



Non-Power Reactor Incident Response Program

National Organization of Test, Research
and Training Reactors

September 13, 2011

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.

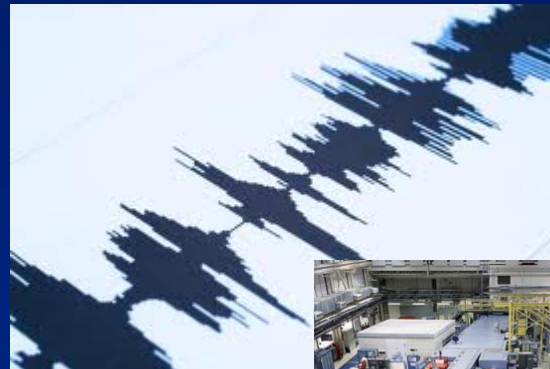
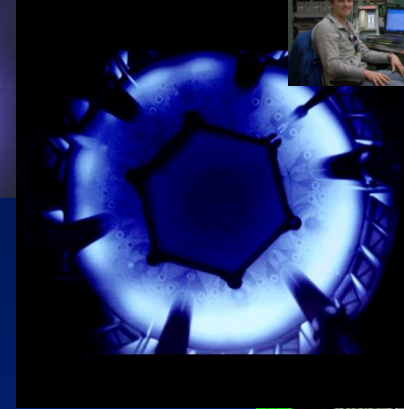
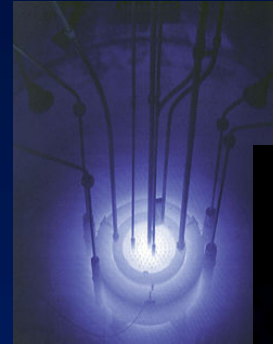
NPR Challenges

- 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



Programmatic Changes

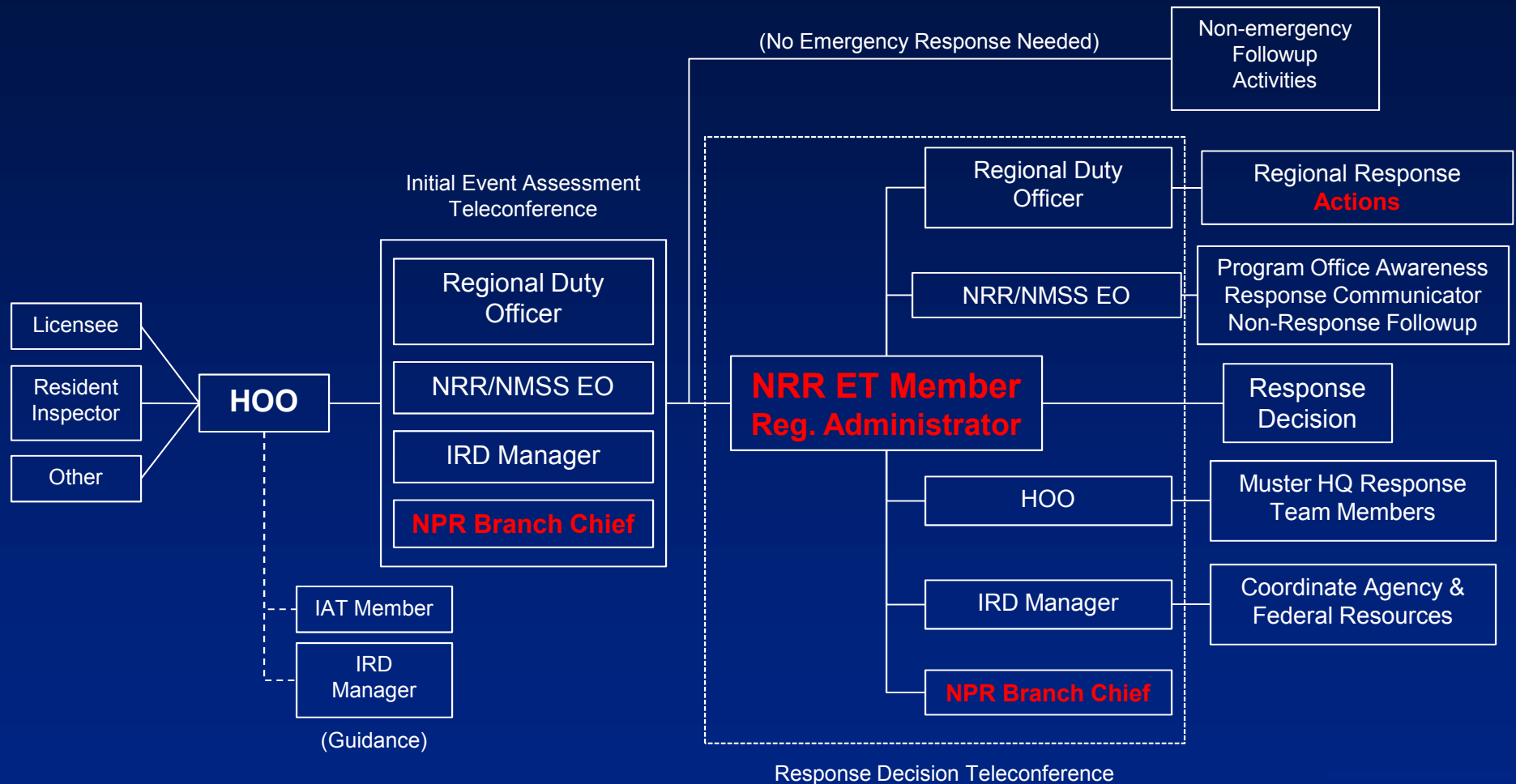
- NPR Incident Response Program Ownership
 - A single branch owns the process
 - Responsible for day-to-day operation and maintenance of the program
 - Responsible for inter-office coordination
 - Responsible for staff training and exercises
- Personnel Responsibilities
 - NPR Branch Chief
 - Provides 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



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

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

Event Notification Worksheet

- Used by Headquarters Operations Officers to record events and/or emergencies at NPR facilities
- You will not be asked to fill out this form

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NRC FORM 361N (03-2011)		NON-POWER REACTOR (NPR) EVENT NOTIFICATION WORKSHEET		U.S. NUCLEAR REGULATORY COMMISSION OPERATIONS CENTER
				EN #
NRC OPERATION TELEPHONE NUMBER: PRIMARY -- 301-816-5100 or 800-532-3469; BACK UPS -- [1st] 301-951-0550 or 800-449-3694; [2nd] 301-415-0550 and [3rd] 301-415-0553. *Licensees who maintain their own ETS are provided these telephone numbers.				
NOTIFICATION TIME	FACILITY OR ORGANIZATION	NAME OF CALLER	CALL BACK #	
EVENT TIME & ZONE	EVENT DATE	POWER/MODE BEFORE	POWER/MODE AFTER	
REACTOR TYPE	MAX POWER	MAX PULSE	PULSE INSERTED DURING EVENT?	
EVENT CLASSIFICATIONS		REPORTABLE CONDITION (series by facility TS)		
<input type="checkbox"/> GENERAL EMERGENCY	GEN	<input type="checkbox"/> TS Deviation	<input type="checkbox"/> Offsite Medical	
<input type="checkbox"/> SITE AREA EMERGENCY	S/A	<input type="checkbox"/> TS Required S/D	<input type="checkbox"/> Loss of Control/Resp	
<input type="checkbox"/> ALERT	ALB	<input type="checkbox"/> RPS Activation (scram)	<input type="checkbox"/> Invalid Specified System Act	
<input type="checkbox"/> UNUSUAL EVENT	UNU	<input type="checkbox"/> Offsite Notification	<input type="checkbox"/> Suspicious Activity	
<input type="checkbox"/> SAFEGUARDS EVENT (TS App G)		<input type="checkbox"/> Degraded Condition	<input type="checkbox"/> Security Event	
<input type="checkbox"/> MATERIAL EXPOSURE		<input type="checkbox"/> Unanalyzed Condition		
<input type="checkbox"/> INFORMATION ONLY		<input type="checkbox"/> Specified System Activation		
<input type="checkbox"/> OTHER UNSPECIFIED REOMT (see last column)		<input type="checkbox"/> Safe S/D Capability	Other Unspecified Requirement (Identify)	
		<input type="checkbox"/> Control of Rad Release	<input type="checkbox"/> NONR	
		<input type="checkbox"/> Accident Mitigation	<input type="checkbox"/> NONR	
DESCRIPTION				
Include: Systems affected, actions and their initiating signals, causes, effect on plant, actions taken or planned, etc. (Continue on back)				
NOTIFICATIONS	YES	NO	WILL BE	ANYTHING UNUSUAL OR NOT UNDERSTOOD?
HQ NPR STAFF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES (explain above) <input type="checkbox"/> NO
STATES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DO ALL SYSTEMS FUNCTION AS REQUIRED?
LOCAL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO (explain above)
OTHER GOV AGENCIES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MODE OF OPERATION UNTIL CORRECTED:
MEDIA/PRESS RELEASE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ESTIMATE FOR RESTART DATE: <input type="checkbox"/> YES <input type="checkbox"/> NO

NRC FORM 361N (3-2011)

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