Non-Power Reactor Incident Response Program

National Organization of Test, Research and Training Reactors

September 13, 2011

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Abstract

The Nuclear Regulatory Commission (NRC) staff has coordinated among various offices to streamline incident response procedures and to develop a more flexible incident response program. From standardizing roles and responsibilities to ensuring senior management has all relevant information to make an adequate response decision, these improvements are another example of the NRC protecting the public health and safety, and the environment.
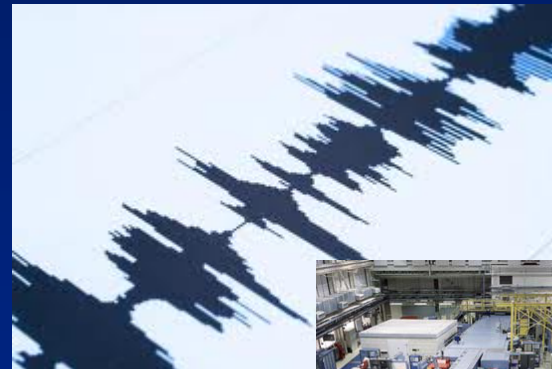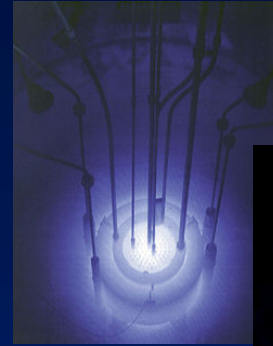
NPR Challenges

- NPRs are located in dense populations that don't fully understand nuclear technology

- Incident response at NPRs is not a routine activity

- Most NPR facilities cannot achieve an emergency class greater than Alert

- HQ has the lead during ALL response phases for NPRs, including Monitoring

Recent NPR Events

- Violations of Tech Specs

- Unexpected Dose Rate Changes

- Indications of Fuel Damage

- Fire in Reactor Building

- East Coast Earthquake

- Hurricane Irene

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Programmatic Changes
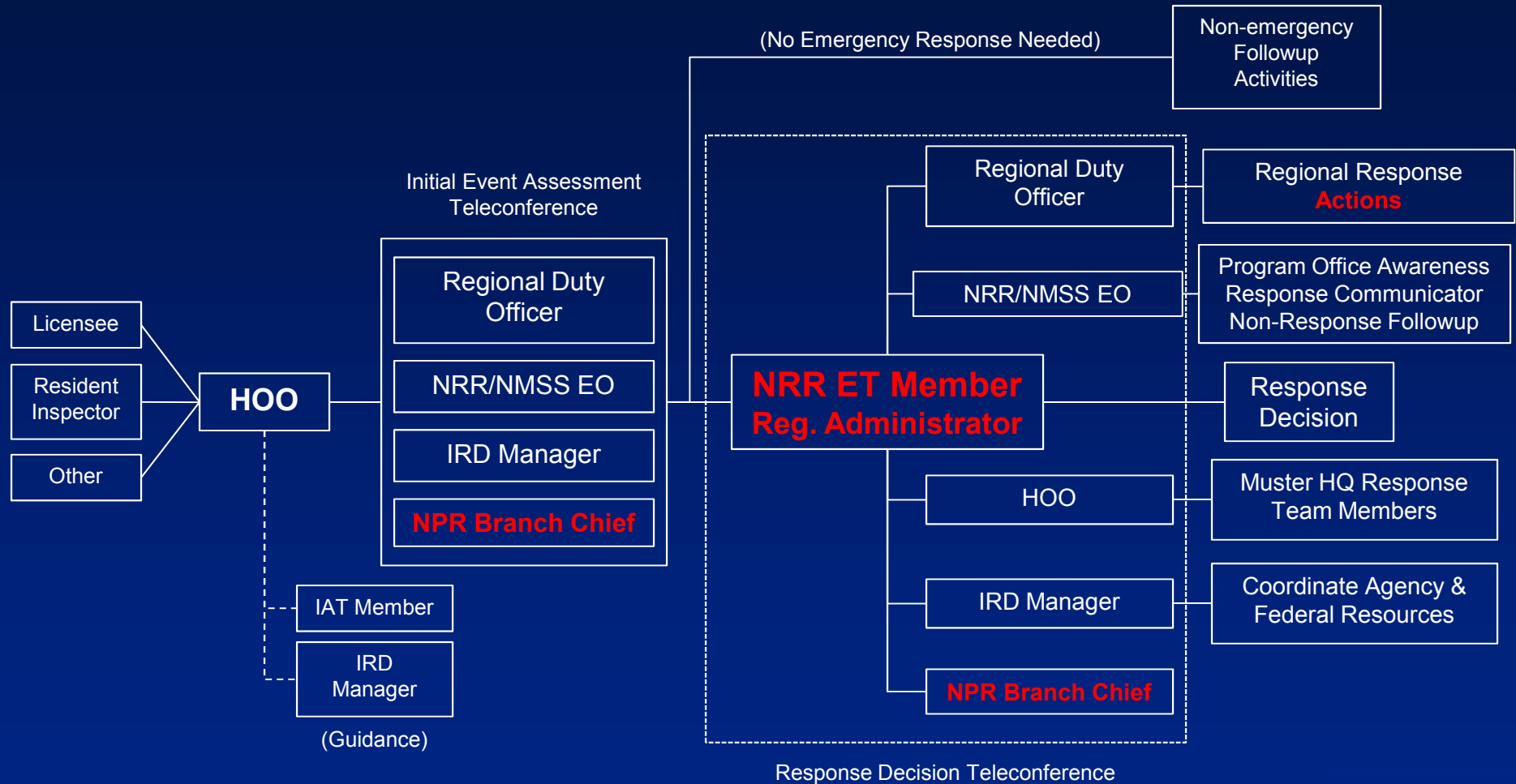
- NPR Incident Response Program Ownership
  - A single branch owns the process
    - Responsible for day-to-day operation and maintenance of the program
    - Responsible for inter-office coordination
    - Responsible for staff training and exercises

- Personnel Responsibilities
  - NPR Branch Chief
    - Provides managerial direction to NPR staff responders
    - Determines if additional NPR personnel resources are needed
    - Keeps upper management informed, as necessary
  - NPR Incident Response Lead
    - Incident response process owner for NPRs
    - Interoffice liaison
    - Assist NPR Branch Chief as necessary during response

Tiered Response Approach

- Non-emergency AND non-reportable
  - HOO enters record of call into logbook
  - HOO informs facility Project Manager and Incident Response Lead
  - HOO has authority to contact NPR staff immediately if necessary

- Reportable, non-emergency
  - HOO contacts NPR Branch Chief, Incident Response Lead, facility PM, and facility inspector
    - NPR Security Lead and ILTAB contacted if security/safeguards event
  - NPR Branch Chief determines whether further escalation of event is warranted

Declared Emergencies

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

(No Emergency Response Needed) → Non-emergency Followup Activities

Licensee / Resident Inspector / Other → **HOO**

Initial Event Assessment Teleconference
- Regional Duty Officer
- NRR/NMSS EO
- IRD Manager
- **NPR Branch Chief**

IAT Member
IRD Manager
(Guidance)

Response Decision Teleconference
- Regional Duty Officer → Regional Response **Actions**
- NRR/NMSS EO → Program Office Awareness Response Communicator Non-Response Followup
- **NRR ET Member Reg. Administrator** → Response Decision
- HOO → Muster HQ Response Team Members
- IRD Manager → Coordinate Agency & Federal Resources
- **NPR Branch Chief**

Red font indicates NPR-specific differences from power reactor incident response

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Event Retractions

- If later technical analysis indicates that declared event did not occur, licensees may retract event notifications
  - Call the HOO to explain the retraction
    - (301) 816-5100
  - NRR staff will follow up

- Used by Headquarters Operations Officers to record events and/or emergencies at NPR facilities

- You will not be asked to fill out this form

Keep NRC In The Loop

- CALL THE HOO!!
    - (301) 816-5100
    - They can reach other NRC staff in short order
- Drills and Exercises
    - The NRC would like to exercise its revised processes
    - Please let us know if you would be interested in engaging in a non-attributable exercise
- Site Visits
    - Familiarization tours for NRC regional staff and nearby resident inspectors
    - Liaison with federal partners

Questions…Comments…Concerns