



**FINAL**  
**Exercise Report**  
**Robert E. Ginna**  
**Nuclear Power Station**

**Licensee: Constellation Energy**

**Exercise Date: May 5, 2009**

**Report Date: Feb. 4, 2010**

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**U.S. DEPARTMENT OF HOMELAND SECURITY**  
**FEDERAL EMERGENCY MANAGEMENT AGENCY**  
**REGION II**  
**26 Federal Plaza**  
**New York, New York 10278**

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# **I. Executive Summary**

On May 5, 2009, a full-scale plume exercise was conducted in the 10-mile plume exposure pathway, emergency planning zone (EPZ) around the Robert E. Ginna Nuclear Power Station by the Federal Emergency Management Agency (FEMA), Region II. The purpose of the exercise and the out-of-sequence demonstrations was to assess the level of State and local preparedness in responding to a radiological emergency. The exercise and out-of-sequence demonstrations were held in accordance with FEMA's policies and guidance concerning the exercise of State and local radiological emergency response plans (RERP) and procedures.

The most recent prior full-scale exercise at this site was conducted on May 22, 2007. The qualifying emergency preparedness exercise was conducted on January 21, 1982.

FEMA wishes to acknowledge the efforts of the many individuals in the State of New York and the risk jurisdictions of Monroe and Wayne Counties who were evaluated at this exercise. Protecting the public health and safety is the full-time job of some of the exercise 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. Cooperation and teamwork of all the participants were evident during this exercise.

This report contains the final evaluation of the biennial exercise and the evaluation of the following out-of-sequence activities:

## **Monroe County**

June 26, 2009 - Greece Olympia Reception Center  
July 12, 2009 – MS-1 Rochester General Hospital & Monroe Ambulance  
May 6, 2009 – RTS Special Population Bus Interviews  
May 6, 2009 – Webster School Bus Co. Interviews  
May 20, 2009 – Monroe County Emergency Worker PMC  
May 20, 2009 – Traffic Control Points

## **Wayne County**

May 6, 2009 – Backup Route Alerting Lincoln Fire Dept  
May 6, 2009 – School Interviews;  
• Dyers Daycare  
• Marion Central School District  
• Williamson BOCES  
May 13, 2009 – Marion Central School Bus Interview  
May 13, 2009 – Newark School Reception Center Interview  
May 13, 2009 – WATS and Lyons Special Population Bus Co. Interviews  
May 13, 2009 – Newark Reception Center  
May 13, 2009 – Lyons Emergency Worker PMC

The State and local organizations except where noted in this report, demonstrated knowledge of their emergency response plans and procedures and adequately implemented them. There was one Deficiency and three Areas Requiring Corrective Action (ARCA's) identified as a result of this exercise. Three ARCAs from a previous exercise were successfully demonstrated at this exercise.

## II. Introduction

On December 7, 1979, the President directed the Federal Emergency Management Agency (FEMA) to assume the lead responsibility for all off-site nuclear planning and response. FEMA's activities were conducted pursuant to 44 Code of Federal Regulations (CFR) Parts 350, 351 and 352. These regulations are a key element in the Radiological Emergency Preparedness (REP) Program that was established following the Three Mile Island Nuclear Station accident in March 1979.

44 CFR 350 establishes the policies and procedures for FEMA's initial and continued approval of Tribal, State, and local governments' radiological emergency planning and preparedness for commercial nuclear power plants. This approval is contingent, in part, on State and local government participation in joint exercises with licensees.

FEMA's responsibilities in radiological emergency planning for fixed nuclear facilities include the following:

Taking the lead in offsite emergency planning and in the review and evaluation of Radiological Emergency Response Plans (RERPs) and procedures developed by State and local governments;

Determining whether such plans and procedures can be implemented on the basis of observation and evaluation of exercises of the plans and procedures conducted by State and local governments;

Responding to requests by the U.S. Nuclear Regulatory Commission (NRC) pursuant to the Memorandum of Understanding between the NRC and FEMA dated June 17, 1993 (Federal Register, Vol. 58, No. 176, September 14, 1993; and

Coordinating the activities of the following Federal agencies with responsibilities in the radiological emergency planning process:

- U.S. Department of Commerce,
- U.S. Nuclear Regulatory Commission,
- U.S. Environmental Protection Agency,
- U.S. Department of Energy,
- U.S. Department of Health and Human Services,
- U.S. Department of Transportation,
- U.S. Department of Agriculture,
- U.S. Department of the Interior, and
- U.S. Food and Drug Administration.

Representatives of these agencies serve on the FEMA Region II Radiological Assistance Committee (RAC), which is chaired by FEMA.

A REP exercise was conducted on May 22, 2007 to assess the capabilities of State and local emergency preparedness organizations in implementing their RERPs and procedures to protect the public health and safety during a radiological emergency involving Robert E. Ginna Nuclear Power Station. The purpose of this exercise report is to present the exercise results and findings on the performance of the off-site response organizations (OROs) during a simulated radiological emergency.

The findings presented in this report are based on the evaluations of the Federal evaluator team, with final determinations made by the FEMA Region II RAC Chairperson and approved by FEMA Headquarters.

These reports are provided to the NRC and participating States. State and local governments utilize the findings contained in these reports for the purposes of planning, training, and improving emergency response capabilities.

The criteria utilized in the FEMA evaluation process are contained in the following:

NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980;

FEMA Guidance Memoranda MS-1, "Medical Services," November 1986;

FEMA-REP-14, "Radiological Emergency Preparedness Exercise Manual," September 1991;

66 FR 47546, "FEMA Radiological Emergency Preparedness: Alert and Notification," September 12, 2001; and

67 FR 20580, "FEMA Radiological Emergency Preparedness: Exercise Evaluation Methodology," April 25, 2002.

Section III of this report, entitled "Exercise Overview," presents basic information and data relevant to the exercise. This section of the report contains a description of the plume pathway emergency planning zone (EPZ), a listing of all participating jurisdictions and functional entities that were evaluated, and a tabular presentation of the time of actual occurrence of key exercise events and activities.

Section IV of this report, entitled "Exercise Evaluation and Results," presents detailed information on the demonstration of applicable exercise evaluation areas at each jurisdiction or functional entity evaluated in a jurisdiction-based, issues-only format. This section also contains: (1) descriptions of all Deficiencies and Areas Requiring Corrective Action (ARCAs) assessed during this exercise, recommended corrective actions, and the Tribal, State, and local governments' schedule of corrective actions for each

identified exercise issue and (2) descriptions of ARCAs assessed during previous exercises and resolved at this exercise, including the corrective action demonstrated as well as ARCAs assessed during previous exercises and scheduled for demonstration at this exercise which remain unresolved.

The final section of the report is comprised of the appendices, which present the following supplementary information: acronyms and abbreviations, exercise evaluators and team leaders, exercise evaluation area criteria and Extent-of-Play agreement, and the exercise scenario.



### **III. Exercise Overview**

Contained in this section are data and basic information relevant to the May 05, 2009 exercise to test the off-site emergency response capabilities in the area surrounding Robert E. Ginna Nuclear Power Station. This section of the exercise report includes a description of the plume pathway emergency planning zone (EPZ), a listing of all participating jurisdictions and functional entities that were evaluated, and a tabular presentation of the time of actual occurrence of key exercise events and activities.

#### **A. Plume EPZ Description**

The Robert E. Ginna Nuclear Power Station site is located on the South shore of Lake Ontario, in the township of Ontario, in the Northwest corner of Wayne County, New York.

The surface of the land on the southern shore of Lake Ontario at the site and East and West of it is either flat or gently rolling. It slopes upward to the South from an elevation of about 225 feet above mean sea level near the edge of the lake; to 440 feet at Ridge Road (New York State Highway 104) 32 miles South of the lake; and then to about 1,600 feet at the Northern edge of the Appalachian Plateau, 30 to 40 miles to the South. Southward from Ridge Road, the terrain progressively roughens, with a series of small abrupt hills, commencing about 10 miles south of the site.

There are no public highways or railroads that traverse the site area.

#### **Monroe County**

Monroe County is bordered by Orleans and Genesee Counties to the West, by Livingston and Ontario Counties to the South, by Wayne County to the East and by Lake Ontario to the North. There are many manufacturing activities centered in and around the city of Rochester. Approximately 22% of the County's 67 square miles is in urban development, about 28% is vacant, wooded or water surface and 50% is farmland. Of Monroe County's workers, 45% are employed in manufacturing, 20% in service industries, 16% in retail, 1.4% in agriculture and the remainder in other activities.

The population of Monroe County is dispersed among the City of Rochester, nineteen towns and ten villages. In terms of population size and growth, Monroe is number one in the 8-county Genesee/Finger Lakes Region.

## **Wayne County**

Ginna Station is located in the Town of Ontario in the Northwest corner of Wayne County. Wayne County is bordered by Monroe County to the West, by Ontario and Seneca Counties to the South, by Cayuga County to the east and Lake Ontario to the north.

Since its settlement in the 19th Century, Wayne County has been predominately rural in character. The Northern portion of the county, especially the area between Ridge Road and Lake Ontario, is primarily orchards. Cherries, pears and apples are the chief crops produced. In the Southeastern portion of the County highly productive muck lands can be found that produce, for the most part, corn, potatoes and onions. In the Southwest, grains such as corn, oats and wheat are grown. Dairy farms are also located throughout the County. Roughly 70% of the county's 600 square miles is utilized for approximately 2,500 farms. About 34% of the County's workers are employed in manufacturing operations; 18% in service industries; 16% in retail trade; 19% in agriculture and 13% in other occupations.

The population is dispersed among fifteen towns and eleven villages. Many residents of the Western portion of Wayne County (including the four EPZ towns) commute to jobs in Monroe County.

## **B. Exercise Participants**

Agencies and organizations of the following jurisdictions participated in the Robert E. Ginna Nuclear Power Station exercise:

### **New York State Agencies/Organizations**

New York State Department of Aging  
New York State Department of Agriculture and Markets  
New York State Department of Child Services  
New York State Department of Criminal Justice Services  
New York State Department of Environmental Conservation  
New York State Department of Health Bureau of Environmental Radiation Protection  
New York State Department of Health Services  
New York State Department of State Office of Fire Prevention and Control  
New York State Department of Transportation  
New York State Division of Military and Naval Affairs  
New York State Education Department  
New York State Emergency Management Office  
New York State Energy Research and Development Authority  
New York State Office of Fire Protection and Control  
New York State Office of Homeland Security  
New York State Office of General Services  
New York State Office of Mental Health  
New York State Police  
New York State Public Service Commission  
New York State Thruway Authority

### **Federal Agencies / Organizations**

Nuclear Regulatory Commission  
United States Customs and Border Patrol  
United States Department of Agriculture Farm Service Agency

### **Private Organizations**

American Red Cross  
Civil Air Patrol  
Constellation Energy  
Dyer's Daycare  
Frontier Telephone  
Homeland Security Management Institute  
Lift Line  
Monroe Ambulance

Radio Amateur Civil Emergency Service  
Regional Transit Service  
Robert E. Ginna  
Rochester General Hospital  
Rochester Gas and Electric  
Rochester Institute of Technology  
Rural Metro City Emergency Medical Services  
State University of New York  
Wayne Finger Lakes Board of Cooperative Educational Services  
Xerox Corporation

## **RISK JURISDICTIONS**

### **Monroe County**

#### **County Agencies / Organizations**

Monroe County Communications  
Monroe County Community/Special Events  
Monroe County Department of Human Services  
Monroe County Emergency Management Office  
Monroe County Emergency Medical Services  
Monroe County Executive  
Monroe County Fire Bureau  
Monroe County Geographic Information System  
Monroe County Information Services  
Monroe County Law Department  
Monroe County Office of Aging  
Monroe County Parks Department  
Monroe County Probation  
Monroe County Public Health  
Monroe County Public Safety Department  
Monroe County Public Safety Training Facility  
Monroe County Pure Waters  
Monroe County Security  
Monroe County Sheriff's Office  
Monroe County Transportation  
Monroe County Water Authority  
Monroe County 911 Dispatch

## **Wayne County**

### **County Agencies / Organizations**

Wayne County Board of Supervisors  
Wayne County Data Processing  
Wayne County Department of Social Services  
Wayne County Dose Assessment  
Wayne County Emergency Management Office  
Wayne County Emergency Medical Services  
Wayne County Emergency Operations Center  
Wayne County Fire Department  
Wayne County Highway  
Wayne County Mental Health  
Wayne County Nursing Home  
Wayne County Public Defender's Office  
Wayne County Public Health Department  
Wayne County School District  
Wayne County Sheriff's Office  
Wayne County 911

### **SUPPORT JURISDICTIONS**

City of Rochester  
City of Rochester Department of Environmental Services  
City of Rochester Fire Department  
City of Rochester Police Department  
City of Rochester Water Bureau  
Greece Police Department  
Greece Central School District  
Greece Special Police  
Lincoln Fire Dept.  
Lyons School  
Marion Central School District  
Ridge Road Fire District  
Town of Huron  
Town of Ontario  
Webster Fire Department  
Webster Police Department  
Webster School District

## **C. Exercise Timeline**

Tables 1 and 2 on the following pages, present the times at which key events and activities occurred during the Robert E. Ginna Nuclear Power Station exercise on May 5, 2009. Also included are times notifications were made to the participating jurisdictions/ functional entities.

Emergency Classification Level or Event	Time Utility Declared	Time Notification Was Received or Action Was Taken							
		State EOC	EOF	JIC	Wayne County EOC	Wayne County Warning Point	Monroe County EOC	Monroe County Warning Point	EAS Station WHAM
Unusual Event	N/A	N/A	N/A	N/A	N/A		N/A		N/A
Alert	0807	0815	0815	0812	0815		0817		N/A
Site Area Emergency	0933	0946	0946	0933	0940		0944		N/A
General Emergency	1042	1052	1052	1042	1052		1057		N/A
Simulated Radiation Release Started	----	1145	1145	1134	1135		1130		N/A
Simulated Radiation Release Terminated	1347	----	----	----	----		----		N/A
Facility Declared Operational		0845	0916	----	0900		0912		N/A
Declared of State Emergency:		----	----	----	0940		1005		N/A
Exercise Terminated		1404	1351	----	1400		1334		N/A
<b>Precautionary Actions:</b> Cleared lakes and parks, transferred school, and contacted FAA and Railroads		0930		----	0930		0921		N/A
"Heads Up" Siren Activation		1011	1011	1011	1011		1011		N/A
"Heads Up" EAS Message		1042	1042	1042	1042		1042		1042
<b>1<sup>st</sup> A&amp;N Decision (State [made]; local [received])</b> Shelter: Evacuate: M1 + M3 + W1 + W2		1105		1105	1105		1105		N/A
2nd Siren Activation		1116	1116	1116	1116		1116		N/A
2nd EAS Message		1120	1120	1120	1120		1120		----
<b>2<sup>nd</sup> A&amp;N Decision (State [made]; local [received])</b> Shelter: Evacuate: All remaining Monroe ERPAs and W3 + W7.		1226	1226	----	1226		1226		N/A
3 <sup>rd</sup> Siren Activation		1237	----	1237	1237		1237		N/A
3 <sup>rd</sup> EAS Message		1241	----	1241	1241		1247		----
<b>KI Administration Decision: Emergency Workers</b>		1105	----	----	----		----		N/A
<b>KI Administration Decision: M1, M3, W1 &amp; W2</b>		----		----	1105		1105		
<b>KI Administration Decision: W3 &amp; W7</b>		----		----	1226		----		
<b>KI Administration Decision: General Population</b>		1226		----	----		----		

## **IV. Exercise Evaluation and Results**

Contained in this section are the results and findings of the evaluation of all jurisdictions and locations that participated in the May 05, 2009 biennial Radiological Emergency Preparedness (REP) exercise. The exercise was held to test the offsite emergency response capabilities of local governments in the 10-mile Emergency Planning Zone (EPZ) surrounding the Robert E. Ginna Nuclear Power Station. Each jurisdiction and functional entity was evaluated on the basis of its demonstration of the exercise evaluation area criteria contained in the REP Exercise Evaluation Methodology. Detailed information on the exercise evaluation area criteria and the extent-of-play agreement used in this exercise are found in Appendix 3 of this report.4.1.

### **A. Summary Results of Exercise Evaluation – Table 2**

The matrix presented in Table 2, on the following pages, presents the status of the exercise evaluation area criteria from the REP Exercise Evaluation Methodology that were scheduled for demonstration during this exercise by all participating jurisdictions and functional entities. Exercise evaluation area criteria are listed by number and the demonstration status of the criteria is indicated by the use of the following letters:

M - Met (No Deficiency or Area Requiring Corrective Action (ARCA) assessed and no unresolved ARCAs from prior exercises)

D - Deficiency assessed

A - ARCA(s) assessed

R - Resolved ARCA(s) from prior exercises



	Mobilization					Protective Action Decision-Making					Protective Action Implementation						Field Measurement and Analysis				Emergency Notification & Public Information			Support Operations/ Facilities						
	Emergency Operations Management					Protective Action Decision-Making					Protective Action Implementation						Field Measurement and Analysis				Emergency Notification & Public Information			Support Operations/ Facilities						
STATE OF NEW YORK	1 a	1 b	1 c	1 d	1 e	2 a	2 b	2 c	2 d	2 e	3 a	3 b	3 c	3 d	3 e	3 f	4 a	4 b	4 c	4 d	4 e	5 a	5 b	5 c	5 d	6 a	6 b	6 c	6 d	
NYSEOC	M		M	M	M			M	M		M	M	M		M										M			M		
NYSAA					M	M					M	M																		
NYS EWPMC – WCC				M	M						M	M														M	M			
G JIC	M			M	M																			D			M			
G EOF	M		M	M	M																									
REG EAS (Station) WHAM				M																				M		M				

LEGEND: M = Met (no Deficiency or ARCA(s) assessed)  
R = Resolved ARCA(s) from prior exercises  
Blank = Not scheduled for demonstration

A = ARCA(s) assessed  
U = Unresolved ARCA(s) from prior exercise

	Mobilization					Protective Action Decision-Making					Protective Action Implementation										Field Measurement and Analysis			Emergency Notification & Public Information				Support Operations/Facilities					
	1a	1b	1c	1d	1e	2a	2b	2c	2d	2e	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	4a	4b	4c	5a	5b	5c	5d	6a	6b	6c	6d		
<b>MONROE COUNTY</b>	1	1	1	1	1	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	5	5	5	5	6	6	6	6			
MC EOC	M		M	M	M						M	M	M	M	M					M	M	M											
MC AA						M	M														M												
MC FMT	M				M						M	M								M		M											
MC GPRC PMHS																																	
MC TCP											M	M			M																		
MC EWPMC ROC		M									M	M																M	M				
MC SBC WCSD											M	M		M																			
MC GPRC GOHS					M						M	M															M	M					
MC SPBC RTS											M	M	M																				
MC SI WCSD														M																			
MC MSH RGH											M																						M
MC MST MA											M	M																					M
MC MST OVES											M	M																					M

LEGEND: M = Met (no Deficiency or ARCA(s) assessed)    A = ARCA(s) assessed  
R = Resolved ARCA(s) from prior exercises                    U = Unresolved ARCA(s) from prior exercise  
Blank = Not scheduled for demonstration

WAYNE COUNTY	Emergency Operations Management					Protective Action Decision-Making					Protective Action Implementation										Field Measurement and Analysis					Emergency Notification & Public Information				Support Operations/Facilities			
	1. a	1. b	1. c	1. d	1. e	2. a	2. b	2. c	2. d	2. e	3. a	3. b	3. c	3. d	3. e	3. f	3. g	3. h	3. i	3. j	4. a	4. b	4. c	4. d	4. e	5. a	5. b	5. c	5. d	6. a	6. b	6. c	6. d
	1	1	1	1	1	1	1	2	1	1	1	1	1	2	1	2	1	2	1	2	1	1	1	1	1	1	2	3	1	1	1	1	
Wayne EOC	M		M	M	M			M	M		M	M	M	M	M										M				M				
Wayne AA					M	M	M															M											
Wayne FMT R	M			M							M	M									A		M										
Wayne MSH NCH																																	M
Wayne BRA											M	M																					
Wayne SPBC WATS											M	M	M																				
Wayne SI DD														M																			
Wayne SI MCSD														M																			
Wayne GPRC NHS											M	M																		A	M		
Wayne SI WTCCC														M																			
Wayne SPBC LCSD											M	M	M																				
Wayne SBC MCSD											M	M		M																			
Wayne SRC NMS														M																			
Wayne TCP														M																			

LEGEND: M = Met (no Deficiency or ARCA(s) assessed)  
R = Resolved ARCA(s) from prior exercises  
Blank = Not scheduled for demonstration

A = ARCA(s) assessed  
U = Unresolved ARCA(s) from prior exercise

## B. Status of Jurisdictions Evaluated

This subsection provides information on the evaluation of each participating and functional entity in a jurisdiction-based, issues-only format. Presented below are definitions of the terms used in this subsection relative to criteria demonstration status.

- **Met** – Listing of the demonstrated exercise evaluation area criteria under which no Deficiencies or ARCAs were assessed during this exercise and under which no ARCAs assessed during prior exercises remain unresolved.
- **Deficiency** – Listing of the demonstrated exercise evaluation area criteria under which one or more Deficiencies were assessed during this exercise. Included is a description of each Deficiency and recommended corrective actions.
- **Area Requiring Corrective Action** – Listing of the demonstrated exercise evaluation area criteria under which one or more ARCAs were assessed during the current exercise. Included is a description of the ARCAs assessed during this exercise and the recommended corrective actions to be demonstrated before or during the next biennial exercise.
- **Not Demonstrated** – Listing of the exercise evaluation area criteria that were scheduled to be demonstrated during this exercise, but were not demonstrated and the reason they were not demonstrated.
- **Prior ARCAs – Resolved** – Descriptions of ARCAs assessed during previous exercises that were resolved in this exercise and the corrective actions demonstrated.
- **Prior ARCAs – Unresolved** – Descriptions of ARCAs assessed during prior exercises that were not resolved in this exercise. Included are the reasons the ARCAs remain unresolved and recommended corrective actions to be demonstrated before or during the next biennial exercise.

The following are definitions of the two types of exercise issues that are discussed in this report.

- A **Deficiency** is defined in the FEMA-REP-14 as “...an observed or identified inadequacy of organizational performance in an exercise that could cause a finding that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a nuclear power plant.”

- An **ARCA** is defined in the FEMA-REP-14 as “...an observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health and safety.”

The Federal Emergency Management Agency (FEMA) has developed a standardized system for numbering exercise issues (Deficiencies and ARCAs). This system is used to achieve consistency in numbering exercise issues among FEMA Regions and site-specific exercise reports within each Region. It is also used to expedite tracking of exercise issues on a nationwide basis.

The identifying number for Deficiencies and ARCAs includes the following elements, with each element separated by a hyphen (-).

- **Plant Site Identifier** – A two-digit number corresponding to the Utility Billable Plant Site Codes.
- **Exercise Year** – The last two digits of the year the exercise was conducted.
- **Evaluation Area Criterion** – A letter and number corresponding to the criteria in the FEMA REP Exercise Evaluation Methodology.
- **Issue Classification Identifier** – (D = Deficiency, A = ARCA). Only Deficiencies and ARCAs are included in exercise reports.
- **Exercise Issue Identification Number** – A separate two digit indexing number assigned to each issue identified in the exercise.

# 1. New York Jurisdictions

## 1.1 New York State Emergency Operations Center

**a. MET:** 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.b.2, 2.c.1  
3. a.1, 3.b.1, 3.c.1, 3.d.1, 5.a.1, 5.b.1

**b. AREAS REQUIRING CORRECTIVE ACTION:** NONE

**c. DEFICIENCY:** NONE

**d. NOT DEMONSTRATED:** NONE

**e. PRIOR ISSUES - RESOLVED:** ONE

**ISSUE NO:** 27-07-3.a.1-A-01

**ISSUE:** An emergency worker, a New York State Trooper, was not aware of what actions to take in the event his self-reading dosimeter (SRD) read 5 R and he was unable to report the reading. Several times, when asked what he would do in this circumstance, the Trooper replied that he would remain at his assigned duty location, but did not seem to know to report to his supervisor at 1 R, 3 R, and off scale exposures.

**CORRECTIVE ACTION DEMONSTRATED:** The New York State Trooper interviewed for this Emergency Worker Exposure Control demonstration clearly understood the dosimetry procedures and how to read and record Self Reading Dosimeters (SRD). The Trooper arrived at the Wayne County EOC with his issued EW packet and equipment operational. His exposure record card was filled out and up to date with SRD entries. The Trooper clearly understood all aspects of Emergency Worker exposure control and to follow his agency's plans and procedures for reporting SRD readings to his Supervisor.

**f. PRIOR ARCAs – UNRESOLVED:** NONE

**1.2 Accident Assessment (AA)**

- a. MET:** 1.e.1; 2.a.1; 2.b.1; 3.a.1
- b. DEFICIENCY:** NONE
- c. AREAS REQUIRING CORRECTIVE ACTION:** NONE
- d. NOT DEMONSTRATED:** NONE
- e. PRIOR ARCAs – RESOLVED:** NONE
- f. PRIOR ARCAs – UNRESOLVED:** NONE

**1.3 Emergency Operations Facility (EOF)**

- a. MET:** 1.a.1; 1.c.1; 1.d.1; 1.e.1
- b. DEFICIENCY:** NONE
- c. AREAS REQUIRING CORRECTIVE ACTION:** NONE
- d. NOT DEMONSTRATED:** NONE
- e. PRIOR ARCAs – RESOLVED:** NONE
- f. PRIOR ARCAs – UNRESOLVED:** NONE

**1.4 Ginna Joint Information Center**

- a. MET:** 1.a.1, 1.d.1, 1.e.1, 5.b.1
- b. AREAS REQUIRING CORRECTIVE ACTION:** ONE

**ISSUE NO:** 27-09-5.a.1-A-01

**CONDITION:** Follow-on faxes sent by the WC PIO staff at the JIC to EAS Station WHAM were never received at WHAM. The JIC fax machine generated a receipt for the sent faxes and it was assumed, incorrectly, that this report was a confirmation and the faxes had been received at the station.

Upon scrutiny, after the exercise terminated, it was discovered that they, in fact, had not gone through. When dialing out from the JIC, one of the two telephone systems requires dialing a 9 for an outside line. The WC PIO Assistant did this with the fax and consequently, the last number dialed was dropped off because the 9 was not needed on the fax line.

The printed report actually showed that the fax had not been transmitted; there had been a busy signal. The printed information showed the number dialed with the last number dropped.

**POSSIBLE CAUSE:** There was not a clear understanding of what systems required dialing a 9 prior to the number to obtain an outside line. Further, the assumption that the printed report was a positive confirmation the fax had been received was incorrect. A follow-up telephone call to the EAS Station is indicated in the procedures and this was not done. Also, the printed report was not looked at when it was received. Had it been read the Assistant PIO would have seen the fax had not gone through and could have resolved the problem.

**REFERENCE:** NUREG-0654, E. 5.,7., G.3.a., G.4,a.,b.,c.Joint Information Center Procedures, EAS Message Preparation Procedures(rev. 05.04.09

**EFFECT:** The EAS Station did not have current up to date information to broadcast to the public.

**RECOMMENDATION:** Determine which telephones and faxes actually require dialing a 9 for an outside line and mark these instruments clearly. Train anyone using faxes to review any reports generated by the fax machine to verify successful transmission. Upon arrival at the JIC, send a test fax to the WC EOC or the EAS Station to confirm successful transmission prior to any vital information being sent later.

**SCHEDULE OF CORRECTIVE ACTIONS:** To be demonstrated at the next federally-evaluated biennial exercise.

**c. DEFICIENCY: ONE**

**ISSUE NO:** 27-09-5.a.1-D-01

**CONDITION:** EAS Message #1 could not be transmitted to the EAS station (WHAM) in time for broadcast at 1015, following the siren activation at 1011. The message did not go out until 27 minutes after it was supposed to have been broadcast.

**POSSIBLE CAUSE:** The designated telephone at the EAS Station, WHAM, was busy when the Wayne County (WC) EAS recorder called at 1005 to give them a “heads up” that the EAS message would be coming soon. She then contacted the WC EOC and reported the telephone situation to the EMD.

At about 1005 the Assistant WC PIO contacted a different radio station in the same building as the EAS station and requested someone walk to WHAM and ask the News Manager to call her at the JIC.





EAS Message #2 had a decision time of 0900. The siren time was scheduled for 0911 with an EAS broadcast to follow at 0915.

After verifying the content of the EAS Message, the Wayne County PIO Representative at the JIC called the EAS Radio Station (WHAM) from an EAS designated telephone in the EAS/Communications Room (0906). The Wayne County PIO Representative at the JIC completed the recording of the EAS Message at 0909 and verified that the EAS Radio Station would be able to broadcast the message at 0915.

The remedial exercise successfully demonstrated that the communication systems between the JIC and EAS Radio Station have been restored.

Subsequently the New York State Emergency Management Office (NY SEMO) submitted revised "Joint Information Center (JIC) Procedures, R.E. Ginna (Revised 10/05/09)". The updated procedure successfully addressed the recommendations following the remedial exercise, including designating Wayne County as the responsible party for preparation and dissemination of EAS messages during a radiological incident at the Ginna Nuclear Power Station. Specific EAS responsibilities are described on page 9 of the JIC Procedures (Revised 10/05/09) for the Wayne County Spokesperson, Wayne County PIO, and for Wayne County's PIO Administrative Support staff.

The revised JIC procedure also addresses the issue of a communications failure at the JIC to ensure that an Emergency Alert System (EAS) message is broadcast to the public in a timely manner. On page 9 of the JIC Procedures, under "Exceptional Situations," it states that if the JIC is not able to contact the LP-1 station, Monroe County and Wayne County will coordinate over the Executive Hotline and Monroe County will use their dedicated telephone line to the LP-1 station to relay the EAS message.

**d. NOT DEMONSTRATED: NONE**

**e. PRIOR ISSUES - RESOLVED: NONE**

**f. PRIOR ISSUES - UNRESOLVED: NONE**

**1.5 Emergency Alert System Station (WHAM)**

**a. MET:** 1.d.1; 5.a.1; 5.b.1

**b. AREAS REQUIRING CORRECTIVE ACTION:** NONE

**c. DEFICIENCY:** NONE

**d. NOT DEMONSTRATED:** NONE

**e. PRIOR ISSUES - RESOLVED:** ONE

**ISSUE NO:** 27-07-5.b.1-A-02

**ISSUE:** During the exercise, two fax transmissions were sent from the Joint Information Center (JIC) to the Emergency Alert System (EAS) radio station, while all other means of communication to the station were being simulated. The faxes were of EAS message #2 and a follow-up Special News Release. This created confusion at the station on proper actions to take.

**CORRECTIVE ACTION DEMONSTRATED:** The Wayne County Assistant PIO faxed only the fax cover sheet for EAS # 2 and the Follow on Special News Release to WHAM, the EAS radio station. This was in accordance with her procedures and corrects this ARCA. The fax transmission did not go through to the station due to incorrect entry of the telephone number, resulting in a different issue.

**f. PRIOR ISSUES - UNRESOLVED:** NONE

**1.6 New York State PMC - Wayne County Complex**

**a. MET:** 1.d.1, 1.e.1, 3.a.1, 3.b.1, 6.a.1, 6.b.1

**b. AREAS REQUIRING CORRECTIVE ACTION:** NONE

**c. DEFICIENCY:** NONE

**d. NOT DEMONSTRATED:** NONE

**e. PRIOR ISSUES - RESOLVED:** NONE

**f. PRIOR ISSUES - UNRESOLVED:** NONE

## **2 RISK JURISDICTIONS**

### **2.1 MONROE COUNTY**

#### **2.1.1 Monroe County Emergency Operations Center (EOC)**

**a. MET:** 1.a.1; 1.c.1; 1.d.1; 1.e.1; 2.b.2; 2.c.1; 3.a.1  
3.b.1; 3.c.1; 3.c.2; 3.d.1; 3.d.2; 5.a.1; 5.b.1

**b. DEFICIENCY:** NONE

**c. AREAS REQUIRING CORRECTIVE ACTION:** NONE

**d. NOT DEMONSTRATED:** NONE

**e. PRIOR ARCAs – RESOLVED:** NONE

**f. PRIOR ARCAs – UNRESOLVED:** NONE

#### **2.1.2 Accident Assessment (AA)**

**a. MET:** 1.e.1; 2.a.1; 2.b.1; 4.a.2

**b. DEFICIENCY:** NONE

**c. AREAS REQUIRING CORRECTIVE ACTION:** NONE

**d. NOT DEMONSTRATED:** NONE

**e. PRIOR ARCAs – RESOLVED:** NONE

**f. PRIOR ARCAs – UNRESOLVED:** NONE

#### **2.1.3 Field Monitoring Team (FMT)**

**a. MET:** 1.a.1; 1.d.1; 3.a.1; 3.b.1; 4.a.1; 4.a.3

**b. AREAS REQUIRING CORRECTIVE ACTION:** NONE

**c. DEFICIENCY:** NONE

**d. NOT DEMONSTRATED:** NONE

**e. PRIOR ARCAs – RESOLVED:** NONE

**f. PRIOR ARCAs – UNRESOLVED: NONE**

**2.1.4 Traffic Control Point**

**a. MET: 3.a.1; 3.b.1; 5.a.3**

**b. DEFICIENCY: NONE**

**c. AREAS REQUIRING CORRECTIVE ACTION: NONE**

**d. NOT DEMONSTRATED: NONE**

**e. PRIOR ARCAs – RESOLVED: NONE**

**f. PRIOR ARCAs – UNRESOLVED: NONE**

**2.1.5 Monroe County - Emergency Worker Personnel Monitoring Center  
(Rochester Operations Center May 20, 2009)**

**a. MET: 1.b.1, 3.a.1, 3.b.1, 6.a.1, 6.b.1**

**b. AREAS REQUIRING CORRECTIVE ACTION: NONE**

**c. DEFICIENCY: NONE**

**e. NOT DEMONSTRATED: NONE**

**f. PRIOR ISSUES - RESOLVED: NONE**

**2.1.6 Monroe County - School Bus Company (Webster Central School  
District - May 6, 2009)**

**a. MET: 3.a.1, 3.b.1, 3.c.2**

**b. AREAS REQUIRING CORRECTIVE ACTION: NONE**

**c. DEFICIENCY: NONE**

**d. NOT DEMONSTRATED: NONE**

**e. PRIOR ISSUES - RESOLVED: NONE**

**f. PRIOR ISSUES - UNRESOLVED: NONE**

**2.1.7 Monroe County Reception Center (Greece Olympia – June 26, 2009)  
June 26, 2009)**

- a. MET: 1.e.1; 3.a.1; 3.b.1; 6.a.1; 6.b.1**
- b. DEFICIENCY: NONE**
- c. AREAS REQUIRING CORRECTIVE ACTION: NONE**
- d. NOT DEMONSTRATED: NONE**
- e. PRIOR ARCAs – RESOLVED: NONE**
- f. PRIOR ARCAs – UNRESOLVED: NONE**

**2.1.8 School Interviews (Webster Central School District Schools -  
Spry Middle School and Dewitt Elementary School – May 20, 2009)**

- a. MET: 3.c.2**
- b. DEFICIENCY: NONE**
- c. AREAS REQUIRING CORRECTIVE ACTION: NONE**
- d. NOT DEMONSTRATED: NONE**
- e. PRIOR ARCAs – RESOLVED: NONE**
- f. PRIOR ARCAs – UNRESOLVED: NONE**

**2.1.9 Monroe County - Special Population Bus Company (Regional Transit  
Service May 6, 2009)**

- a. MET: 3.a.1, 3.b.1, 3.c.1**
- b. AREAS REQUIRING CORRECTIVE ACTION: NONE**
- c. DEFICIENCY: NONE**
- d. NOT DEMONSTRATED: NONE**
- e. PRIOR ISSUES - RESOLVED: NONE**
- f. PRIOR ISSUES - UNRESOLVED: NONE**

**2.1.10 Monroe County Medical Services Hospital (Rochester General Hospital – July 14, 2009)**

- a. MET: 3.a.1, 6.d.1
- b. AREAS REQUIRING CORRECTIVE ACTION: NONE
- c. DEFICIENCY: NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ISSUES - RESOLVED: NONE
- f. PRIOR ISSUES - UNRESOLVED: NONE

**2.1.11 Monroe County - Medical Services Transport (Monroe Ambulance – July 14, 2009)**

- a. MET: 3.a.1, 3.b.1, 6.d.1
- b. AREAS REQUIRING CORRECTIVE ACTION: NONE
- c. DEFICIENCY: NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ISSUES - RESOLVED: NONE
- f. PRIOR ISSUES - UNRESOLVED: NONE

**2.1.12 Monroe County - Medical Service Transport (Ontario Volunteer Emergency Squad)**

- a. MET: 3.a.1, 3.b.1, 6.d.1
- b. AREAS REQUIRING CORRECTIVE ACTION: NONE
- c. DEFICIENCY: NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ISSUES - RESOLVED: NONE
- f. PRIOR ISSUES - UNRESOLVED: NONE

## 2.2 WAYNE COUNTY

### 2.2.1 Wayne County Emergency Operations Center (WCEOC)

**a. MET:** 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.b.2, 2.c.1, 3.a.1  
3.b.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.a.1, 5.b.1

**b. AREAS REQUIRING CORRECTIVE ACTION:** NONE

**c. DEFICIENCY:** NONE

**d. NOT DEMONSTRATED:** NONE

**e. PRIOR ISSUES - RESOLVED:** ONE

**ISSUE NO.:** 27-07-3.b.1-A-03

**ISSUE:** The Emergency Medical Services (EMS) Coordinator at the Wayne County Emergency Operations Center advised ambulance crew members to take Potassium Iodide (KI) prior the General Emergency Classification Level (ECL) and prior to a protective action decision made by the County.

**CORRECTIVE ACTION DEMONSTRATED:** During the exercise the Emergency Medical Services (EMS) Coordinator correctly issued instructions to EMS personnel to ingest KI and record the event on their exposure record card. This action was issued in accordance with WC plans and procedures after the announcement of the General Emergency classification level had been reached. The message included instructions concerning refusal to take KI guidelines and a reminder to record and report dose readings of 1, 3, and 5 rem to report levels to the EOC.

**f. PRIOR ISSUES - UNRESOLVED:** NONE

### 2.2.2 Accident Assessment (AA)

**a. MET:** 1.e.1; 2.a.1; 2.b.1; 4.a.2

**b. DEFICIENCY:** NONE

**c. AREAS REQUIRING CORRECTIVE ACTION:** NONE

**d. NOT DEMONSTRATED:** NONE

**e. PRIOR ARCAs – RESOLVED:** NONE

**f. PRIOR ARCAs – UNRESOLVED:** NONE



### 2.2.3 Wayne County Field Monitoring Team Red

a. MET: 1.a.1, 1.d.1, 3.a.1, 3.b.1, 4.a.3

b. AREAS REQUIRING CORRECTIVE ACTION: ONE

ISSUE NO.: 27-09-4.a.1-A-02

**CONDITION:** Operational checks were performed on the Eberline instruments by the Wayne County Field Monitoring Team (WCFMT) using one unlabeled check source maintained at the Wayne County Emergency Operations Center (WCEOC). The field team member performing the operational checks did not know the material or activity of the check source. Procedure 12 – Field Monitoring, Rev. 15 – 2/01/09, which was included in the team’s kit, specifies a one microcurie Cs-137 source for the Eberline E-140N and an eight microcurie Cs-137 source for the Eberline RO20.

**POSSIBLE CAUSE:** One of the two operational check sources and the label for the remaining source have been lost. The field team member performing the operational checks assumed that the one source could be used for both instruments and that the response to the check source was not important.

**REFERENCE:** NUREG 0654 H. 10.; Wayne County Plan Procedure 12

**EFFECT:** Using an unknown check source does not provide sufficient information to determine that instruments are operating correctly. Without knowing the activity of the check source the operator can not determine if the instrument is responding appropriately or if it is reading high or low. If the instrument is reading incorrectly then excessive or inadequate protective actions may be recommended.

**RECOMMENDATION:** Locate the correct sources for the instruments, as specified in the procedures, label them appropriately and store them securely. Train field team members to verify that the instruments are reading in the expected range when the correct check source is used.

**SCHEDULE OF CORRECTIVE ACTIONS:** To be demonstrated at the next federally-evaluated biennial exercise.

c. DEFICIENCY: NONE

d. NOT DEMONSTRATED: NONE

e. PRIOR ISSUES - RESOLVED: NONE

**f. PRIOR ISSUES - UNRESOLVED: NONE**

**2.2.4 Wayne Area - Medical Services Hospital (Newark Community Hospital  
Aug. 26, 2008)**

**a. MET: 6.d.1.AREAS REQUIRING CORRECTIVE ACTION: NONE**

**b. DEFICIENCY: NONE**

**c. NOT DEMONSTRATED: NONE**

**d. PRIOR ISSUES - RESOLVED: NONE**

**e. PRIOR ISSUES - UNRESOLVED: NONE**

**2.2.5 Wayne County - Backup Route Alerting**

**a. MET: 3.a.1, 3.b.1, 5.a.3**

**b. AREAS REQUIRING CORRECTIVE ACTION: NONE**

**c. DEFICIENCY: NONE**

**d. NOT DEMONSTRATED: NONE**

**e. PRIOR ISSUES - RESOLVED: NONE**

**f. PRIOR ISSUES - UNRESOLVED: NONE**

**2.2.6 Wayne County - Special Population Bus Company – Wayne Area  
Transport Service**

**a. MET: 3.a.1, 3.b.1, 3.c.1**

**b. AREAS REQUIRING CORRECTIVE ACTION: NONE**

**c. DEFICIENCY: NONE**

**d. NOT DEMONSTRATED: NONE**

**e. PRIOR ISSUES - RESOLVED: NONE**

**f. PRIOR ISSUES - UNRESOLVED: NONE**

**2.2.7 Wayne County - School Interview (Marion Central School District – May 13, 2009)**

- a. **MET:** 3.c.2
- b. **AREAS REQUIRING CORRECTIVE ACTION:** NONE
- c. **DEFICIENCY:** NONE
- d. **NOT DEMONSTRATED:** NONE
- e. **PRIOR ISSUES - RESOLVED:** NONE
- f. **PRIOR ISSUES - UNRESOLVED:** NONE

**2.2.8 Wayne County - General Population Reception Center (Newark High School – May 13, 2009)**

- a. **MET:** 3.a.1, 3.b.1, 6.b.1
- b. **AREAS REQUIRING CORRECTIVE ACTION:** ONE

**ISSUE:** 27-09-6.a.1-A-03

**CONDITION:** At the Newark High School in Wayne County where the general population reception center is established, 20% of the 9492 anticipated evacuees, or 1898 people, could not be processed in a 12 hour period. The one SAIC portal processed 6 persons in 4 minutes, which works out to 90 in an hour, and 1080 in 12 hours. Therefore, the ability to monitor expected evacuees in a timely manner at this facility fell short by 818 evacuees.

**POSSIBLE CAUSE:** Failure to process the appropriate number of evacuees at a rate that would accommodate the total number of anticipated evacuees within a 12 hour period. The rate at which people passed through the portal monitor was slowed due to the Civil Air Patrol who were training staff at the Reception Center.

**REFERENCE:** NUREG J.10.h; J.12; K.5.b

**EFFECT:** The reception center would be overloaded with evacuees waiting outside the facility to be processed, placing undue stress on the evacuees and the workers trying to process them.

**RECOMMENDED CORRECTIVE ACTION:** Staff should be trained prior to the exercise and not during the exercise, when training activities can result in slowed processing times.

**SCHEDULE OF CORRECTIVE ACTIONS:** To be demonstrated at the next federally-evaluated biennial exercise.

**c. DEFICIENCY: NONE**

**d. NOT DEMONSTRATED: NONE**

**e. PRIOR ISSUES - RESOLVED: NONE**

**f. PRIOR ISSUES - UNRESOLVED: NONE**

**2.2.9 Wayne County – School Interview (Wayne Technical & Career Center Campus, Williamson BOCES – May 6, 2009)**

**a. MET: 3.c.2**

**b. AREAS REQUIRING CORRECTIVE ACTION: NONE**

**c. DEFICIENCY: NONE**

**d. NOT DEMONSTRATED: NONE**

**e. PRIOR ISSUES - RESOLVED: NONE**

**f. PRIOR ISSUES - UNRESOLVED: NONE**

**2.2.10 Wayne County - Special Population Bus Company (Lyons Central School District May 13, 2009)**

**a. MET: 3.a.1, 3.b.1, 3.c.1**

**b. AREAS REQUIRING CORRECTIVE ACTION: NONE**

**c. DEFICIENCY: NONE**

**d. NOT DEMONSTRATED: NONE**

**e. PRIOR ISSUES - RESOLVED: NONE**

**f. PRIOR ISSUES - UNRESOLVED: NONE**

**2.2.11 Wayne County - School Bus Company Interview (Marion Central District May 13, 2009)**

- a. MET: 3.a.1, 3.b.1, 3.c.2
- b. AREAS REQUIRING CORRECTIVE ACTION: NONE
- c. DEFICIENCY: NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ISSUES - RESOLVED: NONE
- f. PRIOR ISSUES - UNRESOLVED: NONE

**2.2.12 Wayne County - School Reception Center (Newark Middle School – May 13, 2009)**

- a. MET: 3.c.2
- b. AREAS REQUIRING CORRECTIVE ACTION: NONE
- c. DEFICIENCY: NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ISSUES - RESOLVED: NONE
- f. PRIOR ISSUES - UNRESOLVED: NONE

**2.2.13 Wayne County Traffic Control Point (Webster Police & Sheriff Dept. May 20, 2009)**

- a. MET: 3.a.1, 3.b.1, 3.d.1
- b. AREAS REQUIRING CORRECTIVE ACTION: NONE
- c. DEFICIENCY: NONE
- d. NOT DEMONSTRATED: NONE
- e. PRIOR ISSUES - RESOLVED: NONE
- f. PRIOR ISSUES - UNRESOLVED: NONE

**2.2.14 Wayne County - School Interview (Dyers Daycare – May 6, 2009)**

**a. MET: 3.c.2**

**b. AREAS REQUIRING CORRECTIVE ACTION: NONE**

**c. DEFICIENCY: NONE**

**d. NOT DEMONSTRATED: NONE**

**e. PRIOR ISSUES - RESOLVED: NONE**

**f. PRIOR ISSUES - UNRESOLVED: NONE**

## **APPENDIX 1: Acronyms and Abbreviations**

A&N	Alert and Notification
ACP	Access Control Point
ARC 3031	American Red Cross document <i>Mass Care – Preparedness and Operations</i>
ARCA	Area Requiring Corrective Action
ATWS	Anticipated Transient Without Scram
CFR	Code of Federal Regulations
DEP	Department of Environmental Protection
DHS	Department of Homeland Security
DOT	Department of Transportation
EAL	Emergency Action Level
EAS	Emergency Alerting System
ECL	Emergency Classification Level
ED	Emergency Director
EMS	Emergency Medical Services
ENC	Emergency News Center
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EPIP	Emergency Plan Implementing Procedure
EPZ	Emergency Planning Zone
ERPA	Emergency Response Planning Area
FEMA	Federal Emergency Management Agency
FR	Federal Register
FRERP	Federal Radiological Emergency Response Plan delete not used in document and superseded by NRP
ICFI	ICF International
JNC	Joint News Center
KI	Potassium Iodide
LOCA	Loss of Cooling Accident
MCEOC	Monroe County Emergency Operations Center
NOUE	Notice of Unusual Event
NRC	U.S. Nuclear Regulatory Commission

NUREG-0654	NUREG-0654/FEMA-REP-1, Rev. 1 (Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants), November 1980
NYS	New York State
NYSP	New York State Police
ORO	Offsite Response Organization
OSC	Operational Support Center
PAD	Protective Action Decision
PAG	Protective Action Guidance
PAR	Protective Action Recommendation
PIO	Public Information Officer
R	Roentgen(s)
RAC	Regional Assistance Committee According to the NRP this is Radiological Assistance Committee
RACES	Radio Amateur Civil Emergency Services
RCP	Reactor Coolant Pump
RECS	Radiological Emergency Communications System
Rem	Roentgen Equivalent Man
REP	Radiological Emergency Preparedness
RERP	Radiological Emergency Response Plan
RHR	Residual Heat Removal
R/hr	Roentgens per hour
SAE	Site Area Emergency
SD	School District
SEOC	State Emergency Operations Center
SM	Shift Manager
SOP	Standard Operating Procedure
TCP	Traffic Control Point
TL	Team Leader
TSC	Technical Support Center
TWP	Township
USDA	United States Department of Agriculture
WHAM	Emergency Alert System Radio Station for Ginna area
WEOC	Wayne Emergency Operations Center



**APPENDIX 2**  
**EXERCISE EVALUATORS AND TEAM LEADERS**

The following is a list of the personnel who evaluated the Robert E. Ginna Nuclear Power Station exercise on May 5, 2009 and the out of sequence drills. Evaluator Team Leaders are indicated by the “(TL)” after their names. The organization which each evaluator represents is indicated by the following abbreviations:

FEMA	Federal Emergency Management Agency
USDOT	Department of Transportation
USEPA	Environmental Protection Agency
NRC	Nuclear Regulatory Commission
ICF	ICF Consulting

LOCATION	EVALUATOR	AGENCY
Exercise Oversight	Rebecca Thomson	FEMA RAC Chair
New York State Emergency Operations Center	Brian Hasemann (TL) Gary Goldberg Kevin Reed Miriam Weston	FEMA ICF FEMA FEMA
New York State Accident Assessment	Daryl Thome	ICF
Ginna Joint Information Center	Deborah Bell (TL) Chris Cammarata Dave Petta	ICF FEMA ICF
R.E. Ginna Emergency Alert System - WHAM	Russell Fox	FEMA
Ginna Emergency Operations Facility	Sam Nelson	ICF
Monroe County Emergency Operations Center	William Cullen (TL) Sonia Eischen Mabel Santiago Terry Sheehan	FEMA ICFF EMA DOT
Monroe County Accident Assessment	Joe Keller	ICF
Monroe County Field Monitoring Teams	Jeanette Eng	EPA
Monroe County Traffic Control Point	Sam Nelson	ICF
Monroe County - Emergency Worker Personnel Monitoring Center - Rochester Operations Center	Gary Goldberg Sam Nelson	ICF ICF
Monroe County - School Bus	Sonia Eischen	ICF

Company - Webster Central School District		
Monroe County - General Population Reception Center - Greece Olympia High School	Sam Nelson	ICF
Monroe County - Special Population Bus Company - Regional Transit Service	Sonia Eischen	ICF
Monroe County - School Interview - Webster Central School District	Sam Nelson	ICF
Monroe County - Medical Services Hospital – Rochester General Hospital	Pat Taylor	ICF
Monroe County - Medical Services Transport – Monroe Ambulance	Sam Nelson	ICF
Wayne County Emergency Operations Center	Chris Cammarata(TL) Robert Duggleby Patricia Mason Kevin Reed	FEMA ICF FEMA FEMA
Wayne County Accident Assessment	Korky Dulgerian	FEMA
Wayne County Field Monitoring Team Red	Michael Leal	FDA
Wayne Area - Medical Services Hospital - Newark Community Hospital	Sam Nelson	ICF
Wayne County - Backup Route Alerting	Robert Duggleby	ICF
Wayne County - Special Population Bus Company – Wayne Area Transport Service	Sam Nelson	ICF
Wayne County - School Interview - Marion Central School District	Sam Nelson	ICF
Wayne County - General Population Reception Center – Newark High School	Ronald Biernacki Glenn Kinnear	ICF ICF
Wayne County - SI - Wayne Technical & Career Center Campus	Robert Duggleby	ICF
Wayne County - Special Population Bus Company – Lyons Central School District	Sam Nelson	ICF
Wayne County - School Bus Company - Marion Central District	Sam Nelson	ICF

Wayne County - School Reception Center - Newark Middle School	Sam Nelson	ICF
Wayne County Traffic Control	Sam Nelson	ICF
Monroe County - Medical Service Transport - Ontario Volunteer Emergency Squad	Sam Nelson	ICF
Wayne County - School Interview - Dyers Daycare	Sam Nelson	ICF

## **APPENDIX 3 EXERCISE EVALUATION AND EXTENT OF PLAY**

### EXTENT-OF-PLAY GROUND RULES

- **REAL LIFE EMERGENCIES TAKE PRIORITY OVER EXERCISE PLAY**
  
- The Scenario Development Team will develop free play messages. The State Controller will inject the message to the County Emergency Management Director/Administrator or other staff for action.
  
- Free play messages for the Plume Phase for Public Inquiry at the JNC will be developed by the Scenario Development Team. Public Inquiry messages will be injected at the JNC by a control cell to enable the public inquiry function to identify trends and rumors.
  
- The State Controller will inject radiological data for any radiological field activities.
  
- According to REP Program Strategic Initiative 1.5, “ During tabletop exercises, drills and other demonstrations conducted out-of-sequence from an integrated exercise, if FEMA and the offsite response organizations (ORO) agree, the FEMA Evaluator may have participants re-demonstrate an activity that is determined to be not satisfactorily demonstrated. Immediate corrective of issues in an integrated exercise is authorized only if it would not be disruptive and interrupt the flow of the exercise and affect other Evaluation Areas.”

## EVALUATION AREA 1: EMERGENCY OPERATIONS MANAGEMENT

### Sub-element 1.a – Mobilization

**Criterion 1.a.1: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner. (NUREG-0654, A.4; D.3, 4; E.1, 2; H.4)**

#### WARNING POINTS (NYS, Wayne & Monroe Counties)

##### Extent-of-Play Agreement:

- The latest revised call lists will be provided at the Federal/State evaluators briefing session the day before the exercise, if requested by FEMA. The lists will contain home and business telephone numbers and it is requested that these lists remain confidential.
- There will be no free play messages introduced at the Warning Points.

#### EOCs (NYS, WAYNE and MONROE Counties)

##### Extent-of-Play Agreement:

- The State Liaison will be pre-positioned in the area and will arrive at the County EOC's no sooner than 30 minutes after the notification is received by the State to mobilize. The Licensee Technical Liaison assigned to the State EOC will be pre-positioned and arrive at the State EOC no sooner than 30 minutes after the notification to respond.

#### EOF

##### Extent-of-Play Agreement:

- State liaisons will be pre-positioned in the area and will arrive at the EOF no sooner than 30 minutes after the notification is received by the State to respond.

JIC

**Extent-of-Play Agreement:**

- **State JIC Staff will be pre-positioned and arrive at the JIC no sooner than 30 minutes after the notification is received by the State to respond.**

**ALUATION AREA 1: EMERGENCY OPERATIONS MANAGEMENT**

**Sub-element 1.b – Facilities**

**Criterion 1.b.1: Facilities are sufficient to support the emergency response.  
(NUREG-0654, H.3)**

**Extent-of-Play Agreement:**

- **Monroe County will demonstrate emergency worker monitoring and decontamination at its new location, the Rochester Operations Center on East Henrietta Road, at a date to be determined.**

## **EVALUATION AREA 1: EMERGENCY OPERATIONS MANAGEMENT**

### **Sub-element 1.c - Direction and Control**

**Criterion 1.c.1: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible. (NUREG-0654, A.1.d; A.2.a., b.)**

#### **Extent-of-Play Agreement:**

- **The State Controller will inject free play messages to the County Emergency Management Director/Administrator or designee for action.**
- **Public Inquiry messages will be injected at the JIC by a “control cell”**

## EVALUATION AREA 1: EMERGENCY OPERATIONS MANAGEMENT

### Sub-element 1.d – Communications Equipment

**Criterion 1.d.1: At least two communication systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations. (NUREG-0654, F.1, 2).**

#### Extent-of-Play Agreement:

- **A State Controller will inject a free play message to the County Emergency Management Director/Administrator to initiate the demonstration of backup systems at/or to communicate from the County EOC's to the EOF, JIC, and Field Monitoring Teams.**

#### Wayne County

	<u>Primary</u>	<u>Backup</u>
SECC	ExHotline	Telephone
EOF	RECS	Telephone
JIC	Telephone	E-Mail
MCEOC	ExHotline/RECS	Telephone
Field Team	RACES	EOC Radio
R/C	Telephone	RACES

#### Monroe County

	<u>Primary</u>	<u>Backup</u>
SECC	ExHotline	Telephone
EOF	RECS	Telephone
JIC	Telephone	E-Mail
WEOC	ExHotline	Telephone
Field Team	RACES	Cell phone
R/C	Telephone	RACES/telephone/cell



## **EVALUATION AREA 1: EMERGENCY OPERATIONS MANAGEMENT**

### **Sub-element 1.e – Equipment and Supplies to Support Operations**

**Criterion 1.e.1: Equipment, maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations. (NUREG-0654, H.7, 10; J.10.a, b, e, J.11; K.3.a)**

#### **Extent-of-Play Agreement:**

- **No equipment such as barriers, traffic cones, signs, etc. will be deployed to the field.**

## EVALUATION AREA 2: PROTECTIVE ACTION DECISION-MAKING

### Sub-element 2.a – Emergency Worker Exposure Control

**Criterion 2.a.1: OROs use a decision-making process, considering relevant factors and appropriate coordination, to insure that an exposure control system, including the use of KI, is in place for emergency workers including provisions to authorize radiation exposure in excess of administrative limits or protective action guides. (NUREG-0654, J.10.e, f; K.4)**

#### Extent-of-Play Agreement:

- **A State Controller will inject a free play message to the field monitoring team that will initiate a discussion between the F/T Coordinator and the field team regarding what actions would be taken if the exposure limits are reached. This will be a discussion only activity.**
- **Wayne County plans do not utilize a turn-back value.**
- **Both Monroe and Wayne Counties are in possession of permanent record OSLD badges.**

## **EVALUATION AREA 2: PROTECTIVE ACTION DECISION-MAKING**

### **Sub-element 2.b. Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency**

**Criterion 2.b.1: Appropriate protective action recommendations are based on available information on plant conditions, field monitoring data, and licensee and ORO dose projections, as well as knowledge of on-site and off-site environmental conditions. (NUREG-0654, I.8, 10 and Supplement 3).**

#### **Extent-of-Play Agreement:**

**All activities will be based on the State/County's plans and procedures as they would in an actual emergency.**

## **EVALUATION AREA 2: PROTECTIVE ACTION DECISION-MAKING**

### **Sub-element 2.b. Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency**

**Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make protective action decisions (PADs) for the general public (including the recommendation for the use of KI, if ORO policy). (NUREG-0654, J.9, 10.f, m).**

#### **Extent-of-Play Agreement:**

**All activities will be based on the State/County's plans and procedures as they would in an actual emergency.**

## **EVALUATION AREA 2: PROTECTIVE ACTION DECISION-MAKING**

### **Sub-element 2.c - Protective Action Decisions Consideration for the Protection of Special Populations**

**Criterion 2.c.1: Protective action decisions are made, as appropriate, for special population groups. (NUREG-0654, J.9, J.10.d, e)**

#### **EXTENT-OF-PLAY AGREEMENT FOR THE FOLLOWING:**

- **TRANSPORTATION DEPENDENT POPULATION**
- **NOTIFICATION OF HEARING IMPAIRED**
- **NON-INSTITUTIONALIZED MOBILITY IMPAIRED INDIVIDUALS**
- **SCHOOLS**
- **SPECIAL FACILITIES**

#### **AGREEMENT:**

**All above activities will be based on the State/County's plans and procedures as they would in an actual emergency.**

## **EVALUATION AREA 2: PROTECTIVE ACTION DECISION-MAKING**

### **Sub-element 2.d. –Radiological Assessment and Decision-Making for the Ingestion Exposure Pathway**

**Criterion 2.d.1: Radiological consequences for the ingestion pathway are assessed and appropriate protective action decisions are made based on the ORO planning criteria. (NUREG-0654, J.9, J.11).**

**NOT TO BE DEMONSTRATED DURING THIS EXERCISE.**

## **EVALUATION AREA 2: PROTECTIVE ACTION DECISION-MAKING**

### **Sub-element 2.e. – Radiological Assessment and Decision-Making Concerning Relocation, Re-entry, and Return**

**Criterion 2.e.1: Timely relocation, re-entry, and return decisions are made and coordinated as appropriate, based on assessments of the radiological conditions and criteria in the ORO's plan and/or procedures. (NUREG-0654, I.10; J.9; M.1)**

**NOT TO BE DEMONSTRATED DURING THIS EXERCISE.**

### **EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION**

#### **Sub-element 3.a – Implementation of Emergency Worker Exposure Control**

**Criterion 3.a.1: The OROs issue appropriate dosimetry and procedures, and manage radiological exposure to emergency workers in accordance with the plans and procedures. Emergency workers periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. (NUREG-0654, K.3.a, b)**

#### **Extent-of-Play Agreement:**

**All activities will be based on the State/County's plans and procedures as they would in an actual emergency.**



## **EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION**

### **Sub-element 3.b – Implementation of KI Decision**

**Criterion 3.b.1: KI and appropriate instructions are available should a decision to recommend use of KI be made. Appropriate record keeping of the administration of KI for emergency workers and institutionalized individuals is maintained. (NUREG-0654, J.10. e)**

#### **Extent-of-Play Agreement:**

**All activities will be based on the State/County's plans and procedures as they would in an actual emergency.**

## **EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION**

### **Sub-element 3.c – Implementation of Protective Actions for Special Populations**

**Criterion 3.c.1: Protective action decisions are implemented for special populations other than schools within areas subject to protective actions. (NUREG-0654, J.10.c, d, g).**

## **EVACUATION OF TRANSPORTATION DEPENDENT POPULATION**

### **Extent-of-Play Agreement:**

- **Bus companies will be interviewed in accordance with the offsite extent of play activities schedule.**
- **Each company will provide a dispatcher and at least 10% of that company's drivers needed to implement the Plan for interview.**
- **During the May 5, 2009 exercise, there will be initial contact with the transportation providers (telephone call) by the Transportation Coordinator. Initial contacts will be actual and some follow-up calls may be simulated. All calls to the transportation provider will be logged at the County EOC's.**
- **There will be no actual dispatch of vehicles during the exercise.**

## **NOTIFICATION OF HEARING IMPAIRED**

### **Extent-of-Play Agreement:**

- **The hearing impaired list will be available for inspection at each County EOC. The list will be reviewed but not retained by the Federal evaluator. The procedures for notification will also be discussed at the County EOC.**
- **There will be no actual notification of hearing impaired individuals during the exercise.**
- **The equipment and location will be identified and observed.**
- **A TDD to TDD test message will be demonstrated between the EOC and 911 location.**

## **EVACUATION OF NON-INSTITUTIONALIZED MOBILITY IMPAIRED INDIVIDUALS**

### **Extent-of-Play Agreement:**

- **The list of non-institutionalized mobility impaired individuals will be available for inspection at the County EOC. The lists will be reviewed but not retained by the Federal evaluator.**
- **There will be no actual dispatch of vehicles for transport of non-institutionalized mobility impaired individuals.**
- **During the exercise, there will be no actual contact of non-institutionalized mobility-impaired individuals identified on the list.**

## **EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION**

### **Sub-element 3.c – Implementation of Protective Actions for Special Populations**

**Criterion 3.c.2: OROs/School officials implement protective actions for schools. (NUREG-0654, J.10.c, d, g).**

### **EVACUATION OF SCHOOL POPULATIONS**

#### **Extent-of-Play Agreement:**

- **Bus companies will be interviewed in accordance with the offsite extent-of-play activities schedule.**
- **Each company will provide a dispatcher and at least 10% of that company's drivers needed to implement the Plan for interview.**
- **During the May 5, 2009 exercise, there will be initial contact with the schools (telephone call) by the School Coordinator. Initial contacts will be actual and some follow-up calls may be simulated. All calls to the Schools will be logged at the County EOC.**

### **SCHOOL INTERVIEWS**

#### **Extent-of-Play Agreement:**

- **One school from each (District) will be interviewed as per the offsite extent-of-play activities schedule.**

### **SPECIAL FACILITIES**

#### **Extent-of-Play Agreement:**

- **During the exercise, there will be initial contact with the special facilities (telephone call). Initial contacts will be actual and some follow-up calls may be simulated. All calls to special facilities will be logged at the County EOC.**
- **There will be no actual dispatch of vehicles to the special facilities.**

## **EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION**

### **Sub-element 3.d. – Implementation of Traffic and Access Control**

**Criterion 3.d.1: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel. (NUREG-0654, J.10.g, j)**

### **TRAFFIC AND ACCESS CONTROL POINTS (TCPs and ACPs)**

#### **Extent-of-Play Agreement:**

- **During the May 5, 2009 exercise, law enforcement officials will discuss how to activate TCPs/ACPs. (EOC Discussion)**
- **Each designated law enforcement agency will provide one officer for interview. Monroe- 1 Deputy Sheriff, 1 Webster Police Officer, Wayne Sheriff- 1 person, NYSP- 1 person as per the EOP activities schedule.**
- **The TCPs/ACPs will be identified by a free play message provided by the State Controller to the County Emergency Management Director/Administrator or designee. Actual travel to the TCP/ACP will not be demonstrated .**
- **No equipment such as barriers, traffic cones, signs, etc will be deployed to the field.**

## **EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION**

### **Sub-element 3.d. – Implementation of Traffic and Access Control**

**Criterion 3.d.2: Impediments to evacuation are identified and resolved.  
(NUREG-0654, J.10.k).**

#### **IMPEDIMENTS TO EVACUATION**

##### **Extent-of-Play Agreement:**

- **The County will demonstrate the organizational ability to deal with at least two (2) impediments to evacuation on the day of the exercise. (EOC Discussion)**
- **The State Controller in the County EOC will hand the free play messages to the County Emergency Management Director/Administrator or designee for action to test the procedures for the removal of traffic impediments.**
- **No equipment (Barriers, Traffic cones, Signs, etc.) will be deployed to the field.**
- **This demonstration will not involve the dispatch of a police or other emergency vehicle to the scene of a simulated impediment on the day of the exercise. Initial contact of resource providers will actually occur. All calls concerning traffic impediments will be logged at the County EOC.**

## **EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION**

### **Sub-element 3.e – Implementation of Ingestion Pathway Decisions**

**Criterion 3.e.1: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk, and agricultural production within the ingestion exposure pathway emergency planning zone for implementation of protective actions. (NUREG-0654, J.9, 11).**

**NOT TO BE DEMONSTRATED DURING THIS EXERCISE.**

## **EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION**

### **Sub-element 3.e – Implementation of Ingestion Pathway Decisions**

**Criterion 3.e.2: Appropriate measures, strategies, and pre-printed instructional material are developed for implementing protective action decisions for contaminated water, food products, milk, and agricultural production. (NUREG-0654, J.9, 11).**

**NOT TO BE DEMONSTRATED DURING THIS EXERCISE.**



## **EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION**

### **Sub-element 3.f. – Implementation of Relocation, Re-entry, and Return Decisions**

**Criterion 3.f.1: Decisions regarding controlled re-entry of emergency workers and relocation and return of the public are coordinated with appropriate organizations and implemented. (NUREG-0654, M.1, 3).**

#### **Extent-of-Play Agreement:**

**NOT TO BE DEMONSTRATED DURING THIS EXERCISE.**

## **EVALUATION AREA 4: FIELD MEASUREMENT AND ANALYSIS**

### **Sub-element 4.a – Plume Phase Field Measurements and Analyses**

**Criterion 4.a.1: The field teams are equipped to perform field measurements of direct radiation exposure (cloud and ground shine) and to sample airborne radioiodine and particulates. (NUREG-0654, H.10; I.7, 8, 9)**

#### **Extent-of-Play Agreement:**

- **The monitoring teams will not be suited up in anti-contamination clothing. However, the clothing will be available for inspection.**

## **EVALUATION AREA 4: FIELD MEASUREMENT AND ANALYSIS**

### **Sub-element 4.a – Plume Phase Field Measurements and Analyses**

**Criterion 4.a.2: Field teams are managed to obtain sufficient information to help characterize the release and to control radiation exposure. (NUREG-0654, H.12; I.8, 11; J.10.a)**

#### **Extent-of-Play Agreement:**

**All activities will be based on the State/County's plans and procedures as they would in an actual emergency.**

## EVALUATION AREA 4: FIELD MEASUREMENT AND ANALYSIS

### Sub-element 4.a – Plume Phase Field Measurements and Analyses

**Criterion 4.a.3: Ambient radiation measurements are made and recorded at appropriate locations, and radioiodine and particulate samples are collected. Teams will move to an appropriate low background location to determine whether any significant (as specified in the plan and/or procedures) amount of radioactivity has been collected on the sampling media. (NUREG-0654, I.9).**

### FIELD MONITORING TEAMS

#### Extent-of-Play Agreement:

- Each County will dispatch one (1) radiological monitoring team. Each team will be provided with a State Controller and FEMA evaluator.
- Each team will take at least six (6) ambient radiation measurements and at least two (2) air samples. All teams must take the air samples as though they were in the presence of the plume (even teams that may not be impacted by the plume).
- Actual contamination control techniques will be demonstrated (with the exception of tyvek suits) and discussed for the first (2) sample sites.
- There will be no actual transport of samples to the laboratory. All arrangements up to transport will be demonstrated. EOC staff will be questioned only regarding means of transportation of air samples to a central point and the location of the laboratory. Field teams will demonstrate how to obtain air samples during the exercise and will be questioned only regarding the procedures for the pick-up point of air samples.

## **EVALUATION AREA 4: FIELD MEASUREMENT AND ANALYSIS**

### **Sub-element 4.b – Post Plume Phase Field Measurements and Sampling**

**Criterion 4.b.1: The field teams demonstrate the capability to make appropriate measurements and to collect appropriate samples (e.g., food crops, milk, water, vegetation, and soil) to support adequate assessments and protective action decision-making. (NUREG-0654, I.8; J.11)**

**NOT TO BE DEMONSTRATED AT THIS EXERCISE.**

## **EVALUATION AREA 4: FIELD MEASUREMENT AND ANALYSIS**

### **Sub-element 4.c - Laboratory Operations**

**Criterion 4.c.1: The laboratory is capable of performing required radiological analyses to support protective action decisions. (NUREG-0654, C.3; J.11)**

**NOT TO BE DEMONSTRATED DURING THIS EXERCISE.**

## EVALUATION AREA 5: EMERGENCY NOTIFICATION & PUBLIC INFORMATION

### Sub-element 5.a – Activation of the Prompt Alert and Notification System

**Criterion 5.a.1: Activities associated with primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include as a minimum the elements required by current FEMA REP guidance. (10 CFR Part 50, Appendix E.IV.D & NUREG-0654, E.5, 6, 7)**

#### Extent-of-Play Agreement:

- **There will be no actual siren sounding, no actual tone alert radio activation, and no broadcasting of EAS messages. The R.E. GINNA siren system was last successfully tested on May 8, 2008. The next test is scheduled for May 7, 2009.**
- **Airing of at least one EAS message will be simulated with the radio station.**
- **Contact with the radio station for subsequent EAS messages may be simulated.**
- **Regular programming responsibilities of the radio station may preclude participation at the time of the issuance of the simulated EAS message.**
- **Wayne and Monroe Counties will perform a silent siren test in sequence with the scenario for the first EAS activation only. If siren failure(s) are indicated on the silent test, procedures will be followed for backup notifications, this activity will be an EOC discussion only. If there is no siren failures indicated by the silent test, a siren failure inject message will be handed to the Emergency Manager/Administrator.**

**EVALUATION AREA 5: EMERGENCY NOTIFICATION & PUBLIC INFORMATION**

**Sub-element 5.a – Activation of the Prompt Alert and Notification System**

Criterion 5.a.2: RESERVED



## **EVALUATION AREA 5: EMERGENCY NOTIFICATION & PUBLIC INFORMATION**

### **Sub-element 5.a – Activation of the Prompt Alert and Notification System**

**Criterion 5.a.3: Activities associated with FEMA approved exception areas (where applicable) are completed within 45 minutes following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. Backup alert and notification of the public is completed within 45 minutes following the detection by the ORO of a failure of the primary alert and notification system. (NUREG-0654, E. 6, Appendix 3.B.2.c).**

#### **Extent-of-Play Agreement:**

- **There are no exception areas that require supplementary route alerting.**
- **During the May 5, 2009 exercise, one (1) simulated siren failure will be discussed at each County EOC. The State Controller will inject a free play message regarding this siren failure to the County Emergency Management Director/Administrator or designee for action to test back up notification procedures.**

**In accordance with the offsite extent-of-play activities schedule,**

- **As per the out of sequence activities schedule, the Wayne County Volunteer Fire Service will provide one representative with a vehicle capable of public notification to actually drive the route for the simulated siren failure as identified by the federal evaluator.**
- **The route alerting demonstration will not include actual vehicle siren sounding or public address announcement of emergency instructions. However, the emergency instructions or message will be read aloud to the Federal evaluator.**
- **Back-up alert and notification of the public is to be completed within 45 minutes following the detection by the ORO of a failure of the primary system. To verify this, during the EOC demonstration, the FEMA EOC evaluator will note how long it takes between when the simulated siren failure is injected by the controller and when the volunteer fire personnel are called upon to run the route. During the actual route alert demonstration, that time will be added to the time it takes to run the route.**
- **In Monroe County, back-up notification is performed via “Hypereach”. All telephone numbers within a siren coverage area have been identified and are able to be contacted by 911 using the Hypereach system. No actual calls will be made during the Hypereach demonstration. This is an EOC discussion.**

## **EVALUATION AREA 5: EMERGENCY NOTIFICATION & PUBLIC INFORMATION**

### **Sub-element 5.b – Emergency Information and Instructions for the Public and the Media**

**Criterion 5.b.1: OROs provide accurate emergency information and instructions to the public and the news media in a timely manner. (NUREG-0654, E. 5, 7; G.3.a, G.4.c).**

#### **PUBLIC INSTRUCTION AND EMERGENCY INFORMATION**

##### **Extent-of-Play Agreement:**

**All activities will be based on the State/County’s plans and procedures as they would in an actual emergency.**

#### **EMERGENCY INFORMATION**

##### **Extent-of-Play Agreement:**

**All activities will be based on the State/County’s plans and procedures as they would in an actual emergency.**

#### **PUBLIC INQUIRY**

##### **Extent-of-Play Agreement:**

- **The public inquiry function at the JIC will be staffed by at least four operators with one supervisor.**
- **Inject messages will indicate false or misleading information to enable the public inquiry function to identify a minimum of 2 trends or false rumors.**
- **Conduct at least 2 actual briefings as selected by the Federal Evaluators. All other briefings will be prepared/developed up to the point of performance of the actual briefing.**

## **EVALUATION AREA 6: SUPPORT OPERATION/FACILITIES**

### **Sub-element 6.a – Monitoring and Decontamination of Evacuees and Emergency Workers, and Registration of Evacuees**

**Criterion 6.a.1: The reception center/emergency worker facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees and/or emergency workers. (NUREG-0654, J.10.h; J.12; K.5.a)**

#### **Extent-of-Play Agreement:**

- **A Reception Center and Emergency Worker PMC will be demonstrated.**
- **Monitoring and Decon techniques will be demonstrated as follows: Staff will be provided to simulate evacuees.**
- **One lane for vehicle monitoring with at least 1 monitor monitoring at least 2 vehicles; (Monroe County may utilize a vehicle portal monitor)**
- **One portal monitoring station monitoring at least 6 individuals;**
- **One registration station (social services) with 2 personnel registering at least 2 individuals each;**
- **One male or one female decon station with 2 monitors to simulate at least 1 personnel decon each;**
- **One vehicle decon station with at least 1 monitor to simulate at least 2 vehicle decons;**
- **Other staff will be demonstrated through the use of rosters;**
- **The facility will be setup as it would be in an actual emergency with all route markings and contamination control measures in place with the exception that Reception Center floors will not be covered with paper/plastic;**
- **Decontamination techniques will be simulated.**
- **The monitoring and decontamination teams will not be suited up in contamination clothing. However, the clothing will be available for inspection.**
- **Normal and backup communications will be discussed between the Reception Center and each County EOC during the demonstration.**

- **EVALUATION AREA 6: SUPPORT OPERATION/FACILITIES**

**Sub-element 6.b – Monitoring and Decontamination of Emergency Worker Equipment**

**Criterion 6.b.1: The facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of emergency worker equipment including vehicles. (NUREG-0654, K.5.b).**

**Extent-of-Play Agreement**

**Each County will set up and demonstrate one EWPMC for local emergency workers in accordance with the Extent of Play schedule.**

**Each PMC will be setup as it would be in an actual emergency. All route markings and contamination control measures will be in place, with the exception that floors may not be covered in paper/plastic. Procedures and techniques for monitoring emergency workers will be demonstrated. Staff will be provided to simulate emergency workers.**

- **One lane for vehicle monitoring, with at least 1 monitor and at least 2 vehicles.**
- **One vehicle decon station with at least 1 monitor to simulate at least 1 vehicle decon.**
- **One personnel decon station with at least 1 monitor to simulate at least 2 personnel decons. (In Wayne County, either the men's or women's decon will be demonstrated. Supplies and equipment will be available for both. Monroe County will demonstrate the male decon and will have staff resources available for the female decon).**
- **Other staff will be demonstrated through the use of rosters.**
- **Monitors will not suit up in anti-contamination clothing, although one monitor may suit up at FEMA's request.**
- **Communications to EOC's will be simulated.**

- **EVALUATION AREA 6: SUPPORT OPERATION/FACILITIES**

**Sub-element 6.c - Temporary Care of Evacuees**

**Criterion 6.c.1: Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with American Red Cross planning guidelines (found in MASS CARE-Preparedness Operations, ARC 3031). Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate prior to entering congregate care facilities. (NUREG-0654, J.10.h, J.12).**

**Extent-of-Play Agreement:**

- 1. Congregate Care Centers will be evaluated, as per out of sequence schedule, as agreed to between FEMA, ARC and the counties.**
- 2. Capabilities will be demonstrated through an interview process between FEMA and ARC.**
- 3. The evaluation of the capabilities will be conducted by FEMA and ARC as specified in the ARC- FEMA Memorandum of Understanding.**
- 4. Monroe County will fulfill this requirement by interviewing ARC at a central location to enable the efficient review of documentation. Facilities in the Greece/Olympia school district will be assessed.**
- 5. Wayne County will fulfill this requirement by interviewing ARC at Chapter Headquarters.**

## **6. EVALUATION AREA 6: SUPPORT OPERATION/FACILITIES**

### **Sub-element 6.d - Transportation and Treatment of Contaminated Injured Individuals**

**Criterion 6.d.1: The facility/ORO has the appropriate space, adequate resources, and trained personnel to provide transport, monitoring, decontamination, and medical services to contaminated injured individuals. (NUREG-0654, F.2; H.10; K.5.a, b; L.1, 4)**

#### **Extent-of-Play Agreement:**

- **The transportation and facility component of this medical drill will be demonstrated in accordance with the offsite extent-of-play agreement schedule.**
- **The facility component of this drill will involve the transport of a patient from the Ginna Site to Rochester General Hospital for treatment. This component will be evaluated in accordance with the exercise schedule.**
- **No flashing lights or sirens will be used on the demonstration day.**
- **The Monroe County EMS demonstration will be demonstrated in accordance with the activities schedule.**

**AREAS REQUIRING CORRECTIVE ACTION**

**Areas Requiring Corrective Action for the Ginna Exercise dated May 5, 2008**

**New York State**

**Issue No: 27-05-3.e.1-A-01**

**State Agriculture and Markets Dairy Farm Database not up-to-date.**

**Resolution: Continued coordination with Ag& Mkts to ensure GIS data bases are current as possible.**

**This will be accomplished with a staff assistance visit.**

**Monroe County**

**Issue No: 27-05-4.a.1-A-06**

**Monroe County Radiological Field Monitoring team did not follow procedure for air sampling.**

**Resolution: Recalibration of air sampling equipment and training on air sampling procedures.**

**CORRECTED JULY 19, 2006**

**Issue No; 27-05-4.a.1-A-07**

**Monroe County Radiological Field Monitoring team did follow procedure for source checking survey instrument.**

**Resolution: The controller stopped the demonstration and indicated that the team should review it's procedures, the team reviewed the document and successfully demonstrated the operation of the instrument. Issue is resolved.**

**CORRECTED JULY 19, 2006**

**Issue No; 27-05-1.e.1-A-09**

**Wayne County Operations room air conditioner not powerful enough to cool work space**

**Resolution: County should consider replacing unit.**



## **APPENDIX 4: Exercise Scenario**

### **Ginna Station**

#### **Emergency Preparedness Evaluated Exercise**

##### SCENARIO SUMMARY AND TIMELINE

#### **Scenario Assumptions**

- A. Scenario operations data was empirically derived to provide the minimum necessary information considered necessary to provide the maximum training opportunity.
- B. Radiological data was empirically derived to support the objectives of the scenario.
- 3.2

#### **Initial Conditions**

1. The R.E. Ginna Nuclear Power Plant has been operating continuously for the past 9 months. The Reactor Coolant System boron concentration is 1048 ppm. Plant core burn up is 10,000 MTUIMTW. Boric Acid Storage Tank concentration is 17,300 ppm.
2. The plant is currently operating at approximately 68% rated thermal power. The "A" heater drain tank pump tripped out which required plant power to be reduced. The pump has been repaired and has recently been started. Maintenance is monitoring the pump operability prior to turning it over to Operations.

General weather conditions are partly cloudy with no current precipitation. For purposes of the Evaluated Exercise, additional meteorological information should be obtained from the plant process computer system (PPCS) and the National Weather Service in Buffalo.

3. The plant is in a 50-50 electrical line up
4. The "A" Reactor Coolant Pump (RCP) oil level has been slowly lowering over the past month. Engineering, Maintenance, Radiation Protection and Operations, using Fleet Procedure CNG-OP-1 .01-1001 Operational Decision

Making, developed a strategy to replenish the oil and inspect the oil collection

system in containment. The strategies were reviewed by the station ALARA Committee and senior station management. A containment entry is scheduled for later today to verify the leak and to fill the upper oil pot.

### **Narrative Scenario Summary**

The Evaluated Exercise begins at the simulator with the simulator crew accepting the watch at 07:30. The plant is operating at 68% rated thermal power.

About 07:55, a 100 gpm leak on the "B" loop of the reactor coolant system due to RCP vibrations. The leak is contained within the reactor containment building. This meets the criteria for the classification of an Alert based on EAL 3.1.2 "Primary System Leakage >46 gpm". Operators should implement EPIP 1-2 "Alert". The entire Ginna ERO will be activated at this time.

About 08:45, the "C" Containment Recirc fan trips. The TSC & OSC should dispatch an Assessment and Repair Team.

About 9:25, the reactor coolant system leak increases in size to 10,000gpm. This causes an automatic reactor trip. On the reactor trip, the turbine does not automatically trip. Due to high steam flow, the Main Steam Isolation Valves (MSIVs) automatically go closed. The 3 Safety injection pumps start to deliver water to the reactor coolant system. Containment pressure increases above 28 psig. One of the two containment spray pumps does not start on the auto-start signal due to a breaker problem. The 3 remaining fans for the containment fan coolers either trip or do not start automatically and cannot be started manually. Due to the large leak, Reactor Vessel Level Indicating System (RVLIS) level drops below 77%. This meets the criteria of a Site Area Emergency based on EAL 3.1.3 "RVLIS cannot be maintained >77% with no RCPs running". Operators should implement EPIP 1-3 "Site Area Emergency".

About 09:35, the "A" Motor Driven Auxiliary Feed water pump trips while running. Operators should take actions to provide adequate feed water flow to the steam generators. The TSC & OSC should dispatch an Assessment and Repair Team.

About 10:30, the Refueling Water Storage Tank (RWST) level reaches 15%. The operators align the Residual Heat Removal (RHR) system from the injection mode to the recirculation mode. When the RHR system is placed in the recirculation mode, the containment radiation monitors (R-29 & R-30) begin to increase.

About 10:50, the containment radiation monitors increase above 100 Whr. This meets the criteria for a General Emergency based on EAL 4.1.4 "Safety injection signal due to LOCA with less than minimum operable containment heat removal equipment (0 containment recirc fans and 1 containment spray pump) AND Containment radiation monitor (R-29/30) reading >100 Whr".

**Protective Action Recommendations are required.**

About 11 :30, a leak develops on the discharge of the "A" RHR pump. This results in elevated auxiliary building radiation levels and elevated readings on the plant vent effluent monitors. A release to the environment starts. The release magnitude is large enough so that dose assessment calculations will require Protective Actions to be recommended beyond 5 miles downwind of the plant.

About 13:00, the RHR system leak is stopped. Plant vent effluent monitors and auxiliary building area radiation monitors start to decrease.

About 13:30 the plant vent effluent monitors have decreased to near background. The release to the environment is terminated.

The Evaluated Exercise will be terminated when the opportunity to demonstrate performance objectives have been provided. A critique will occur in each facility after Evaluated Exercise termination.

Ten (10) Evaluated Drill and Exercise opportunities will be counted in this Evaluated Exercise. They are:

Declaration of an Alert

Notification of an Alert

Declaration of a Site Area Emergency

Notification of a Site Area Emergency

Declaration of a General Emergency

Notification of a General Emergency

Development of Protective Action Recommendations

Notification of Protective Action Recommendations

Development of a Revised Protective Action Recommendation

Notification of a Revised Protective Action Recommendation