1000 Readiness Issues

Related to RI-16:

Radiological Assessment System for Consequence Analysis (RASCAL)

What do we have?

We believe that we currently have all of the design and site-specific information needed to add Vogtle 3 & 4 to our RASCAL data base.

What do need?

If we find that we need a particular system volume or flow rate in order to complete or validate the RASCAL data base, we'd request a point of contact (POC) to help us obtain or validate the needed information.