



Southern Exposure 2015

NRC SLO Meeting October 27, 2015

South Carolina Department of Health and Environmental Control

Promoting and Protecting the Health of the Public and the Environment



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Southern Exposure 2015 (SE15)

- H.B. Robinson Steam Electric Generating Plant
- FEMA REP Ingestion Pathway Exercise
- Full Federal Participation Exercise
- Almost 2 years of Planning
- Multiple Workgroups
- Multiple Seminars, Workshops and Training



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SE15 Workgroups

1. Control and Evaluation
2. Scenario and Simulation
3. External Affairs
4. Public Health and Environment
5. Incident Management
6. Logistics
7. Recovery (Continued discussions post-exercise)



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SE15 Workshops

- Nov 20, 2014 - Incident Management Workshop
- May 26, 2015 - Agricultural Workshop
- May 27, 2015 - National Disaster Recovery Framework Workshop
- May 28, 2015 - Price-Anderson Act and Other Funding Mechanisms Workshop



SE15 Exercise Dates

- Feb 10 - Duke Energy TTX
- June 17 - Dress Rehearsal
- July 21-23 - Full Scale Field Activities
- July 23 - TTX (Response/Recovery at 14 Days)
- Sept 9 - TTX (Recovery at 6 Months)
- Sept 10 - TTX (Recovery at 18 Months)
- July 20-24 - WINGS Aerial Response Exercise



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Plume Phase – Day 1

- SEOC, Field, & JIC Operations.
- State ESF-10 makes PARs to the Governor, SCEMD and Counties.
- Based on plant conditions and dose projections.
- Gov, SC EMD and Counties determine PADs.
- Field team conducting monitoring activities.



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Ingestion Phase Days 2-3

- SEOC, JIC, FRMAC and Operations
- FRMAC products
 - Agriculture Dairy
 - Public Relocation
 - Worker Protection Areas
 - ETC



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Ingestion Phase Days 2-3

Unified Coordination Group(UCG)

- 1. FCO**
- 2. SCO**
- 3. DOE**
- 4. Defense Coordinating Officer**
- 5. Nuclear Regulatory Commission**
- 6. EPA**
- 7. Duke Energy**



Day 3 TTX

- Activities up to Day 14 post-incident
- Breakout groups
 - Unified Coordination Group
 - Return, Reentry & Relocation
 - Environmental & Agricultural Contamination & Mitigation
 - Economic & Infrastructure Effects



Event 4 TTXs

- Activities up to Day 60 & Day 180 post-incident
- Breakout groups based on NDRF RSFs
 - Unified Coordination Group
 - Housing
 - Economic Recovery (Agriculture Focused)



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After Action Reviews

- Internal Agency AARs
- FEMA REP Program
- Interagency/FEMA National Exercise Program
- Day 3 TTX (14 Days Post-Incident)
- Recovery TTXs



DHEC Activities

Lead:

ESF-8 Health and Medical

- Health order for Potassium Iodide Ingestion
- Authorization for Over-Exposure

ESF-10 Hazardous Materials

- Protective Action Recommendations
- Dose Assessment/Plume Modeling
- Field Monitoring/Sampling
- Laboratory Analysis

Support:

ESF-3 Public Works

- Drinking Water and Wastewater

ESF-15 Public Information

- Public Messaging

ESF-17 Animal/Agriculture

Emergency Response

- Agriculture (animal and crops)
- Dairy



Lessons Learned

Exercise Process:

- Manpower intensive
- Graded REP Exercise vs Federal Participation
 - Separate or transition the activities
- Objectives/Activities vs Exercise Length
 - Three days of field play was not enough



Lessons Learned

Field Play:

- Field Team integration with other responders
- Laboratory integration
- IAP development
- Field objectives are dependent on many protective action decisions
- Data entry/sharing



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Lessons Learned

Technical Response:

- Lots of science vs few scientist responders
- Interpretation of scientific data to non-scientist
- Data products
- Public Messaging



Lessons Learned

Command and Coordination:

- SERT vs. UCG
- ICP & IAP: SEOC or Field?
- Agency Authority vs. Coordinated PADs



Lessons Learned

Recovery:

- Focused on Housing and Economic (Agriculture)
- Contamination a big issue in both
- Financial considerations affect response/recovery
- Communication of technical information



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THANK YOU!

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