



James A. FitzPatrick Nuclear Power Plant

After Action Report

Radiological Emergency Preparedness Exercise

U.S. Department of Homeland Security

Federal Emergency Management Agency, Region 2

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FEMA

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Executive Summary

On June 21, 2023, a plume exercise was conducted in the 10-mile Plume Exposure Pathway Emergency Planning Zone (EPZ) around the James A. FitzPatrick Nuclear Power Plant and was evaluated by the Federal Emergency Management Agency (FEMA), Region 2. 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 FEMA's policies and guidance concerning the exercise of State and local radiological emergency response plans and procedures.

The most recent exercise at this site was conducted on June 25, 2019. The qualifying emergency preparedness exercise was conducted on September 15, 1981.

FEMA wishes to acknowledge the efforts of the many individuals in the State of New York, Oswego and Onondaga Counties 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.

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 Level 2 Findings and no Level 1 Findings identified as a result of this exercise.

Section 1: Exercise Overview

1.1 Exercise Details

Exercise Name	James A. FitzPatrick Plume Exercise FY 2023
Exercise Dates	6/21/2023
Scope	This exercise was a Biennial, planned for 05/29/2023 to 06/30/2023 at James A. FitzPatrick Nuclear Power Plant (NY). Exercise play was limited to New York.
Mission Area(s)	Protection, Recovery, Response
Core Capabilities	Access Control and Identity Verification, Critical Transportation, Environmental Response/Health and Safety, Health and Social Services, Housing, Mass Care Services, Natural and Cultural Resources, On-scene Security, Protection, and Law Enforcement, Operational Communications, Operational Coordination, Planning, Public Health, Healthcare, and Emergency Medical Services, Public Information and Warning, Situational Assessment
Objectives	Alert and Notification; Detect, Measure, Sample, Analyze, and Assess; Emergency Operations Management; Exposure Control; Operate
Threat or Hazard	Hazard
Scenario	See Section 2.1: Exercise Scenario
Sponsor	NONE
Participating Organizations	See Section 1.3: Participating Organizations

1.2 Exercise Planning Team Leadership

Federal Emergency Management Agency (FEMA)

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1.3 Participating Organizations

New York State Emergency Operations Center (EOC) Albany, NY

- American Red Cross
- Constellation Energy, LLC
- New York State Police
- NYS Department of Corrections and Community Supervision
- NYS Department of Environmental Conservation
- NYS Department of Health
- NYS Department of Information and Technology Services
- NYS Department of Public Service
- NYS Department of Transportation
- NYS Division of Homeland Security and Emergency Services
- NYS Division of Military and Naval Affairs
- NYS Education Department
- NYS Energy Research and Development Authority
- NYS Office of the Aging
- NYS Office of Agriculture and Markets
- NYS Office of Children and Family Services
- NYS Office of Emergency Management
- NYS Office of General Services
- NYS Office of Parks, Recreation and Historic Preservation
- NYS Office of People with Developmental Disabilities
- NYS Office of Temporary and Disability Assistance

New York State Warning Point

New York State Accident Assessment, New York State EOC Albany, NY

- NYS Department of Environmental Conservation
- NYS Department of Health
- NYS Department of Public Service

Emergency Operations Facility (EOF) – Fulton, NY

- Constellation Energy, LLC
- NYS Department of Health
- NYS Department of Public Service
- NYS Division of Homeland Security and Emergency Services
- NYS Energy Research and Development Authority
- Nuclear Regulatory Commission
- Oswego County Nuclear Facility Liaison Officer

Joint Information Center (JIC) – Fulton, NY

- Constellation Energy, LLC
- NYS Department of Health
- NYS Division of Homeland Security and Emergency Services
- Nuclear Regulatory Commission
- Oswego County Department of Health
- Oswego County Emergency Management Office

Oswego County Emergency Operations Center (EOC)

- American Red Cross
- CiTi/BOCES
- City of Fulton Police Department
- City of Oswego Fire Department
- Constellation Energy, LLC
- Consultant
- Cornell Cooperative Extension of Oswego County
- Emergency 911
- Fulton Fire Department
- Madison County Emergency Management Office
- New York State Police
- NYS Department of Health
- NYS Department of Health - Bureau of Environmental Radiation Protection
- NYS Department of Homeland Security and Emergency Services
- NYS Office of Emergency Management
- Onondaga County Emergency Management Office
- Oswego County Administration
- Oswego County Community Development, Planning and Tourism
- Oswego County Department of Health
- Oswego County Department of Social Services
- Oswego County Emergency Management Office
- Oswego County Fire Coordinator's Office
- Oswego County Highway Department
- Oswego County Human Resources
- Oswego County IT
- Oswego County Legislature
- Oswego County Mobility Management
- Oswego County Pioneer Search & Rescue
- Oswego County Sheriff's Department
- Oswego County Veterans Services

Oswego County Accident Assessment

- City of Fulton Fire Department
- Constellation Energy, LLC
- Oswego County Emergency Management
- Oswego County Pioneer Search & Rescue
- Oswego County Veterans Service

Oswego Field Monitoring Teams (FMTs) – from County EOC

- City of Fulton Fire Department
- Oswego County Pioneer Search & Rescue

Oswego County EOC Traffic/Access Control Points (T/ACPs):

- City of Fulton Police Department
- Oswego County Sheriff

Oswego County Warning Point

Section 2: Exercise Design Summary

2.1 Exercise Scenario

Time	Description
0800	<ul style="list-style-type: none"> Exercise Begins [wind from 289°; at 7.0 mph; Stability Class E (inland)].
0810	<ul style="list-style-type: none"> Loss of Recirculation Pumps leads to unsuccessful reactor trip. <ul style="list-style-type: none"> No Radiological Release Conditions met for Alert ECL: Declared NLT 0825 Notification to State/Counties NLT 0840
0820	<ul style="list-style-type: none"> Manual trip of reactor successful. The reactor is shutdown.
0845	<ul style="list-style-type: none"> Reactor Coolant leak to the drywell begins. Reactor fuel damage is indicated. Radiation levels inside drywell rising.
0950	<ul style="list-style-type: none"> Inadvertent High Pressure Coolant Injection leads to steam leak in the Reactor. <ul style="list-style-type: none"> Building creating a path to environment through Standby Gas Treatment. Radiological Release to environment begins (monitored, filtered). Conditions met for Site Area Emergency ECL: Declared NLT 1005 Notification to State/Counties NLT 1020
1130	<ul style="list-style-type: none"> Radiation levels inside drywell > 1800 Rem/hr. [wind from 282-303°; at ~5.0 mph; Stability Class D (inland)]. <ul style="list-style-type: none"> Radiological Release continues Conditions met for General Emergency ECL: Declared NLT 1145 Not a Rapidly Progressing Severe Accident (RPSA) Notification to State/Counties NLT 1200 Default Protective Action Recommendation Issued: <ul style="list-style-type: none"> Evacuation of all Emergency Response Planning Areas (ERPA) within the 2-Mile EPZ Evacuation of all Emergency Response Planning Areas (ERPA) within the 5-Mile EPZ in the downwind direction For all remaining ERPAs, monitor and prepare. Recommend the use of KI in accordance with state procedures

Section 3: Analysis of Capabilities

3.1 Exercise Evaluation and Results

This section contains the results and findings of the evaluation of all jurisdictions and functional entities that participated in the June 21, 2023, James A. FitzPatrick Exercise.

Each jurisdiction and functional entity was evaluated based on the demonstration of core capabilities, capability targets, critical tasks, and the underlying Radiological Emergency Preparedness criteria as delineated in the Federal Emergency Management Agency Radiological Emergency Preparedness Program Manual dated December 2019. Exercise criteria are listed by number, and the demonstration status of those criteria are indicated by the use of the following terms:

- **Met (M):** The jurisdiction or functional entity performed all activities under the objective/capability target to the level required per the work plan and/or the extent-of-play agreement, with no Level 1 or Level 2 Findings evaluated under that objective/capability target during the current activity and no unresolved prior Level 2 Finding(s).
- **Level 1 Finding (L1):** An observed or identified inadequacy of organizational performance during an assessment activity that could cause a determination 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 an NPP.
- **Level 2 Finding (L2):** An observed or identified inadequacy of organizational performance during an assessment activity that is not considered, by itself, to adversely impact public health and safety.
- **Plan Issue (P):** An observed or identified inadequacy in the ORO's emergency plan/implementing procedures, rather than in that of the ORO's performance.
- **Not Demonstrated (N):** For a justifiable reason, the jurisdiction or functional entity did not perform assessment activities under the objective/capability target as specified in the extent-of-play agreement.
- **Not Applicable (N/A):** The objective/capability target does not apply to the jurisdiction.

3.2 Summary Results of Exercise Evaluation by Venue

Venue	Target	Core Capability	Status
Objective 1: Emergency Operations Management			
New York State Warning Point - Warning Point	1.1	Planning, Operational Coordination	M
Oswego County Field Monitoring Team 2 - Field Monitoring Team 2	1.1	Planning, Operational Coordination	M
Oswego County Field Monitoring Team 1 - Field Monitoring Team 1	1.1	Planning, Operational Coordination	M
Oswego County Warning Point - Warning Point	1.1	Planning, Operational Coordination	M
New York State Accident Assessment - State Accident Assessment	1.1	Planning, Operational Coordination	M
New York State Division of Homeland Security Emergency Services - State EOC	1.1	Planning, Operational Coordination	M
Oswego County Emergency Operation Center - Risk County EOC	1.1	Planning, Operational Coordination	M
Joint Information Center (Fulton, NY) - Joint Information Center	1.1	Planning, Operational Coordination	M
Emergency Operation Facility - Emergency Operations Facility	1.1	Planning, Operational Coordination	M
Emergency Operation Facility - Emergency Operations Facility	1.2	Planning, Public Information and Warning, Operational Coordination, Critical Transportation, Environmental Response/Health and Safety, Mass Care Services, Public Health, Healthcare, and Emergency Medical Services, Situational Assessment	M

Venue	Target	Core Capability	Status
New York State Division of Homeland Security Emergency Services - State EOC	1.2	Planning, Public Information and Warning, Operational Coordination, Critical Transportation, Environmental Response/Health and Safety, Mass Care Services, Public Health, Healthcare, and Emergency Medical Services, Situational Assessment	M
Joint Information Center (Fulton, NY) - Joint Information Center	1.2	Planning, Public Information and Warning, Operational Coordination, Critical Transportation, Environmental Response/Health and Safety, Mass Care Services, Public Health, Healthcare, and Emergency Medical Services, Situational Assessment	M
Oswego County Dose Assessment - County Accident Assessment	1.2	Planning, Public Information and Warning, Operational Coordination, Critical Transportation, Environmental Response/Health and Safety, Mass Care Services, Public Health, Healthcare, and Emergency Medical Services, Situational Assessment	M

Venue	Target	Core Capability	Status
New York State Accident Assessment - State Accident Assessment	1.2	Planning, Public Information and Warning, Operational Coordination, Critical Transportation, Environmental Response/Health and Safety, Mass Care Services, Public Health, Healthcare, and Emergency Medical Services, Situational Assessment	M
Oswego County Emergency Operation Center - Risk County EOC	1.2	Planning, Public Information and Warning, Operational Coordination, Critical Transportation, Environmental Response/Health and Safety, Mass Care Services, Public Health, Healthcare, and Emergency Medical Services, Situational Assessment	M
Oswego County Emergency Operation Center - Risk County EOC	1.2	Planning, Public Information and Warning, Operational Coordination, Critical Transportation, Environmental Response/Health and Safety, Mass Care Services, Public Health, Healthcare, and Emergency Medical Services, Situational Assessment	M
New York State Accident Assessment - State Accident Assessment	1.3	Planning, Operational Coordination, Environmental Response/Health and Safety, Situational Assessment	M

Venue	Target	Core Capability	Status
Oswego County Dose Assessment - County Accident Assessment	1.3	Planning, Operational Coordination, Environmental Response/Health and Safety, Situational Assessment	M
New York State Division of Homeland Security Emergency Services - State EOC	1.3	Planning, Operational Coordination, Environmental Response/Health and Safety, Situational Assessment	M
Oswego County Emergency Operation Center - Risk County EOC	1.4	Planning, Operational Coordination, Critical Transportation, Environmental Response/Health and Safety, Situational Assessment	M
New York State Division of Homeland Security Emergency Services - State EOC	1.4	Planning, Operational Coordination, Critical Transportation, Environmental Response/Health and Safety, Situational Assessment	M
Oswego County Emergency Operation Center - Risk County EOC	1.5	Planning, Public Information and Warning, Operational Coordination, Critical Transportation, Environmental Response/Health and Safety, Health and Social Services, Housing, Natural and Cultural Resources	M
Objective 2: Exposure Control			
Oswego County Emergency Operation Center - Risk County EOC	2.1	Planning, Operational Coordination, Environmental Response/Health and Safety, Situational Assessment	M

Venue	Target	Core Capability	Status
Oswego County Dose Assessment - County Accident Assessment	2.1	Planning, Operational Coordination, Environmental Response/Health and Safety, Situational Assessment	M
Oswego County Dose Assessment - County Accident Assessment	2.2	Planning, Operational Coordination, Environmental Response/Health and Safety	M
Oswego County A/TCPs - Traffic and Access Control Points	2.2	Planning, Operational Coordination, Environmental Response/Health and Safety	M
Oswego County Field Monitoring Team 1 - Field Monitoring Team 1	2.2	Planning, Operational Coordination, Environmental Response/Health and Safety	M
Oswego County Field Monitoring Team 2 - Field Monitoring Team 2	2.2	Planning, Operational Coordination, Environmental Response/Health and Safety	M
Objective 3: Alert and Notification			
Oswego County Field Monitoring Team 2 - Field Monitoring Team 2	3.1	Planning, Operational Coordination, Operational Communications, Situational Assessment	M
Oswego County Warning Point - Warning Point	3.1	Planning, Operational Coordination, Operational Communications, Situational Assessment	M
Oswego County Dose Assessment - County Accident Assessment	3.1	Planning, Operational Coordination, Operational Communications, Situational Assessment	M

Venue	Target	Core Capability	Status
Oswego County Dose Assessment - County Accident Assessment	3.1	Planning, Operational Coordination, Operational Communications, Situational Assessment	M
New York State Accident Assessment - State Accident Assessment	3.1	Planning, Operational Coordination, Operational Communications, Situational Assessment	M
Emergency Operation Facility - Emergency Operations Facility	3.1	Planning, Operational Coordination, Operational Communications, Situational Assessment	M
New York State Division of Homeland Security Emergency Services - State EOC	3.1	Planning, Operational Coordination, Operational Communications, Situational Assessment	M
Oswego County Emergency Operation Center - Risk County EOC	3.1	Planning, Operational Coordination, Operational Communications, Situational Assessment	M
Oswego County Field Monitoring Team 1 - Field Monitoring Team 1	3.1	Planning, Operational Coordination, Operational Communications, Situational Assessment	M
Oswego County Emergency Operation Center - Risk County EOC	3.1	Planning, Operational Coordination, Operational Communications, Situational Assessment	M
Joint Information Center (Fulton, NY) - Joint Information Center	3.1	Planning, Operational Coordination, Operational Communications, Situational Assessment	M
New York State Warning Point - Warning Point	3.1	Planning, Operational Coordination, Operational Communications, Situational Assessment	M

Venue	Target	Core Capability	Status
Oswego County Emergency Operation Center - Risk County EOC	3.2	Planning, Public Information and Warning	M
Oswego County Emergency Operation Center - Risk County EOC	3.2	Planning, Public Information and Warning	M
Oswego County Emergency Operation Center - Risk County EOC	3.3	Planning, Public Information and Warning	M
Oswego County Emergency Operation Center - Risk County EOC	3.3	Planning, Public Information and Warning	M
Joint Information Center (Fulton, NY) - Joint Information Center	3.3	Planning, Public Information and Warning	M
New York State Division of Homeland Security Emergency Services - State EOC	3.3	Planning, Public Information and Warning	M
Objective 4: Detect, Measure, Sample, Analyze, and Assess			
Oswego County Dose Assessment - County Accident Assessment	4.1	Planning, Operational Coordination, Environmental Response/Health and Safety	M
Oswego County Field Monitoring Team 1 - Field Monitoring Team 1	4.2	Planning, Environmental Response/Health and Safety	M
Oswego County Field Monitoring Team 2 - Field Monitoring Team 2	4.2	Planning, Environmental Response/Health and Safety	M
Oswego County Dose Assessment - County Accident Assessment	4.5	Planning, Environmental Response/Health and Safety	M
Objective 5: Operate			

Venue	Target	Core Capability	Status
Oswego County Emergency Operation Center - Risk County EOC	5.4	Planning, Operational Coordination, Access Control and Identity Verification, Critical Transportation, Environmental Response/Health and Safety, On-scene Security, Protection, and Law Enforcement, Situational Assessment	M
Oswego County A/TCPs - Traffic and Access Control Points	5.4	Planning, Operational Coordination, Access Control and Identity Verification, Critical Transportation, Environmental Response/Health and Safety, On-scene Security, Protection, and Law Enforcement, Situational Assessment	M

Appendix A: Exercise Timeline

DATE AND SITE: June 21, 2023 – James A. FitzPatrick

Emergency Classification Level	Time Utility Declared	NY State EOC	NY State Warning Point	NY State AA	EOF Fulton, NY JAF	JIC Fulton, NY JAF	Oswego County EOC	Oswego County 911 Center
Unusual Event	NA	NA	NA	NA	NA	NA	NA	NA
Alert	0816	0825	0825	0839	0818	0825	0825	0825
Site Area Emergency	1001	1008	1008	1004	1002	1012	1008	NA
General Emergency	1132	1141	1141	1132	1132	1132	1143	NA
Rad. Release Started	0900/1001	0900	0900	0900	0900/1001	0900/1001	1012	NA
Rad. Release Terminated	0932/1338	NA	NA	NA	0932/1338	0932	1338	NA
Facility Declared Operational	-	0923	0923	0923	0901	0858	0907	NA
Governor Declared State of Emergency	-	1015	1015	NA	NA	1130	1015	NA

Emergency Classification Level	Time Utility Declared	NY State EOC	NY State Warning Point	NY State AA	EOF Fulton, NY JAF	JIC Fulton, NY JAF	Oswego County EOC	Oswego County 911 Center
Exercise Terminated	-	1338	1338	1338	1338	1341	1338	NA
Early Precautionary Actions: Close parks and Clear Waterways (ERPA's 26 & 27); Early School dismissal; PMC's Open.	-	0904	0904	0904	NA	0940	0852/0939	NA
1st Protective Action Decision ¹	-	1200	1200	1200	1200	1200	1200	NA
Shelter, Evacuate: 1,2,3,4,5,9,10,26, & 27 ²	-	1200	1200	1200	1200	1200	1200	NA
Siren Activation ³	-	1211	1211	1211	1211	1211	1211	NA

¹ Official coordinated decision time.

² Ibid.

³ Ibid.

Emergency Classification Level	Time Utility Declared	NY State EOC	NY State Warning Point	NY State AA	EOF Fulton, NY JAF	JIC Fulton, NY JAF	Oswego County EOC	Oswego County 911 Center
EAS Message ⁴	-	1214	1214	1214	1214	1214	1214	NA
KI Administration Decision ⁵	-	1200	1200	1200	1200	1200	1200	NA

⁴ Ibid.

⁵ Ibid.

Appendix B: Evaluation Team

Name	Organization
Cammarata, Christopher	FEMA Region 2
Candurra, Steven	FEMA Region 2
DeBonis, Michael	FEMA Region 2
Hasemann, Brian	FEMA Region 2
LaForge, Helen	FEMA Region 1
Malone, Kevin	FEMA Region 2
McSwain, Alonzo	FEMA HQ
McWilliams, Robert	FEMA HQ
Rink, Lisa	FEMA HQ
Robinson, Kevin	FEMA Region 2
Stoliarova, Janise	FEMA HQ
Sturman, Michele	FEMA Region 2
Thomas, Brian	FEMA Region 2
Thomas, Tina	FEMA Region 3
Wierman Jr., Kenneth	FEMA HQ

Appendix C: Extent of Play Agreement

Off-Site Extent-Of-Play

For The

May 16, 2023

James A. FitzPatrick Practice Exercise

June 21, 2023

James A. FitzPatrick Nuclear Power Plant

Full-Participation Federally Evaluated Exercise

Extent-Of-Play Ground Rules

- Real life emergencies take priority.
- The Scenario Development Team will develop the “Exercise” free play messages. The State Controllers will inject these messages for action as agreed upon.
- “Optional” messages may be developed and inserted to facilitate EOC participation.
- The State Controllers will provide radiological data for any radiological field activities (e.g., Field Teams, Emergency Worker Personnel Monitoring Centers, Reception Centers, etc.).
- According to the Radiological Emergency Preparedness (REP) Program Manual 2019 (page 176), “During the assessment activity, an evaluator who notes that an ORO did not correctly demonstrate activities for an objective/capability target eligible for redemonstration advises the appropriate controller, or another appropriate individual dependent on the type of assessment activity, of the issue. Participants may redemonstrate an activity that the ORO or FEMA determined was not performed satisfactorily only when the correction would not interrupt the flow of the assessment activity. The controller or other ORO personnel will retrain the staff that performed the activity incorrectly. Upon completion of the retraining, those staff will redemonstrate the activity. If the ORO demonstrates that activity adequately, the evaluation report will record the issue, but a follow-on statement will describe the corrective action demonstrated.” Re-demonstrations of any activity will be discussed and agreed upon between the State Controller and FEMA Evaluator as practicable for all activities/locations evaluated.
- Redemonstration of capability targets will be determined on a case-by-case basis.

OBJECTIVE 1: EMERGENCY OPERATIONS MANAGEMENT

Capability Target 1.1: Mobilization

Individuals with roles in support of emergency operations are identified, alerted, and mobilized in a timely manner. (NUREG-0654/FEMA-REP-1, Rev. 2: A.1, A.1.a, A.1.b, A.3, A.4, A.5, C.1, C.2, C.2.a, C.2.b, C.3, E.1, E.1.a, E.3, F.1.c, H.6, O.1).

Warning Point (NYS and Oswego County)

Extent-of-Play Agreement

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

Emergency Operations Center (EOC)/Command Room (NYS and Oswego County)

Extent-of-Play Agreement

- Oswego County staff will be pre-positioned in their assigned roles. Oswego County will provide staffing roster for 24-hour operation, demonstrate alerting staff, and talk through mobilization procedures.
- All pre-positioned staff will still receive notification for mobilization for evaluation procedures.
- NYS Staff will be pre-staged near their EOC and State Command Room.
- All activities will be based on the ORO plans and procedures as they would in an actual emergency.

Emergency Operations Facility (EOF)

Extent-of-Play Agreement

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

Field Monitoring Teams (FMTs)

Extent-of-Play Agreement

- Oswego County FMT staff will be pre-staged near their EOC.

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

Joint Information Center (JIC)

Extent-of-Play Agreement

- All activities will be based on the ORO plans and procedures as they would in an actual emergency.
- State and County Staff will be pre-staged near the facility.

Capability Target 1.2: Direction and Control

Individuals in leadership roles provide direction and control to the portion of the overall response effort for which they are responsible. (NUREG-0654/FEMA-REP-1, Rev. 2: A.1, A.1.a, A.1.b, A.1.c, A.2, A.3, A.5, C.2, C.2.a, C.2.b, C.3, D.4, E.1, H.6, O.1).

Command Room (NYS and Oswego County)

Extent-of-Play Agreement

- All activities will be based on the ORO plans and procedures as they would in an actual emergency.
- The State Controller may inject “Exercise” free play messages at selected ORO locations for action as agreed upon.

Emergency Operations Center (EOC) (NYS and Oswego County)

Extent-of-Play Agreement

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

Emergency Operations Facility (EOF)

Extent-of-Play Agreement

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

Joint Information Center (JIC)

Extent-of-Play Agreement

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

Dose Assessment

Extent-of-Play Agreement

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

Field Monitoring Teams (FMTs)

Extent-of-Play Agreement

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

Capability Target 1.3: Protective Action Recommendations

Appropriate PARs are selected based on available information and factors. (NUREG-0654/FEMA-REP-1, Rev. 2: D.4, J.7, J.8, J.8.b, J.9, O.1).

Emergency Operations Center (EOC) (NYS and Oswego County)

Extent-of-Play Agreement

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

Dose Assessment

Extent-of-Play Agreement

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

Emergency Operations Facility (EOF)

Extent-of-Play Agreement

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

Capability Target 1.4: Protective Action Decisions for the Plume Phase

Appropriate PADs are based on available information for the plume phase. (NUREG-0654/FEMA-REP-1, Rev. 2: D.1.b, D.4, J.6, J.7, J.8, J.8.b, J.10, J.10.a, J.10.b, J.11.c-g, O.1).

Command Room

Extent-of-Play Agreement

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

Emergency Operations Center (EOC)

Extent-of-Play Agreement

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

Capability Target 1.5: Protective Action Decision Implementation for the Plume Phase

Implement decisions for those populations and areas subject to plume phase protective actions. (NUREG-0654/FEMA-REP-1, Rev. 2: A.4, C.2.a, G.1, J.11, J.11.a, J.11.b, J.11.c, J.11.e, J.11.g, O.1).

Command Room

Extent-of-Play Agreement

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

Emergency Operations Center (EOC)

Extent-of-Play Agreement

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

Capability Target 1.6: Protective Action Decisions for the Post-Plume Phase

Appropriate PADs are based on available information for the post-plume phase. (NUREG-0654/FEMA-REP-1, Rev. 2: J.12, J.14, J.14.a-f, M.1, M.1.b, M.4, M.5, M.6, M.7, M.8, O.1).

Extent-of-Play Agreement

NOT DEMONSTRATED DURING THIS EXERCISE

Capability Target 1.7: Protective Action Decisions Implementation for the Post- Plume Phase

Implement decisions for those populations and areas subject to post-plume phase protective actions. (NUREG-0654/FEMA-REP-1, Rev. 2: C.2, J.12, J-14, J.14.a-f, M.1, M.1.b, M.4, M.5, M.6, M.7, M.8, O.1)

Extent-of-Play Agreement

NOT DEMONSTRATED DURING THIS EXERCISE

OBJECTIVE 2: EXPOSURE CONTROL

Capability Target 2.1: Emergency Worker Exposure Control Decision-Making Process

A decision-making process involving consideration of appropriate factors and necessary coordination is used to ensure that an exposure control system is in place for emergency workers and includes the use of radioprotective drugs and procedures to authorize emergency exposures in excess of PAGs. (NUREG-0654/FEMA-REP-1, Rev. 2: C.2.c, H.11, K.2, K.2.b, K.3, K.3.a, M.1.b, M.8, O.1).

Emergency Operations Center (EOC)/ Command Room

Extent-of-Play Agreement

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

Dose Assessment

Extent-of-Play Agreement

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

Capability Target 2.2: Emergency Worker Exposure Control Management

Emergency workers manage radiological exposure and dose in accordance with the plans/procedures. (NUREG-0654/FEMA-REP-1, Rev. 2: C.2.c, H.11, H.11.b, K.2.b, K.3, K.3.a, M.1.b, O.1).

Emergency Operations Center (EOC)

Extent-of-Play Agreement

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

Dose Assessment

Extent-of-Play Agreement

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

Field Monitoring Teams (FMTs)

Extent-of-Play Agreement

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

Traffic and Access Control Points (TCPs and ACPs)

Extent-of-Play Agreement

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

OBJECTIVE 3: ALERT AND NOTIFICATION

Capability Target 3.1: Communications

Communications processes, systems, and equipment are sufficient to support emergency operations. (NUREG-0654/FEMA-REP-1, Rev. 2: E.1.a, E.3, F.1, F.1.a, F.1.b, F.1.c, F.3, O.1).

Warning Point

Extent-of-Play Agreement

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

Command Room (NYS and Oswego County)

Extent-of-Play Agreement

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

Emergency Operations Center (EOC) (NYS and Oswego County)

Extent-of-Play Agreement

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

Emergency Operations Facility (EOF)

Extent-of-Play Agreement

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

Dose Assessment

Extent-of-Play Agreement

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

Field Monitoring Teams (FMTs)

Extent-of-Play Agreement

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

Joint Information Center (JIC)

Extent-of-Play Agreement

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

Capability Target 3.2: Alert and Notification of the Public

Alert and notification of the public is completed in a timely manner. (NUREG-0654/FEMA-REP-1, Rev. 2: E.2, E.4, E.5, F.3, O.1).

Command Room

Extent-of-Play Agreement

- All activities will be based on the ORO plans and procedures as they would in an actual emergency.
- There will be no actual sounding of sirens and no actual broadcasting of EAS messages.
- Oswego County will simulate siren activation (no sounding) and discuss in conjunction with an EAS message broadcast (simulated) during the exercise.
- One (1) complete alerting and notification sequence will be evaluated. This sequence will include simulation of siren activation, and EAS activation (simulated) by NWS.

Emergency Operations Center (EOC)

Extent-of-Play Agreement

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

Joint Information Center (JIC)

Extent-of-Play Agreement

- All activities will be based on the ORO plans and procedures as they would in an actual emergency.
- At least one (1) complete alerting and notification sequence will be conducted and one will be evaluated. This sequence will include simulation of siren activation, and EAS activation (simulated) by NWS.
- Airing of the EAS messages will be simulated.
- There will be (1) simulated EAS follow-on news release which contains protective actions released to the media and available on the JIC FTP site for evaluation. Any other news releases may also be simulated but will not be evaluated.
- There will also be contact with the radio station to verify receipt of (1) simulated EAS follow-on news release which contains protective actions from Oswego County.

Capability Target 3.3: Emergency Information and Instructions for the Public and News Media

Accurate emergency information and instructions are provided to the public and the news media in a timely manner. (NUREG-0654/FEMA-REP-1, Rev. 2: E.2, E.4, E.5, G.1, G.2, G.3, G.3.a, G.4, G.5, O.1).

Command Room / Emergency Operations Center (EOC) (NYS and Oswego County)

Extent-of-Play Agreement

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

Joint Information Center (JIC)

Extent-of-Play Agreement

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

Public Instruction and Emergency Information

Extent-of-Play Agreement

- Two (2) news releases from the county will be prepared for evaluation: one (1) news release from the county with precautionary actions and one (1) EAS Special News Bulletin for simulated broadcast from the county, done separately.
- One (1) news release from NYS will be prepared for evaluation.

Emergency Information

Extent-of-Play Agreement

- At least one (1) media briefing will be conducted and one will be evaluated. Preparation and scheduling activities for the media briefings will be conducted in accordance with the JIC procedures.

Public Inquiry

Extent-of-Play Agreement

- Public Inquiry and Media Monitoring staff will be provided by licensee personnel.
- Inject messages will indicate false or misleading information to enable the public inquiry function to identify a minimum of two (2) trends or false rumors.

Media Inquiry

Extent-of-Play Agreement

- Two (2) media calls to the Media Inquiry line will be demonstrated.

OBJECTIVE 4: DETECT, MEASURE, SAMPLE, ANALYZE, and ASSESS

Capability Target 4.1: Field Monitoring Teams Management

FMTs are managed to obtain information to help characterize the release, locate and track the airborne radiological plume, and control contamination. (NUREG-0654/FEMA-REP-1, Rev. 2: H.11, H.13, I.5, I.6, I.9, I.10, M.7, M.8, O.1).

Dose Assessment

Extent-of-Play Agreement

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

Field Monitoring Team

Extent-of-Play Agreement

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

Capability Target 4.2: Plume Phase Measurements and Sampling

FMTs make, record, and report measurements of ambient radiation to appropriate authorities: radioiodine and particulate samples are collected. (NUREG-0654/FEMA-REP-1, Rev. 2: H.9, H.11, H.11.a, H.11.b, H.12, H.13, I.2, I.5, I.6, I.7, I.8, I.9, I.10, O.1).

Field Monitoring Teams (FMTs)

Extent-of-Play Agreement

- Oswego County will dispatch two (2) radiological monitoring teams to the Oswego County EOC parking lot. Each team will be provided with a State Controller and FEMA Evaluator.
- Each team will take two (2) ambient radiation measurements (including background measurements) and two (2) air samples as follows:
 - 1st Sample Set (Demonstration purposes)

- Each team will collect the first set of samples (1 ambient radiation measurement (including background measurements) and 1 air sample) from the Oswego County parking lot. This set of samples may be collected prior to any radioactive release as driven by the scenario. If the first set of samples will be collected for demonstration purposes only and radiation readings will be limited to background.
- In the event of inclement weather on Exercise Day, the field teams will be allowed to use an alternate indoor location to complete the 1st set of samples.
- 2nd Sample Set (Mobilized to alternate location)
 - After the first set of samples have been collected, each team will travel to the Oswego County Airport where a second set of samples (1 ambient radiation measurement (including background measurements) and 1 air sample) will be collected. Radiation measurements including background reading will be provided based on the scenario timeline.
 - In the event of inclement weather, field teams will be allowed to collect the second set of samples inside the NPP alternate OSC/TSC location (EOF building).
- During the exercise, the field monitoring teams will be using and provided with green labeled “Expired Silver Zeolite” cartridges that are properly labeled “For Exercise Use Only”. The silver zeolite cartridges used during a real emergency are in the monitoring kits and are available for inspection.
- At least one county field monitoring team member of each team will demonstrate proper donning, usage, and removal of protective clothing at the respective dispatch location at an appropriate time. If necessary, an inject message from the State Controller may be used to complete this demonstration prior to the end of the exercise. Teams will not be suited up in protective clothing after leaving the dispatch location. Additional protective clothing supplies will be available for inspection.
- There will be no actual packaging or transport of samples to the laboratory. Dose Assessment / Field Monitoring staff will be questioned only regarding means of transportation of air samples to a rendezvous point and the location of the State 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 and chain of custody.
- Opening of Windows or use of ventilation/ use of AC, Eating, drinking, and smoking will be allowed after concurrence of the FEMA Evaluator.
- Contamination control techniques will be demonstrated and discussed. The initial use of gloves by all teams will be demonstrated.
- In the event of inclement weather on Exercise Day, the field teams will be allowed to use an alternate indoor location to complete the drill.

Capability Target 4.3: Post-Plume Phase Measurements and Sampling

FMTs take measurements and samples to support assessment of the ingestion exposure pathway and to support reentry, relocation, and return decisions. (NUREG-0654/FEMA-REP-1, Rev. 2: H.11, H.11.a, H.11.b, H.12, H.13, I.2, I.5, I.6, I.8, M.7, O.1).

Extent-of-Play Agreement

NOT DEMONSTRATED DURING THIS EXERCISE

Capability Target 4.4: Laboratory Operations

The laboratory performs radiological analyses to support protective action decision-making. (NUREG-0654/FEMA-REP-1, Rev. 2: C.4, H.11, H.11.b, H.13, I.2, I.6, M.7, O.1).

Extent-of-Play Agreement

NOT DEMONSTRATED DURING THIS EXERCISE

Capability Target 4.5: Plume Phase Analysis and Dose Assessment

Dose assessment considers all available information including plant conditions, environmental conditions, field monitoring data, sample analysis results, and dose projection calculations. (NUREG-0654/FEMA-REP-1, Rev. 2: A.3, H.13, I.6, I.8, I.10, K.3, O.1).

Dose Assessment

Extent-of-Play Agreement

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

Emergency Operations Facility (EOF)

Extent-of-Play Agreement

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

Capability Target 4.6: Post-Plume Phase Sampling Plan Development and Analysis

Post-plume phase assessment considers all available information, including environmental conditions, field monitoring data, sample analysis results, and dose projection calculations. (NUREG-0654/FEMA-REP-1, Rev. 2: A.3, H.13, I.2, I.6, I.8, I.10, J.12, J.14.b, J.14.c, K.3, M.7, M.8, O.1).

Extent-of-Play Agreement

NOT DEMONSTRATED DURING THIS EXERCISE

OBJECTIVE 5: OPERATE

Capability Target 5.1: Monitoring, Decontamination, Sheltering, and Registration of Evacuees

Facilities, equipment, and procedures are in place and utilized to provide monitoring, decontamination, identification, temporary shelter, congregate care, and registration of evacuees. (NUREG-0654/FEMA-REP-1, Rev. 2: J.11.d, J.13, K.4, O.1).

Extent-of-Play Agreement

NOT DEMONSTRATED DURING THIS EXERCISE

Capability Target 5.2: Monitoring and Decontamination of Emergency Workers, Equipment, and Vehicles

Facilities, equipment, and procedures are in place and utilized to provide monitoring and decontamination of emergency workers and their equipment and vehicles. (NUREG-0654/FEMA-REP-1, Rev. 2: K.4, O.1).

Extent-of-Play Agreement

NOT DEMONSTRATED DURING THIS EXERCISE

Capability Target 5.3: Transportation and Treatment of Contaminated, Injured Individuals

Transport contaminated, injured individuals to medical facilities with the capability to monitor and decontaminate. (NUREG-0654/FEMA-REP-1, Rev. 2: C.2.d, F.2, H.11, H.12, J.2, K.3, K.4, L.1, L.3, L.4, O.1).

Extent-of-Play Agreement

NOT DEMONSTRATED DURING THIS EXERCISE

Capability Target 5.4: Traffic and Access Control

Appropriate traffic and access control is established; accurate instructions are provided to traffic and access control personnel. (NUREG-0654/FEMA-REP-1, Rev. 2: H.12, J.8, J.8.b, J.10, J.10.a, J.11.c, J.11.e, J.11.f, J.14.d, J.14.e, M.1.b, O.1).

Traffic and Access Control Points (TCPs and ACPs) – County EOC

Extent-of-Play Agreement

- All activities will be based on the OROs' plans and procedures as they would in an actual emergency.
- Oswego County - There will be one (1) interview of law enforcement officials to discuss how to activate TCPs/ACPs, done in the training room of the EOC at exercise conclusion.

Impediments to Evacuation

- The communication of the alternate route to evacuees leaving the area will be accomplished through news releases and/or media briefings.
- The State Controller will inject one "Exercise" message for re-routing of traffic due to the impediments as agreed upon.
- 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 and some follow-up contacts may be simulated.

Exercise Issues (Level 1 Findings)

- No issues were reported for this exercise.

Exercise Issues (Level 2 Findings)

- No issues were reported for this exercise.

END OF REPORT