U.S. Department of Homeland Security Region VII 9221 Ward Parkway, Suite 300 Kansas City, MO 64114-3372



FEMA

SEP 0 6 2012

Mark Satorius Regional Administrator U.S. Nuclear Regulatory Commission, Region III 2443 Warrenville Road, Suite 210 Lisle, Illinois 60532-4351

Dear Mr. Satorius:

Enclosed is a copy of the Final After Action Report for the June 11, 2012, drill of the Clinton County Reception and Decontamination Center emergency response plans site-specific to the Quad Cities Nuclear Power Station. The State of Iowa and Clinton County participated during the drill. The report was prepared by the Federal Emergency Management Agency (FEMA) Region VII staff. Copies of the final report will be provided to the State of Iowa.

During the June 11, 2012, drill, no Deficiencies or Area Requiring Corrective Action (ARCA) were identified. One Planning Issue was identified as a result of this drill. There were no open ARCAs coming into the exercise, so re-demonstrations during this exercise were not necessary.

Based on the results of this drill, the offsite radiological emergency response plans and preparedness for the State of Iowa and the affected local jurisdictions, site-specific to the Quad Cities Nuclear Power Station, can be implemented and are adequate to provide reasonable assurance that appropriate measures can be taken offsite to protect the health and safety of the public in the event of a radiological emergency at the site. Therefore, the Title 44 CFR, Part 350, approval of the offsite radiological emergency response plans and preparedness for the State of Iowa, site-specific to the Quad Cities Nuclear Power Station, granted on November 1, 1990, will remain in effect.

If you have questions or concerns regarding the report, please contact Mr. Jeff Clark at (816) 283-7946.

Sincerely, Beth Freeman

Regional Administrator

Enclosure

cc: Vanessa Quinn, HQ REP w/o enclosure Lisa Hamilton, HQ REP w/o enclosure Allan Barker, NRC Region III w/o enclosure NRC HQ, Document Control Desk w/enclosure NRC Region III, RIII FEMADistribution@nrc.gov

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Quad Cities Nuclear Power Station

After Action Report/ Improvement Plan

Drill Date - June 11, 2012 Radiological Emergency Preparedness (REP) Program



Published

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EXECUTIVE SUMMARY

On June 11, 2012, the Federal Emergency Management Agency (FEMA), Region VII, evaluated the Clinton County Reception and Decontamination Center for the Quad Cities Nuclear Power Station. The purpose of the drill was to assess the level of State and local preparedness in responding to a radiological emergency. This drill was held in accordance with FEMA's policies and guidance concerning the evaluation of State and local radiological emergency response plans and procedures.

The previous Reception and Decontamination drill at the Quad Cities Nuclear Power Station was conducted on November 17, 2010. The qualifying emergency preparedness exercise was conducted on October 31 - November 1, 1990.

FEMA wishes to acknowledge the efforts of the many individuals who participated in this drill. In the State of Iowa, the Risk County of Clinton, and various State and voluntary agencies participated. The efforts of Excelon Nuclear should also be commended for their work on training and drill preparation.

Protecting the public health and safety is the full-time job of some of the drill participants and an additional assigned responsibility for others. Still others have willingly sought this responsibility by volunteering to provide vital emergency services to their communities. A special thank you is once again extended to those wonderful volunteers. Cooperation and teamwork of all the participants were evident during this drill.

The State and local organizations demonstrated knowledge of their emergency response plans and procedures and adequately implemented them. No Deficiencies were identified, No Areas Requiring Corrective Actions (ARCA's) were identified as a result of this drill. One Planning Issue was identified as a result of this drill. There were no open ARCAs coming into the drill, so re-demonstrations during this drill sequence were not necessary.

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SECTION 1: EXERCISE OVERVIEW

1.1 Exercise Details

Exercise Name

Quad Cities Nuclear Power Station

Type of Exercise Drill

Exercise Date

June 11, 2012

Program

Department of Homeland Security/FEMA Radiological Emergency Preparedness Program

Scenario Type

Radiological Emergency

1.2 Exercise Planning Team Leadership

Jeff Clark Site Specialist FEMA Region VII Technological Hazards Specialist 9221 Ward Parkway Kansas City, Missouri, 64114 816-283-7946 jeffrey.clark@dhs.gov

Kathy Stodola State of Iowa Representative Homeland Security and Emergency Management Division REP Planning Specialist 7105 N.W. 70th Ave.

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Mike Muth Exelon Representative Exelon Nuclear MidWest Region Emergency Preparedness 4300 Winfield Warrenville, Illinois, 60555 630-657-4670 mike.muth@exeloncorp.com

1.3 Participating Organizations

Agencies and organizations of the following jurisdictions participated in the Quad Cities Nuclear Power Station drill:

State Jurisdictions

Iowa Homeland Security and Emergency Management Division

Risk Jurisdictions

Andover Fire Department

Clinton County Sheriff

Charlotte Fire Department

Clinton County Dosimetry Control Officer

Clinton County Emergency Management Agency

Human Services Department

Delmar Fire Department

Northeast Community School District

Dewitt Fire Department

Goose Lake Fire Department

Low Moor Fire Department

Preston Fire Department

Welton Fire Department

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Support Jurisdictions American Red Cross / Gateway Chapter Private Organizations Exelon Nuclear

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SECTION 2: EXERCISE DESIGN SUMMARY 2.1 Exercise Purpose and Design

Quad Cities Nuclear Power Station (QCNPS) Emergency Plan describes QCNPS's capability to respond effectively to a radiological emergency at the site, and provides a detailed description of QCNPS's interaction with Federal, State, and local government agencies and private organizations. The Emergency Plan provides for continuous emergency preparedness including the conduct of an annual exercise and preparatory drills.

The purpose of the June 11, 2012, drill was to activate and evaluate portions of the Iowa State Emergency Plan and Clinton County emergency plans, and associated implementiong procedures, in accordance with 44 CFR 350. The conduct and evaluation of the Clinton County Reception and Decontamination Center drill provided additional training for emergency response organization personnel and a means to further enhance Quad Cities Nuclear Station's emergency response capability.

2.2 Exercise Objectives, Capabilities and Activities

Quad Cities Nuclear Power Station (QCNPS) Emergency Preparedness Exercises and Drills are conducted to test and provide the opportunity to evaluate Emergency Plans, associated Implementing Procedures, facilities, and equipment. This drill tested the QCNPS emergency response organization's ability to assess and respond to emergency conditions and coordinate efforts with other agencies for protection of the health and safety of the public.

The Quad Cities Nuclear Power Station (QCNPS), Emergency Preparedness Exercise & Drill Program objectives are based on the Federal requirements delineated in 44 CFR 350, and State of Iowa, Clinton County, and Scott County Radiological Emergency Preparedness plans. Additional guidance provided in NUREG-0654, NUREG-0696, and NUREG-0737, was utilized in developing these objectives.

The objective of this drill was to test the implementation of the plans and procedures of the participating agencies, and the capability of these agencies to conduct operations in accordance with these plans. This objective is further defined by the criteria evaluated for each participant. These criteria are listed in Table 3.1

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The capabilities tested in this drill were related to reception and decontamination ability during a radiological emergency. All aspects of a Reception and Decontamination facitility were evaluated based upon the plans and procedures which they have established for use in a radiological emergency.

2.3 Scenario Summary

There was no specific scenario associated with this drill. All activities were driven by controller and evaluator inputs.

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SECTION 3: ANALYSIS OF CAPABILITIES 3.1 Drill Evaluation and Results

Contained in this section are the results and findings of the evaluation of all jurisdictions and functional entities that participated in the June 11, 2012, Reception and Decontamination drill to test the offsite emergency response capabilities of the State of Iowa and local Iowa organizations in support of the Quad Cities Nuclear Power Station.

Each functional entity was evaluated on the basis of its demonstration and criteria delineated in the Radiological Emergency Preparedness Program Manual dated October 2011.

3.2 Summary Results of Drill Evaluation

The matrix presented in Table 3.1 on the following pages presents the status of all drill criteria that were scheduled for demonstration during this drill by all participating and functional entities. Drill criteria are listed by number and the demonstration status of those criteria is indicated by the use of the following letters:

M - Met (No Deficiency or ARCAs assessed and no unresolved ARCAs from prior exercises)

D - Deficiency assessed

A - Area Requiring Corrective Action (ARCA) assessed or unresolved ARCA(s) from prior exercises)

P - Planning Issue

N - Not Demonstrated (Reason explained in subsection B)

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DATE: 2012-06-11 SITE: Quad Cities Nuclear Power Station, IA M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated Emergency.Operations Management Mobilization Facilities Direction & Control	1a1	Clinton Recp/Decon
Mobilization Facilities Direction & Control	1.1	
Facilities Direction & Control	101	8
Direction & Control		M
	<u>1b1</u>	
	<u>1c1</u>	M
Communications Equipment	1 <u>d1</u>	M
Equipment and Supplies	1e1 ·	M
Protective Action Decision Making		1. j
EW Exp. Control Decisions	2 <u>a1</u>	
PARs	<u>2b1</u>	┣──
PADs	2b2	<u> </u>
PADs for Disabled/Functional Needs	2c1 2d1	
Ingestion PADs		
RRR Decisions Protective Action Implementation	2e1	1962 - J
EW Exp. Control Implementation	3a1	М
KI Public/Institutionalized	3b1	
PAD Imp. Disabled/Functional Needs	3c1	<u> </u>
PAD Imp. Schools	3c2	
TACP Establishment	3d1	
Impediments to Evacuation	3d2	
Implementation of Ingestion PADs	3e1	
Ingestion Strategies and Information	3e2	
Imp. of RRR Decisions	3f1	
Field Measurement and Analysis		
RESERVED	4a1	
Field Team Management	4a2	
Field Team Operations	4a3	
Field Team Sampling	4b1	
Laboratory Operations	4c1	
Emergency Notification and Public Info		ala.
Initial Alert & Notification	5a1	<u> </u>
RESERVED	5a2	
Backup Alert & Notification	5a3	<u> </u>
Exception Area Alerting	5a4	
	5b1	
Support Operations/Facilities	and the second of the	
	6al	P M
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3.3 Criteria Evaluation Summaries

3.3.1 Support Jurisdictions

3.3.1.1 Clinton County Reception & Decontamination Center

Clinton County Reception and Decontamination Center was set-up so the flow of evacuees could be easily handled. Staff utilized procedures and all stations were staffed with experienced individuals. All Survey equipment was source checked properly and staff were very knowledgeable of meter use.

In summary, the status of DHS/FEMA criteria for this location is as follows:

- a. MET: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 6.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. PLAN ISSUES: 6.a.1.

ISSUE NO.: 51-12-6a1-P-01

CRITERION: The reception center facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees.

CONDITION: Upon arrival at the reception center evacuees and emergency workers were instructed to remain in their vehicle until the outside was monitored. A single golf cart was used to shuttle evacuees/emergency workers to the reception center several hundred feet away.

POSSIBLE CAUSE: The County Emergency Management Director indicated that additional carts and/or other vehicles are available for this purpose. However, plans/procedures do not indicate the number of golf carts or other means of transport. that will be available or where they will be requisitioned from.

REFERENCE: NUREG 0654/FFEMA-REP-1, A.3; C.4; J.10.h; J.12

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EFFECT: With a large number of evacuees/emergency workers entering the reception center location, an adequate number of golf carts/other transportation should be available for transporting evacuees/emergency workers from the vehicle monitoring site to the reception center as it would be a lengthy walk for many people (several hundred feet).

RECOMMENDATION: Plans/Procedures should be revised to show where golf carts or other means of transporting evacuees/emergency workers will be requisitioned from and how many will be available.

SCHEDULE OF CORRECTIVE ACTIONS: The response procedures in support of the Clinton County Radiological Emergency Response Plan will be revised to include an action for the Reception Center Manager to arrange for transportation resources for the movement of evacuee/emergency workers from the vehicle monitoring location to the reception center entrance. Transportation resources can be attained from mutual aid fire department and/or from the North East School District Transportation Department. These vehicles will be operated by existing reception center staff and will be monitored for possible contamination between trips. The numbers/types of vehicles will be determined by the Reception Center Manager, an exact number will not be referenced in the procedure. This procedure will be submitted to FEMA on or before October 1, 2012.

e. NOT DEMONSTRATED: None

f. PRIOR ISSUES - RESOLVED: None

g. PRIOR ISSUES - UNRESOLVED: None

Quad Cities Nuclear Power Station

SECTION 4: CONCLUSION

Based on the results of this drill, the offsite radiological emergency response plans and preparedness for the State of Iowa and the affected local jurisdictions are deemed adequate to provide reasonable assurance that appropriate measures can be taken to protect the health and safety of the public in the event of a radiological emergency. Therefore, 44 CFR Part 350 approval of the offsite radiological emergency response plans and preparedness for the State of Iowa, site-specific to the Quad Cities Nuclear Power Station, will remain in effect.

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APPENDIX A: IMPROVEMENT PLAN

Issue Number: 51-12-6a1-P-01

Criterion: 6a1

ISSUE: Upon arrival at the reception center evacuees and emergency workers were instructed to remain in their vehicle until the outside was monitored. A single golf cart was used to shuttle evacuees/emergency workers to the reception center several hundred feet away.

RECOMMENDATION: Plans/Procedures should be revised to show where golf carts or other means of transporting evacuees/emergency workers will be requisitioned from and how many will be available.

SCHEDULE OF CORRECTIVE ACTIONS: The response procedures in support of the Clinton County Radiological Emergency Response Plan will be revised to include an action for the Reception Center Manager to arrange for transportation resources for the movement of evacuee/emergency workers from the vehicle monitoring location to the reception center entrance. Transportation resources can be attained from mutual aid fire department and/or from the North East School District Transportation Department. These vehicles will be operated by existing reception center staff and will be monitored for possible contamination between trips. The numbers/types of vehicles will be determined by the Reception Center Manager, an exact number will not be referenced in the procedure. This procedure will be submitted to FEMA on or before October 1, 2012.

CORRECTIVE ACTION DESCRIPTION:

CAPABILITY:	PRIMARY RESPONSIBLE AGENCY:
Mass Care (Sheltering, Feeding, and Related Services)	Clinton County Emergency Management
CAPABILITY ELEMENT:	START DATE:
Planning	2012-09-04
AGENCY POC: Chance Kness 563-242-5712	ESTIMATED COMPLETION DATE: 2012-10-01

Unclassified Radiological Emergency Preparedness Program (REP)

Quad Cities Nuclear Power Station

APPENDIX B: DRILL EVALUATORS AND TEAM LEADERS

DATE: 2012-06-11, SITE: Quad Cities Nuclear Power Station, IA

LOCATION			EVALUATOR	AGENCY
Clinton County Receptio	n & Decontamination Center		Audie Canida *Jeff Clark Laurel Ryan	FEMA RVII FEMA RVII FEMA RVII
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APPENDIX C: ACRONYMS AND ABBREVIATIONS

Acronym	Meaning	
ARC	American Red Cross	
ARCA	Area Requiring Corrective Action	
CFR	Code of Federal Regulations	
FEMA	Federal Emergency Management Agency	
QCNPS	Quad Cities Nuclear Power Station	
RSO	Radiation Safety Officer	

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