Final
Exercise Report

ROBERT E. GINNA
NUCLEAR POWER STATION

Licensee:	**Rochester Gas & Electric**
Exercise Date:	**March 4, 2003**
Report Date:	**November 10, 2003**

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

TABLE OF CONTENTS

List of Appendices

List of Tables

I. EXECUTIVE SUMMARY

On March 4, 2003 an exercise was conducted in the 10-mile Plume Exposure Pathway, emergency planning zone (EPZ) around the Robert E.Ginna Nuclear Power Station by the State and local governments and evaluated by the Federal Emergency Management Agency (FEMA) Region II. The purpose of the exercise was to assess the level of State and local preparedness in responding to a radiological emergency. This exercise was held in accordance with the Federal Emergency Management Agency's (FEMA's) policies and guidance concerning the exercise of State and local radiological emergency response plans (RERPs) and procedures.

The most recent full-scale exercise at this site was conducted on June 6, 2001. The qualifying emergency preparedness exercise was conducted on January 21, 1982.

FEMA wishes to acknowledge the efforts of the many individuals in New York State, Monroe County and Wayne County who participated in 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:

Function	Date	Location
Monroe County		
Monroe County Reception Center	3/14/03	Greece Olympia High School
Monroe County Congregate Care	3/14/03	Greece Olympia High School
Monroe County School Interviews	3/5/03	Webster School District
Monroe School Evacuation Bus Co. Interview	3/5/03	Webster School District
Monroe Special Population Bus Co. Interview	3/5/03	Regional Transit Service
Monroe County MS-1 Drill	7/16/03	Rochester General Hospital Rural Metro Medical Services
Wayne County		
Wayne County Reception Center	3/4/03	Palmyra – Macedon High School
Wayne County Congregate Care	3/5/03	ARC Interview
Wayne County School Interviews	3/12/03	Williamson Central School District Wayne Central School District Totspot Day Care
	3/13/02	Marion Central School District Williamson Cooperative Nursery School

Function	Date	BOCES Location
Wayne County (Cont'd)		
Wayne County School Evacuation Bus Co. Interviews	3/12/03	Gananda Central School District
	3/12/03	Wayne Central School District
	3/12/03	Williamson Central School District
	3/13/03	Newark School District
Wayne County Special Population Bus Co. Interviews	3/13/03	Wayne Area Transit Service
Wayne County MS-1 Drill	3/17/02	Palmyra High School

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 were no Deficiencies and six Areas Requiring Corrective Action (ARCA) identified as a result of this exercise.

II. INTRODUCTION

On December 7, 1979, the President directed FEMA to assume the lead responsibility for all offsite nuclear planning and response. FEMA's activities are 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.

FEMA Rule 44 CFR 350 establishes the policies and procedures for FEMA's initial and continued approval of 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 the RERP and associated 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 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 Regional Assistance Committee (RAC), which is chaired by FEMA.

Formal submission of the RERPs for the Robert E. Ginna Nuclear Power Station to FEMA Region II by the State of New York, Monroe County and Wayne County occurred on June 17, 1985. Formal approval of the RERPs was granted by FEMA on August 19, 1986, under 44 CFR 350.

A REP exercise was conducted on March 4, 2003, by FEMA Region II 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 the 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 offsite response organizations (ORO) 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 the Regional Director.

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

- 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 (hereafter referred to as NUREG-0654);

- FEMA Interim REP Program Manual, August 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 EPZ, a listing of all participating jurisdictions and functional entities which were evaluated, and a tabular presentation of the time of actual occurrence of key exercise events and activities.

Section IV of this report, titled "Exercise Evaluation and Results," presents detailed information on the demonstration of applicable exercise criteria at each jurisdiction or functional entity evaluated in a jurisdiction-based, issues-only format. This section also contains: (1) descriptions of all Deficiencies and ARCAs assessed during this exercise, recommended corrective actions, and the State and local governments' schedule of corrective actions for each identified exercise issue and (2) descriptions of unresolved ARCAs assessed during previous exercises and the status of the OROs' efforts to resolve them.

III. EXERCISE OVERVIEW

Contained in this section are data and basic information relevant to the March 4, 2003 exercise to test the offsite emergency response capabilities in the area surrounding the Robert E. Ginna Nuclear Power Station. This section of the exercise report includes a description of the plume pathway EPZ, a listing of all participating jurisdictions and functional entities, which 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 (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 mucklands 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

The following agencies, organizations, and units of government participated in the Robert E. Ginna Nuclear Power Station exercise on March 4, 2003.

STATE OF NEW YORK

New York State Agencies/Organizations -

- New York State Emergency Management Office
- New York State Department of Health
- New York State Police
- New York State Department of Education
- New York State Department of Transportation
- New York State Department of Social Services
- New York State Department of Labor
- New York State Disaster Preparedness Commission
- New York State Department of Agriculture and Markets
- New York State Guard
- New York State Department of Environmental Conservation

Federal Agencies/Organizations -

- U.S. Nuclear Regulatory Commission

Private/Volunteer Organizations -

- RACES
- Greater Rochester American Red Cross
- Salvation Army
- New York Power Authority
- State University of New York

RISK JURISDICTIONS

MONROE COUNTY

County Agencies/Organizations

- Monroe County Office of the County Executive
- Monroe County Office of Emergency Preparedness
- Monroe County Sheriff
- Monroe County Department of Communications and Special Events
- Monroe County Department of Environmental Services
- Monroe County Health Department
- Monroe County Law Department
- Monroe County Fire Bureau

Monroe County Security Department
Monroe County Social Services
Monroe County Department of Transportation
Monroe County Information Services
Monroe County Public Safety Communications Department
Monroe County Public Safety
Monroe County Water Authority
Monroe County Shelter/Evacuation
Rochester Emergency Communications Dept./911
Rochester Police Department
Rochester Fire Department
Webster School District
Webster Police Department
Emergency Medical Services and Private Organizations
WHAM Radio

New York State Agencies/Organizations -

New York State Police
New York Department of Transportation
New York State Agriculture and Markets
New York State Department of Health

Private/Volunteer Organizations -

Rochester Gas and Electric
RACES
Lift Line
Greater Rochester American Red Cross
Regional Transit System

WAYNE COUNTY

County Agencies/Organizations -

Wayne County Board of Supervisors
Wayne County Emergency Management Office
Wayne County Weights and Measures Department
Wayne County Department of Health
Wayne County Sheriffs Department
Wayne County Department of Emergency Medical Services
Wayne County School District
Wayne County Department of Highways
Wayne County Department of Public Health
Wayne County Social Services
Wayne County Fire/Ambulance Services

Ontario Fire Department
Palmyra Fire District
Palmyra School District
Marion School District
Wayne School District
Sodus School District
Williamson School District
Lyons School District

New York State Agencies/Organization -

New York State Police
New York State Health Department
New York State Department of Agriculture and Markets
New York State Department of Health

Private/Volunteer Organizations -

RACES
Rochester Gas & Electric
Greater Rochester American Red Cross
Civil Air Patrol

SUPPORT JURISDICTIONS

N/A

PRIVATE/VOLUNTEER ORGANIZATIONS

Radio Station WHAM
RACES
American Red Cross
Civil Air Patrol
St. John's Fisher College - journalism students (mock media at JNC)

C. Exercise Timeline

Table 1, on the following page, presents the time at which key events and activities occurred during the Robert E. Ginna Nuclear Power Station exercise on March 4, 2003. Also included are times notifications were made to the participating jurisdictions/functional entities.

TABLE 1 – TIMELINE

March 4, 2003 - Robert E. Ginna Nuclear Power Plant

Emergency Classification Level or Event	Time Utility Declared	Time That Notification Was Received or Action Was Taken			
		SEOC	JNC	MCEOC	WCEOC
Alert	08:17	08:20	N/O	08:22	08:21
Site Area Emergency	09:28	09:32	09:30	09:40	09:39
General Emergency	10:20	10:20	10:20	10:38	10:26
Simulated Rad. Release Started	11:15	11:27	11:19	11:15	11:27
Simulated Rad. Release Terminated	13:45	13:45	13:45	13:06	13:35
Facility Declared Operational		09:15	09:05	09:24	09:25
Declaration of State of Emergency		N/A	None	None	09:54
Exercise Terminated		13:54	14:40	14:00	14:40
Decision - Early Precautionary Actions: Evacuate Schools and Day Care Centers		09:54	09:54	09:54	09:54
1st Siren Activation		10:05	10:05	10:05	10:05
1st EAS Message		10:09	10:09	10:09	10:09
2ND Protective Action Decision Shelter: M23456789 W4567 Evacuate: M1 W123		10:47	10:47	10:47	10:47
2nd Siren Activation		10:58	10:58	10:58	10:58
2nd EAS Message		11:02	11:02	11:02	11:02
3st Protective Action Decision Shelter: M23456789 W4567 Evacuate: M1 W123		11:52	11:52	11:52	11:52
3rd Siren Evacuation		12:03	12:03	12:03	12:03
3rd EAS Message		12:07	12:07	12:07	12:07
KI Administration Decision: No KI for Emergency Workers		12:43	NA	NA	12:45
LEGEND: NA = Not Applicable					

V. EXERCISE EVALUATION AND RESULTS

Contained in this section are the results and findings of the evaluation of all jurisdictions and functional entities which participated in the March 4, 2003 exercise to test the offsite emergency response capabilities of State and local governments in the 10-mile EPZ surrounding the Robert E. Ginna Nuclear Power Station.

Each jurisdiction and functional entity was evaluated on the basis of its demonstration of criteria delineated in exercise criterion contained in the FEMA Interim REP Program Manual, August 2002. Detailed information on the exercise criteria and the extent-of-play agreement used in this exercise are found in Appendix 3 of this report.

A. Summary Results of Exercise Evaluation - Table 2

The matrix presented in Table 2, on the following page(s), presents the status of all exercise criterion from FEMA-REP-14 that were scheduled for demonstration during this exercise by all participating jurisdictions and functional entities. Exercise criterion are listed by number and the demonstration status of those criterion 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 - ARCA(s) assessed or unresolved ARCA(s) from prior exercise(s)

N - Not Demonstrated (Reason explained in Subsection B)

GINNA NPS

4-Mar-03

NEW YORK STATE OPS	Mobilization	Facilities	Direction & Control	Communications Equipment	Equipment & Supplies to Support Operations	Emergency Worker Exposure Control	Rad Assmt PARs Based on Avail Information	Rad Assmt PADs for General Public	Prot Action Decisions for Special Population's	Rad Assmt & Decision Making for Ingest Exposure	Rad Assmt & Dec Making for Relo/Re-entry/& Return	Implementation of Emergency Wrkr Exposure Control	Implementation of KI Decision	Implementation of PADs for Special Population's	Implementation of PADs for Schools	Implementation of Traffic Access & Control	Impediments to Evac & Traf are Identified & Resolved	Implementation of Ingestion Pathway Decisions	Impl of IP Decisions Show Strat & Instr Material	Impl of Relocation/Re-entry/Return Decisions	Plume Phase Measurement & Analysis Equip	Plume Phase Field Measurement & Analysis Mgmt	Plume Phase Fld Measurements & Analysis Proced	Post Plume Phase Field Measurements & Sampling	Laboratory Operations	Activation of Prompt Alert & Notification	Activation Prompt Alert & Notif 15 Min (Fast Breaker	Activation Prompt Alert & Notif in Exception Areas	Emerg Info & Instructions for the Public & Media	Monitoring/Decon/Registration of Evacuees & EWs	Monitoring & Decon of Emerg Worker Equipment	Temporary Care of Evacuees	Trans & Treatment of Contam Injured Individuals
	EMERGENCY OPNS MANAGEMENT					PROTECTIVE ACTION DECISION-MAKING						PROTECTIVE ACTION IMPLEMENTATION									FIELD MEASUREMENT & ANALYSIS					EMERG NOTIF & PUBLIC INFO				SUPPORT OPN/FACILITIES			
	1a1	1b1	1c1	1d1	1e1	2a1	2b1	2b2	2c1	2d1	2e1	3a1	3b1	3c1	3c2	3d1	3d2	3e1	3e2	3f1	4a1	4a2	4a3	4b1	4c1	5a1	5a2	5a3	5b1	6a1	6b1	6c1	6d1
EOC	A	M	M	M				M	M					M												M			M				
Dose Assessment					M	A	M																			M			M				
Joint News Center	M	M	M	M	A																					M			M				
EAS Station				M																									M				
EOF	M	M	M	M	M																												

M - Met (No Deficiency or ARCA(s) Assessed and no Unresolved ARCAs from Prior Exercises
N - Not Demonstrated as Scheduled (Reason Explained in Section IV.B)
Blank - Not Scheduled forf Demonstration or Not Assigned to Facility/Function

A - ARCA(s) Assessed or Unresolved ARCA(s) from Prior Exercises
A1- ARCA Assessed and Corrected
D - Deficiency

TABLE 2

GINNA NPS

4-MAR-03

Monroe County	Mobilization	Facilities	Direction & Control	Communications Equipment	Equipment & Supplies to Support Operations	Emergency Worker Exposure Control	Rad Assmt PARs Based on Available Information	Rad Assmt PADs for General Public	Prot Action Decisions for Special Population's	Rad Assmt & Decision Making for Ingest Exposure	Rad Assmt & Dec Making for Relo/Re-entry/& Return	Implementation of Emergency Wrkr Exposure Control	Implementation of KI Decision	Implementation of PADs for Special Population's	Implementation of PADs for Schools	Implementation of Traffic Access & Control	Impediments to Evac & Traf are Identified & Resolved	Implementation of Ingestion Pathway Decisions	Impl of IP Decisions Show Strat & Instr Material	Impl of Relocation/Re-entry/Return Decisions	Plume Phase Measurement & Analysis Equip	Plume Phase Field Measurement & Analysis Mgmt	Plume Phase Fld Measurements & Analysis Proced	Post Plume Phase Field Measurements & Sampling	Laboratory Operations	Activation of Prompt Alert & Notification	Activation Prompt Alert & Notif 15 Min (Fast Breaker)	Activation Prompt Alert & Notif in Exception Areas	Emerg Info & Instructions for the Public & Media	Monitoring/Decon/Registration of Evacuees & EWs	Monitoring & Decon of Emerg Worker Equipment	Temporary Care of Evacuees	Trans & Treatment of Contam Injured Individuals
	EMERGENCY OPNS MANAGEMENT					PROTECTIVE ACTION DECISION-MAKING						PROTECTIVE ACTION IMPLEMENTATION									FIELD MEASUREMENT & ANALYSIS					EMERG NOTIF & PUBLIC INFO				SUPPORT OPN/FACILITIES			
	1a1	1b1	1c1	1d1	1e1	2a1	2b1	2b2	2c1	2d1	2e1	3a1	3b1	3c1	3c2	3d1	3d2	3e1	3e2	3f1	4a1	4a2	4a3	4b1	4c1	5a1	5a2	5a3	5b1	6a1	6b1	6c1	6d1
EOC	M	M	M	M	M	M	M	M	M			M	M	M	M	M	M					M				M		M	M				
Dose Assesment	M	M				M	M					M	M								M		M										
Field Monitoring Team	M			M	M							M	M																				
Warning Point	M	M		M	M																												
Webster School District Evacuation												M	M		M															M			
Reception Center												M	M																			M	
Congregate Care Centers																																	
School Bus Company Special Population												M	M		M																		
Traffic Control Point												M	M			M																	
Personnel Monitoring Center												M	M																		M		
School Interviews															M																		
Medical Drill												M	M																				M

M - Met (No Deficiency or ARCA(s) Assessed and no Unresolved ARCAs from Prior Exercises)
N - Not Demonstrated as Scheduled (Reason Explained in Section IV.B)

A - ARCA(s) Assessed or Unresolved ARCA(s) from Prior Exercises
Blank - Not Scheduled for Demonstration
D - Deficiency

TABLE 2. SUMMARY RESULTS OF EXERCISE EVALUATION

GINNA NPS

4-MAR-03

Wayne County	Mobilization	Facilities	Direction & Control	Communications Equipment	Equipment & Supplies to Support Operations	Emergency Worker Exposure Control	Rad Assmt PARs Based on Avail Information	Rad Assmt PADs for General Public	Prot Action Decisions for Special Population's	Rad Assmt & Decision Making for Ingest Exposure	Rad Assmt & Dec Making for Relo/Re-entry/& Return	Implementation of Emergency Wrkr Exposure Control	Implementation of KI Decision	Implementation of PADs for Special Population's	Implementation of PADs for Schools	Implementation of Traffic Access & Control	Impediments to Evac & Traf are Identified & Resolved	Implementation of Ingestion Pathway Decisions	Impl of IP Decisions Show Strat & Instr Material	Impl of Relocation/Re-entry/Return Decisions	Plume Phase Measurement & Analysis Equip	Plume Phase Field Measurement & Analysis Mgmt	Plume Phase Fld Measurements & Analysis Proced	Post Plume Phase Field Measurements & Sampling	Laboratory Operations	Activation of Prompt Alert & Notification	Activation Prompt Alert & Notif 15 Min (Fast Breaker)	Activation Prompt Alert & Notif in Exception Areas	Emerg Info & Instructions for the Public & Media	Monitoring/Decon/Registration of Evacuees & EWs	Monitoring & Decon of Emerg Worker Equipment	Temporary Care of Evacuees	Trans & Treatment of Contam Injured Individuals
	EMERGENCY OPNS MANAGEMENT					PROTECTIVE ACTION DECISION-MAKING						PROTECTIVE ACTION IMPLEMENTATION									FIELD MEASUREMENT & ANALYSIS					EMERG NOTIF & PUBLIC INFO				SUPPORT OPN/FACILITIES			
	1a1	1b1	1c1	1d1	1e1	2a1	2b1	2b2	2c1	2d1	2e1	3a1	3b1	3c1	3c2	3d1	3d2	3e1	3e2	3f1	4a1	4a2	4a3	4b1	4c1	5a1	5a2	5a3	5b1	6a1	6b1	6c1	6d1
EOC	M	M	M	M	M	M	M	M	M			M	M	M	M	M	M					M				M		M	M				
Dose Assesment						M	M					M	M									M											
Field Monitoring Team - Blue	M			M	M							M	M								M		M									
Field Monitoring Team - Red	M			M	M							M	M								A		A									
Warning Point	M	M		M	M																												
School Evacuation												M	M		M															M		
Reception Center												M	M																			M	
Congregate Care																																	
School Bus Company Special Population												M	M	M																	M		
Personnel Monitoring Center												M	M																				M
Medical Drill															M																		
School Interviews												M	M			M																	
Traffic Control Points																																	

M - Met (No Deficiency or ARCA(s) Assessed and no Unresolved ARCAs from Prior Exercises
N - Not Demonstrated as Scheduled (Reason Explained in Section IV.B)
D - Deficiency

A - ARCA(s) Assessed or Unresolved ARCA(s) from Prior Exercises
Blank - Not Scheduled for Demonstration

B. Status of Jurisdictions Evaluated

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

- **Met** - Listing of the demonstrated exercise 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 criteria under which one or more Deficiencies was assessed during this exercise. Included is a description of each Deficiency and recommended corrective actions.

- **Area Requiring Corrective Actions** - Listing of the demonstrated exercise criteria under which one or more ARCAs were assessed during the current exercise or ARCAs assessed during prior exercises remain unresolved. Included is a description of the ARCAs assessed during this exercise and the recommended corrective action to be demonstrated before or during the next biennial exercise.

- **Not Demonstrated - Listing** of the exercise criteria which were not demonstrated as scheduled during this exercise 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 is the reason the ARCA remains 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 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 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."

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 Criteria Number** – An alphanumeric corresponding to the evaluation criterion in the FEMA Interim REP Program Manual (e.g., 1.a.1).
- **Issue Classification Identifier** - (D = Deficiency, A = ARCA). Only Deficiencies and ARCAs are included in exercise reports.
- **Exercise Issue Identification Number** - A separate two (or three) digit indexing number assigned to each issue identified in the exercise.

1 NEW YORK STATE

New York State EOC

1.1 State Emergency Operations Center (SEOC)

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

b. **DEFICIENCY:** NONE

c. **AREAS REQUIRING CORRECTIVE ACTION:** ONE

Issue No.: 27-03-1.a.1-A-01

Criterion: 1.a.1

Condition: New York State Department of Health Liaison to Wayne County was not contacted during the alert and notification process.

Possible Cause: This may have been an oversight due to the fact that New York State personnel were pre-positioned in the Ginna NPS area for the exercise.

References: NUREG-0654, E.1, 2; H.4; State REPP, Section III, 2.3.3 and Procedure B – Communications/Warning, Attachment 10, State Notification and Activation List.

Effect: The NYS DOH Liaison, not having been contacted by the NYS DOH, was late in getting to the Wayne County EOC.

Recommendation: Review and, if necessary, revise State-level alert and notification procedures to ensure that the State DOH Liaison to Wayne (and Monroe) County is to be contacted promptly. Ensure that notification and mobilization procedures are followed during both exercises and actual events.

d. **NOT DEMONSTRATED:** NONE

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

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

1.2 State Warning Point

a. MET: Evaluation Criteria: 1.a.1; 1.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

1.3 Dose Assessment

NY State Dose Assessment

a. MET: Evaluation Criteria: 1.e.1; 2.b.1

b. DEFICIENCY: NONE

c. AREAS REQUIRING CORRECTIVE ACTION: ONE

Issue No.: 27-03-2.a.1-A-02

Criterion: 2.a.1

Condition: Although the plan procedure was followed it does not appear that SDAT took into account field data that indicated very high particulate counts such as the 110000 cpm compared to 2200 cpm iodine obtained at 1210 hours by a utility field team at the sw corner of the parking lot.

Possible Cause: An over reliance on RASCAL program projections which was confirmed by most field monitoring data may have resulted in a lower consideration of some out of line field data.

Reference: NUREG-0654, K.4

Effect: The determination that no correction factor was necessary may have underestimated the TEDE.

Recommendation: All field data should be considered valid and the TEDE

correction should not be made until after laboratory analysis confirms the isotopic content of the samples.

d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ARCAs** - NONE

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

1.4 **Emergency Operations Facility (EOF)**

a. **MET:** Evaluation Criteria: 1.a.1; 1.b.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

1.5 **Joint News Center (JNC)**

a. **MET:** Evaluation Criteria: 1.a.1; 1.b.1; 1.c.1; 1.d.1; 5.a.1; 5.b.1

b. **DEFICIENCY:** NONE

c. **AREAS REQUIRING CORRECTIVE ACTION:** TWO

Issue No.: 27-03-1.e.1-A-03

Criterion: 1.e.1

Condition: The Media briefing room has recently been relocated to a newly renovated section of the first floor of the Rochester Gas & Electric Company's Headquarters building. There is an inadequate selection of local maps, diagrams of the plant, ECL status indicator and ERPA graphics making it difficult for the media to provide full coverage of operations and emergency actions. The media will be looking for adequate graphic materials to provide current, concise and up to date information for presentation to the public. Availability of these materials is extremely important to the electronic broadcast media.

Possible Cause: Possibly overlooked during the renovation and move to the new first floor room.

References: NUREG-0654, J.10.a., b., h.; Ginna Joint News Center Procedures and Public Education Work Plan 2003, p. 3, Media Briefing Room Resources.

Effect: The lack of visual aids may cause media and public confusion. The items listed above would provide information to the media to identify plant conditions, evacuation routes, and other vital information to assist the public.

Recommendation: Identify graphics useful to the media and post visual aids.

Issue No.: 27-03-1.e.1-A-04

Criterion: 1.e.1

Condition: There were no telephone connections for the media to use in the Media Briefing Room.

Possible Cause: The Media Briefing Room has recently been relocated to a newly renovated section of the first floor of the Rochester Gas & Electric Company's Headquarters building.

References: NUREG-0654, J.10.a, b, h; Ginna Joint News Center Procedures and Public Education Work Plan 2003, p. 3, Media Briefing Room Resources.

Effect: The media will not be able to convey the information being provided to them to their news outlets.

Recommendation: Install telephone connections for the media to use in or near to the Media Briefing Room.

d. **NOT DEMONSTRATED:** NONE

e. **PRIOR ARCAs** - NONE

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

1.6. Emergency Alert System Radio Station - WHAM

a. **MET:** Evaluation Criteria: 1.d.1; 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 RISK JURISDICTIONS

2.1 MONROE COUNTY

2.1.1 Monroe County Emergency Operations Center (MCEOC)

MET: Evaluation Criteria: 1.a.1; 1.b.1; 1.c.1; 1.d.1; 1.e.1
2.a.1; 2.b.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.a.3; 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 Dose Assessment

a. MET: Evaluation Criteria: 1.a.1; 1.b.1; 2.a.1; 2.b.1; 3.a.1; 3.b.1; 4.a.2

b. DEFICIENCY: NONE

c. AREAS REQUIRING CORRECTIVE ACTION: NONE

d. NOT DEMONSTRATED: NONE

e. PRIOR ARCAs - RESOLVED:

f. PRIOR ARCAs - UNRESOLVED: NONE

2.1.3 Monroe County Radiological Field Monitoring Team

a. MET: Evaluation Criteria: 1.a.1; 1.d.1; 1.e.1; 3.a.1; 3.b.1; 4.a.1; 4.a.3

b. DEFICIENCY: NONE

c. AREAS REQUIRING CORRECTIVE ACTION: NONE

d. NOT DEMONSTRATED: NONE

e. PRIOR ARCAs - RESOLVED: NONE

e. PRIOR ARCAs - RESOLVED: NONE

f. PRIOR ARCAs - UNRESOLVED: NONE

2.1.4 Monroe County Warning Point

a. MET: Evaluation Criteria: 1.a.1; 1.b.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

2.1.5 School Evacuation (Webster School District, March 5, 2003)

a. MET: Evaluation Criteria: 3.a.1; 3.b.1; 3.c.2

b. DEFICIENCY: NONE

c. AREAS REQUIRING CORRECTIVE ACTION:

d. NOT DEMONSTRATED: NONE

e. PRIOR ARCAs - RESOLVED: NONE

f. PRIOR ARCAs - UNRESOLVED: NONE

2.1.6 Reception Center (Greece Olympia High School, March 14, 2003)

a. MET: Evaluation Criteria: 3.a.1; 3.b.1; 6.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

2.1.7 **Congregate Care Center (Red Cross Interview, March 5, 2003)**

a. **MET:** Evaluation Criteria: 6.c.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 **Special Population Bus Run (Regional Transit Service, March 5, 2003)**

a. **MET:** Evaluation Criteria: 3.a.1; 3.b.1; 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 **Traffic Control Points (2)**

a. **MET:** Evaluation Criteria: 3.a.1; 3.b.1; 3.d.1

b. **DEFICIENCY:** NONE

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

d. NOT DEMONSTRATED: NONE

e. PRIOR ARCAs - RESOLVED: NONE

f. PRIOR ARCAs - UNRESOLVED: NONE

2.1.10 Personnel Monitoring Center (Culver Road Armory)

a. MET: Evaluation Criteria: 3.a.1; 3.b.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

2.1.11 School Interviews (Webster Central School District – March 5, 2003)

a. MET: Evaluation Criteria: 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

2.1.12 Medical Drill (Transportation & Facilities on July 16, 2003 – Rochester General Hospital)

a. MET: Evaluation Criteria: 3.a.1; 3.b.1; 6.d.1

b. DEFICIENCY: NONE

c. AREAS REQUIRING CORRECTIVE ACTION: NONE

d. **NOT DEMONSTRATED:** NONE

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

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

2.1.13 **Medical Drill (Rural Metro - July 16, 2003)**

a. **MET:** Evaluation Criteria: 3.a.1; 3.b.1; 6.d.1

b. **DEFICIENCY:** NONE

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

d. **NOT DEMONSTRATED:** NONE

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

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

2.2 WAYNE COUNTY

2.2.1 Wayne County Emergency Operations Center (WCEOC)

a. MET: Evaluation Criteria: 1.a.1; 1.b.1; 1.c.1; 1.d.1; 1.e.1
2.a.1; 2.b.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
4.a.2
5.a.1; 5.a.3; 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

2.2.2 Wayne County Dose Assessment

a. MET: Evaluation Criteria: 2.a.1; 2.b.1; 3.a.1; 3.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 Radiological Field Monitoring Teams

Wayne County Field Team - Blue

a. MET: Evaluation Criteria: 1.a.1; 1.d.1; 1.e.1; 3.a.1; 3.b.1; 4.a.1; 4.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

Wayne County Field Team – Red

a. **MET:** Evaluation Criteria: 1.a.1; 1.d.1; 1.e.1; 3.a.1; 3.b.1

c. **DEFICIENCY:** NONE

d. **AREAS REQUIRING CORRECTIVE ACTION:** TWO

Issue No.: 27-03-4.a.1-A-05

Criterion: 4.a.1

Condition: FMT-Red did not follow their operational checklist procedures. During equipment readiness verification, a FMT-Red team member was questioned whether or not a particular survey meter was operational, noting that a battery power check had not been made. This inquiry prompted the team member to go back through the operational checklist. The team member with the inventory checklist walked the other member through the standard operating procedure and they discover that the batteries for the detector in question are dead. This event had the positive effect of prompting the members of FMT-Red to follow their operating procedures more closely. The result was the eventual finding that many of the meters and instruments to be taken into the field were equipped with dead batteries, i.e., not operational.

Possible Cause: It is possible that FMT-Red, in their hurry to make up for time lost replacing batteries, rushed through the operating procedures, not realizing that the survey meter was not operational.

Reference: Wayne County Emergency Response Plan, Procedure 11.

Effect: Field instrumentation that is not operating properly can lead to erroneous measurements being taken and reported from the field. Instruments that are not equipped with batteries that work will not register a reading at all. The effect of this issue is twofold. The first effect is personnel exposure if workers cannot measure the presence of radiation. Secondly, dose assessment uses field measurements to refine PARs; erroneous data could adversely impact public

health.

Recommendation: Better training of offsite response personnel in the standard operating procedures of monitoring equipment will alleviate this possible problem. It is recommended that better and more frequent training sessions be conducted.

Issue No.: 27-03-4.a.3-A-06

Criterion: 4.a.3

Condition: FMT-Red did not follow their procedures. The team did not perform open and closed window readings when they identified elevated radiation levels on their instruments and did not perform open and closed window readings when taking the plume air sample. The sample data form requires this data input and it was not requested by the FMT coordinator when the team communicated the results of the air sample with him.

Possible Cause: FMT-Red was inexperienced in using the field monitoring instrumentation and unfamiliar with their procedures. A general lack of understanding of the significance of open and closed window meter readings is evident. The FMT coordinator may have assumed that the measurements would be taken.

Reference: NUREG-0654, I.8., 9., 11.; Wayne County Radiological Emergency Response Plan, Procedure 11.

Effect: Dose assessment relies on the field data to refine PARs. The FMT coordinator directed the team to collect an air sample from inside the plume. Without open and closed window survey meter readings, the team did not confirm that they were within the plume and reported incomplete and possibly erroneous data back to the FMT coordinator. The field team, therefore, potentially spent time within the plume collecting samples that may not be useful to the dose assessment team.

Recommendation: The field monitoring team personnel could be better trained in the underlying significance of each of the instrumental readings. Also, it would benefit the field teams to work together more effectively. In this case, mixing some of the more experienced team members from FMT-Blue with new members of FMT-Red would have been an effective way of evenly spreading the experience and training out between the two teams. Lastly, simply training the field response personnel to refer to the standard operating procedures at all times would prevent these sorts of mistakes.

d. NOT DEMONSTRATED: NONE

e. PRIOR ARCAs - RESOLVED: NONE

f. PRIOR ARCAs - UNRESOLVED: NONE

2.2.4 Wayne County Warning Point

a. MET: Evaluation Criteria: 1.a.1; 1.b.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

2.2.5 School Evacuation (2: Gananda (Wayne Central School District) and Williamson (Williamson Central School District)

a: MET: Evaluation Criteria: 3.a.1; 3.b.1; 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

2.2.6 **Reception Center (Newark High School - March 14, 2003)**

a. **MET:** Evaluation Criteria: 3.a.1; 3.b.1; 6.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

2.2.7 **Congregate Care Centers (Red Cross Interview – March 5, 2003)**

a. **MET:** Evaluation Criteria: 6.c.1

b. **DEFICIENCY:** NONE

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

d. **NOT DEMONSTRATED:** NONE

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

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

2.2.8 **Special Population Bus Run (March 13, 2003)**

a. **MET:** Evaluation Criteria: 3.a.1; 3.b.1; 3.c.1

b. **DEFICIENCY:** NONE

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

d. **NOT DEMONSTRATED:** NONE

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

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

2.2.9 Personnel Monitoring Center (County Complex)

a. MET: Evaluation Criteria: 3.a.1; 3.b.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

2.2.10 School Interviews (6 Locations: Williamson Central School District, Wayne Central School District, and Totspot Day Care on March 12, 2003; BOCES (Sodus Central School District), Marion Central School District, and Williamson Cooperative Nursery School on March 13, 2003).

a. MET: Evaluation Criteria:

b. DEFICIENCY: NONE

c. AREAS REQUIRING CORRECTIVE ACTION: NONE

d. NOT DEMONSTRATED: NONE

e. PRIOR ARCAs - RESOLVED: NONE

f. PRIOR ARCAs - UNRESOLVED: NONE

2.2.11 Traffic Control Points (2)

a. MET: Evaluation Criteria: 3.a.1; 3.b.1; 3.d.1

b. DEFICIENCY: NONE

c. AREAS REQUIRING CORRECTIVE ACTION: NONE

d. NOT DEMONSTRATED: NONE

e. PRIOR ARCAs - RESOLVED: NONE

f. PRIOR ARCAs - UNRESOLVED: NONE

2.2.12 Medical Drill (Transportation and Facilities on July 17, 2002 at Newark Community Hospital)

a. MET: Evaluation Criteria 3.a.1; 3.b.1; 6.d.1

b. DEFICIENCY: NONE

c. AREAS REQUIRING CORRECTIVE ACTION: NONE

d. NOT DEMONSTRATED: NONE

e. PRIOR ARCAs - RESOLVED: NONE

f. PRIOR ARCAs - UNRESOLVED: NONE

APPENDIX 1

ACRONYMS AND ABBREVIATIONS

The following is a list of the acronyms and abbreviations, which were used in this report.

ANL	Argonne National Laboratory
ARCA	Area Requiring Corrective Action
BOCES	Board of Cooperative Educational Services
CFR	Code of Federal Regulations
DOT	U.S. Department of Transportation
EAL	Emergency Action Level
EAS	Emergency Alert System
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EPA	U.S. Environmental Protection Agency
EPIP	Emergency Plan Implementing Procedure
EPZ	Emergency Planning Zone
ERPA	Emergency Response Planning Area
FEMA	Federal Emergency Management Agency
FR	Federal Register
JENC	Joint Emergency News Center
KI	Potassium Iodide
MCC	Monroe Community College
MCEOC	Monroe County Emergency Operations Center
MCFA	Monroe County Field Activities
mR	milliroentgen
mR/h	milliroentgen per hour
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*
ORO	Offsite Response Organization

ORO	Offsite Response Organization
PIO	Public Information Officer
PMC	Personnel Monitoring Center
R	Roentgen
RAC	Regional Assistance Committee
RACES	Radio Amateur Civil Emergency Service
RECS	Radiological Emergency Communications System
REM	Roentgen Equivalent Man
REP	Radiological Emergency Preparedness
RERP	Radiological Emergency Response Plan
RG&E	Rochester Gas and Electric
R/h	Roentgen(s) per hour
RTS	Regional Transport Service
SEOC	State Emergency Operations Center
SEMO	State Emergency Management Office
TBD	To Be Determined
TCP	Traffic Control Point
TL	Team Leader
UE	Unusual Event
USDA	U.S. Department of Agriculture
WCEOC	Wayne County Emergency Operations Center
WCFA	Wayne County Field Activities
WHAM	Emergency Alert System Radio Station for Ginna area.

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 November 17, 1999 and the out of sequence drills. Evaluator Team Leaders are indicated by the letters "(TL)" after their names. The organization which each evaluator represents is indicated by the following abbreviations:

FEMA	Federal Emergency Management Agency
DOT	Department of Transportation
EPA	Environmental Protection Agency
FDA	Food and Drug Administration
NJBNE	New Jersey Bureau of Nuclear Engineering
NRC	Nuclear Regulatory Commission
ICF	ICF Consulting

EVALUATION SITE	EVALUATOR	ORGANIZATION
NEW YORK STATE		
SEOC	Brian Hasemann, TL	FEMA
SEOC	Robert Poole	FEMA
SEOC - Dose Assessment	David Schweller	ICF
EOF	Debra Schneck	NRC
JNC	Michael Beeman (PAO)	FEMA
JNC	Deborah Bell (TL)	FEMA
JNC	Kevin Reed	FEMA
EAS Station	Susan O'Neill	FEMA
MONROE COUNTY		
EOC – Dose Assessment	Joseph Keller TL	ICF
EOC + TCPs	David Petta	DOT
EOC	Sam Nelson	ICF
Special Population Evacuation*	Kevin Reed	FEMA
School Evacuation*	Kevin Reed	FEMA
Reception Center*	Sam Nelson	ICF
Congregate Care Center*	Sam Nelson	ICF
PMC	Nick DiPierro	NJBNE
Radiological Field Monitoring Team	Ron Bernacki	FDA
School Interview*	Kevin Reed	FEMA
Medical Drill*	Sam Nelson	ICF

EVALUATION SITE	EVALUATOR	ORGANIZATION
WAYNE COUNTY		
EOC	Rebecca Thomson (TL)	FEMA
EOC	Arnold Davis	FEMA
EOC – Dose Assessment	Deborah Blunt	ICF
Special Population Evacuation*	Sam Nelson	ICF
School Evacuations*	Sam Nelson	ICF
Reception Center*	Susan O'Neill	FEMA
Congregate Care Center*	Rebecca Thomson and	FEMA
	Sam Nelson	ICF
PMC	Pat Mulligan	NJBNE
Radiological Field Monitoring Teams	Brad McRee and	ICF
	Eric Simpson	EPA
School Interviews*	Sam Nelson	ICF
Medical Drill*	Kevin McCarroll	FEMA

* Indicates an out of sequence drill or demonstration.

APPENDIX 3

EXERCISE CRITERION AND EXTENT-OF-PLAY AGREEMENT

This appendix lists the exercise criterion and the extent-of-play agreement, which were scheduled for demonstration in the Robert E. Ginna Nuclear Power Station exercise on March 4, 2003.

The exercise evaluation criteria, contained in the FEMA Interim REP Program Manual, August 2002, represent the application of the planning standards and evaluation criteria of NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for the Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980 to an emergency response exercise.

Because the exercise evaluation criteria are intended for use at all nuclear power plant sites, and because of variations among offsite plans and procedures, an extent-of-play agreement is prepared by the State and approved by FEMA to provide evaluators with guidance on expected actual demonstration of the criterion. The following extent-of-play agreement was approved by FEMA Region II on February 13, 2003.

FINAL

ROBERT E. GINNA NUCLEAR POWER PLANT

OFFSITE EXTENT – OF- PLAY

FULL – PARTICIPATION

EXERCISE

MARCH 4, 2003

EXTENT

OF

PLAY

EXTENT- OF- PLAY GROUND RULES

- **REAL LIFE EMERGENCIES TAKE PRIORITY OVER EXERCISE PLAY.**

- The Scenario Development Team will develop the free play messages. The State Controller will inject the message to the County Emergency Management Director or designee for action.

- Free play messages for Public Inquiry at the JNC will be developed by the Scenario Development Team. Rumor control messages will be injected at the JNC by a control cell to enable the public inquiry function to identify trends and false rumors.

- The State Controller will inject radiological data for any radiological field activities (Field Teams, EWPMCs, Reception Centers).

- According to REP Program Strategic Review 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 the participants re-demonstrate an activity that is determined to be not satisfactorily demonstrated. Immediate correction 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." This initiative is <u>not</u> applicable to EOC/JNJ/EOF demonstrations during the March 4, 2003 exercise.

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

Extent-of-Play Agreement:

- The latest revised call lists will be provided at the Federal/State evaluators briefing session the day before the exercise. It is requested that these lists remain confidential.
- There will be no free play messages introduced at the Warning Points.
  - Wayne County will utilize an autodialer system to notify responders.

EOCs

Extent-of-Play Agreement:

- The State Liaison will be pre-positioned in the area and will arrive at the County EOCs no sooner than 30 minutes after the ALERT or greater ECL notification is received by the State and Countys. The Utility Technical Liaison assigned to the State and County EOCs will be pre-positioned and arrive no sooner than 30 minutes after the ALERT or greater ECL notification.

EOF

Extent-of-Play Agreement:

- State and Wayne county liaisons will be pre-positioned in the area and will arrive at the EOF no sooner than 30 minutes after the ALERT or greater ECL notification is received by the State and County.

JNC

Extent-of-Play Agreement:

- State and Wayne County JNC Staff will be pre-positioned and arrive at the JNC no sooner than 30 minutes after the ALERT or greater ECL notification is received by the State and Wayne County.

EVALUATION 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:

- Back-up power is available, but will not be activated, at the State and County EOCs.

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:

- All activities will be based on the ORO's plans and procedures as they would in an actual emergency.

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:

- All activities will be based on the ORO's plans and procedures as they would in an actual emergency.

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 (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 Controller will inject a free play message, after the release commences, that will cause the Radiological Officer to discuss what actions would be taken should a Field Monitoring Team's exposure rate exceed the turn-back value in Monroe County or if the exposure limit exceeds 5R in Wayne county.

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 ORO'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:

- Protective Action Decision (PAD) for KI administration to the General Population will not be demonstrated during this exercise in accordance with NRC guidelines.

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)

TRANSPORTATION DEPENDENT POPULATION

Extent-of-Play Agreement:

- All activities will be based on the ORO's plans and procedures as they would in an actual emergency.

NOTIFICATION OF HEARING IMPAIRED

Extent-of-Play Agreement:

- All activities will be based on the ORO's plans and procedures as they would in an actual emergency.

NON-INSTITUTIONALIZED MOBILITY IMPAIRED INDIVIDUALS

Extent-of-Play Agreement:

- All activities will be based on the ORO's plans and procedures as they would in an actual emergency.

SCHOOLS

Extent-of-Play Agreement:

- All activities will be based on the ORO's plans and procedures as they would in an actual emergency.

SPECIAL FACILITIES

Extent-of-Play Agreement:

- All activities will be based on the ORO'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 ORO'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 ORO'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 as per the offsite extent of play activities schedule.
- Each company will provide a dispatcher and at least 5-10% of that company's drivers needed to implement the Plan.
- 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 the EOC. The list will be reviewed but not retained by the Federal evaluator. The procedures for notification will also be discussed at the EOC.
- There will be no actual notification of hearing impaired individuals during the exercise.

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 each 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.

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 contacts may be simulated. All calls will be logged at the EOC.

- There will be no actual dispatch of vehicles to the special facilities.

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:

- During the March 4, 2003 exercise, there will be initial contact by the School Coordinators. Initial contacts will be actual and some follow-up contacts may be simulated. All calls will be logged at the EOC.

- Bus companies will be interviewed as per the offsite extent-of-play activities schedule.

- Each company will provide a dispatcher and at least 5-10% of that company's drivers needed to implement the Plan for interview.

SCHOOL INTERVIEWS

Extent-of-Play Agreement:

- Schools in the EPZ will be interviewed as per the offsite extent-of-play activities schedule.

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:

For out of sequence activities:

- Law enforcement officials, in each County, will discuss how to activate TCPs/ACPs in the field at mutually agreed upon locations, in accordance with the extent of play schedule.

- There will be two interviews in each County with the agencies responsible for staffing the designated TCP's/ACP's. Monroe County will have two interviews with the County Sheriff's and Wayne County will have one interview each with the County Sheriff and the Division of State Police.

- Each designated law enforcement agency will provide at least one officer for the interview.

- The TCPs/ACPs will be identified by a free play message provided by the State Controller to the Emergency Management Director or designee.

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:

- Each County will demonstrate the organizational ability to deal with at least two (2) impediments to evacuation.
- The State Controller in the EOC will hand the free play messages to the County Emergency Management Director 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. Initial contact of resource providers will be actual and some follow-up contacts may be simulated. All calls will be logged at the 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).

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)

FIELD MONITORING TEAMS

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 ORO'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 in the plume EPZ will dispatch radiological monitoring teams according to their plans. Monroe County will dispatch one team and Wayne County will dispatch two teams. In addition, RG&E will dispatch offsite teams in accordance with County plans and MOU. Each county team will be supplied with a State Controller and FEMA evaluator.

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

- Each team will take at least six ambient radiation measurements and at least two 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).

    - There will be no actual packaging or transport of samples to the laboratory. 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.

    - Wayne County uses a Victoreen 450, an Eberline R0-20 and an Eberline 140N. Monroe County uses an Eberline RO-20 and an Eberline E140. Button sources for appropriate instruments are available for inspection.

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 Ginna siren system was last fully tested on 10/24/02.
  - 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.

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 March 4, 2003 exercise, one (1) simulated siren failure, at each EOC, will be discussed at the EOC. The State Controller will inject a free play message regarding this siren failure to the County Emergency Management director or designee for action to test route-alerting procedures.
- Back up route alerting interviews will be conducted in accordance with the out of sequence schedule.

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 ORO's plans and procedures as they would in an actual emergency.

EMERGENCY INFORMATION

Extent-of-Play Agreement:

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

PUBLIC INQUIRY

Extent-of-Play Agreement:

- The public inquiry function 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 trends and false rumors.

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:

- The Reception Center will be demonstrated as per the offsite extent of play activities schedule.
- One registration station with 2 personnel registering at least 3 individuals each.
- Wayne County at Newark needs 1 portal monitor and Monroe County at Greece Olympia needs 1 portal monitor, each, for the 1/3 capacity.
- Monroe and Wayne County will each have:
    - One portal monitoring station will monitor 6 individuals.
    - One personnel decon station with 2 monitors to demonstrate at least one personnel decon (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 female decon and will have staff resources available for the male decon).
    - One vehicle monitoring station with at least 1 monitor, monitoring at least 2 vehicles.
    - 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.
- Communications with EOC's will be simulated by discussion with the reception center manager.
- The monitoring and decontamination teams will not be suited up in anti-contamination clothing. However, the clothing will be available for inspection.
- Decontamination techniques will be simulated.

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 female decon and will have staff resources available for the male 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.
- Monroe County may use radio controlled survey instruments for EWPMC.
- 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:

- Congregate Care Centers will be evaluated, as per out of sequence schedule, as agreed to between FEMA, ARC and the counties.
- Capabilities will be demonstrated through an interview process between FEMA and ARC.
- The evaluation of the capabilities will be conducted by FEMA and ARC as specified in the ARC- FEMA Memorandum of Understanding.

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:

As per the out of sequence schedule:

- The transportation and facility component of this medical drill will be demonstrated as per the offsite extent-of-play agreement schedule.
- The transportation component of this drill will end when the vehicle is ready to depart for the hospital with the patient from an offsite location.
- The facility component of this drill will involve the transport of a patient as per schedule of events.
- The use of flashing lights and sirens for exercise play is not required.

APPENDIX 4.

EXERCISE SCENARIO

This appendix contains a summary of the simulated sequence of events -- Exercise Scenario -- that was used as the basis for invoking emergency response actions by OROs in the Robert E. Ginna Nuclear Power Station exercise on March 4, 2003.

This exercise scenario was submitted by the New York State and approved by FEMA Region II on February 13, 2003.

GINNA STATION

2003 EMERGENCY PREPAREDNESS EXERCISE

ONSITE SEQUENCE OF EVENTS

APPROXIMATE TIME	SCENARIO TIME	EVENT DESCRIPTION
06:45	-00:15	Initial conditions established.
07:00	00:00	Announcement to commence annual Exercise.
07:35	+00:35	The plant loses circuit 751 due to improper manipulation of electric circuits . The emergency diesel generators start and pick up plant electrical loads. Anticipated results Operators should enter procedure AP-ELECT.1 to stabilize the plant. Operators should also consult technical specifications section 3.8.1. Operators should request that the work on circuit 767 be terminated and the circuit restored.
07:37	+00:37	The control room operators are informed by energy operations that circuit 751 will be repaired within 5 minutes.
07:42	+00:42	Circuit 751 is restored by the line crews. Anticipated results Operators will restore power using procedure AP-ELECT.1.
08:00	+01:00	Anticipated results Plant electrical line up should be stabilized at this time
08:07 (approximately)	+01:07	Operators receive fire alarms in the "B" emergency diesel generator room. The "B" EDG will trip if the operators do not secure it. The cause of the fire is a lube oil line break. Anticipated results Operators should announce the fire alarm over the plant page and should sound the fire alarm. The fire brigade should respond. The fire brigade will find a fire on the "B" emergency diesel generator. Operators should consult EPIP 1-0 for event classification.

APPROXIMATE TIME	SCENARIO TIME	EVENT DESCRIPTION
08:10 ALERT	+01:10	The fire brigade reports that there is a fire in the "B" emergency diesel generator room. An Alert should be declared in accordance with EPIP 1-0 "Ginna Station Event Evaluation and Classification" EAL number: 8.2.2 "Fire or explosion in any of the following plant areas which results in EITHER visible damage to plant equipment or structures needed for safe plant operation OR which affects safety system operability as indicated by degraded system performance - Intermediate Building - TSC - Service Building - Contaminated Storage Building - Control Building - Reactor Containment Building - Auxiliary Building - Turbine Building - Emergency Diesel Building - Standby Auxiliary Feedwater Building - Screen House". If an alert is not declared in approximately 15 minutes, a contingency message should be given out to declare it. Anticipated results ▪ Operators should implement EPIP 1-2 "Alert". ▪ The Fire Brigade should respond to the fire.
08:16	+01:16	Circuit 767 is restored by the plant electricians.
08:27	+01:27	The Ontario Fire Department (SIMULATED) has arrived onsite to supplement the onsite fire brigade.
08:40	+01:40	The fire in the "B" Emergency Diesel Generator is extinguished. Anticipated results Operators should make a plant announcement to secure from the fire. Maintenance should start to assess the damage to the "B" Emergency Diesel Generator.

APPROXIMATE TIME	SCENARIO TIME	EVENT DESCRIPTION
08:45	+01:45	Onsite emergency facilities should be nearing operational readiness.
09:00	+02:00	Offsite emergency facilities should be nearing operational readiness.
09:20 SITE AREA EMERGENCY	+02:20	The low pressure turbine experiences a blade failure. Multiple turbine blades penetrate the turbine casing. The turbine blades penetrate the turbine building room and intermediate building. The blades impact various components in the intermediate building and turbine building. Various wires in the intermediate building cable runs and the main steam line to the low pressure turbine downstream of the main steam isolation valves. The turbine will trip on high vibrations. The reactor does not trip automatically. When the operators attempt to manually trip the reactor, it will not trip. When the operators de-energize bus 13 and 15, bus 15 does not trip. The control room operators will send an auxiliary operator to manually trip bus 15 to de-energize the motor-generator set. The auxiliary operator successfully trips bus 15 locally. The reactor core will be damaged by the power excursion. Reactor coolant activity increases, however, letdown will be isolated on the reactor trip. PORV-430 lifts due to the pressure increase. The PORV will not re-seat properly and vents primary coolant into the pressurized relief tank (PRT). If a site area emergency is not declared in approximately 15 minutes, a contingency message should be given out to declare it. Anticipated results ▪ Operators will enter procedure E-0 for a turbine trip and transition to procedure FR-S.1. ▪ A site area emergency should be declared in accordance with EPIP 1-0 "Ginna Station Event Evaluation and Classification" EAL number: 1.1.2 "RED path in F-0.1 SUB-CRITICALITY"

- If a site area emergency is not declared in approximately 15 minutes, a contingency message should be given out to declare it
- The TSC should implement EPIP 1-3 "Site Area
- Emergency".
- The control room should inform the TSC/OSC of the ATWS event and the problems with bus 15.
- Operations should also inform the TSC/OSC of the PORV-430 not re-seating.

APPROXIMATE TIME	SCENARIO TIME	EVENT DESCRIPTION
09:30	+02:30	When operators get to step 5 of procedure FR-S.1, containment vent isolation will not reset. Anticipated results The control room operators will direct an auxiliary operators to reset MOV-515 & 516. When the auxiliary operator resets MOV-515 & 516, they continue to trip. The auxiliary operator will report that MOV-515 & 516 cannot be reset.
09:40	+02:40	The PRT rupture disk fails and primary coolant activity is vented into containment. Containment radiation monitors start to increase.
10:20 **GENERAL EMERGENCY**	+03:20	Containment radiation monitors have increased >1000 R/hr. If a general emergency is not declared in approximately 15 minutes, a contingency message should be given out to declare it. Anticipated results ▪ A general emergency should be declared in accordance with ▪ EPIP 1-0 "Ginna Station Event Evaluation and Classification" EAL number: 2.3.3 "Containment radiation monitors R-29/30 reading >1000 R/hr" ▪ If a general emergency is not declared in approximately 15 minutes, a contingency message should be given out to declare it ▪ The TSC should implement EPIP 1-4 "General

		Emergency". Protective action recommendations should be made in accordance with EPIP 2-1.
11:15	+04:15	The wires in the intermediate building for the containment mini-purge solenoid short due to damage from turbine blade impact and cause the solenoid valve to fail open. **A release to the environment starts.** <u>Anticipated results</u> ▪ Dose projections should calculate a dose >1 REM at 5 miles for a 4-hour default release duration. Additional protective actions should be recommended. ▪ Efforts should be underway to track the plume, terminate the release and implement/coordinate PARs. ▪ Operations should inform the TSC/OSC of the failure of containment integrity.
12:15	+05:45	The containment mini-purge line has been isolated.
12:45	+06:00	<u>Anticipated results</u> The radiation levels in the auxiliary building have decreased significantly. The offsite release is terminated.
13:30	+06:30	Recovery/Re-entry discussions should commence. This should include preliminary discussions about short term and intermediate term concerns, including preliminary designation of the recovery organization. State and counties may also conduct parallel discussions. Recovery/Re-entry interface between TSC/EOF and offsite agencies should be demonstrated as time allows.
14:00	+07:00	Terminate the Exercise when all criterion have been demonstrated.