

St. Lucie Nuclear Power Plant Exercise – February 24, 2010

Final Report - Radiological Emergency Preparedness Program

May 24, 2010



FEMA

FEMA Region IV





FEMA

Draft Exercise Report

St. Lucie Nuclear Power Plant

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Exercise Date: **February 24, 2010**

Report Date: **May 24, 2010**

**U.S. DEPARTMENT OF HOMELAND SECURITY
FEDERAL EMERGENCY MANAGEMENT AGENCY
REGION IV**

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TABLE OF CONTENTS

| | Page |
|--|------|
| TABLE OF CONTENTS | iii |
| I. EXECUTIVE SUMMARY | 1 |
| II. INTRODUCTION | 2 |
| III. EXERCISE OVERVIEW | 4 |
| A. EPZ Description | 4 |
| B. Exercise Participants..... | 4 |
| C. Exercise Timeline | 5 |
| IV. EXERCISE EVALUATION AND RESULTS | 7 |
| A. Table 2: Summary of Results of Exercise Evaluation..... | 7 |
| Table 2a: HSEEP Capabilities Evaluated..... | 7 |
| B. Status of Jurisdictions Evaluated..... | 10 |
| 1. STATE OF FLORIDA | 11 |
| 1.1 State Emergency Operations Center..... | 11 |
| 1.2 State Management Team | 11 |
| 1.3 Emergency News Center | 12 |
| 1.4 Dose Assessment/Emergency Operations Facility..... | 13 |
| 2. RISK JURISDICTIONS..... | 14 |
| 2.1 ST. LUCIE COUNTY | 14 |
| 2.1.1 Emergency Operations Center..... | 14 |
| 2.1.2 Protective Actions for Schools | 14 |
| 2.1.3 Traffic Control Points..... | 15 |
| 2.2 MARTIN COUNTY | 16 |
| 2.2.1 Emergency Operations Center..... | 16 |
| 2.2.2 Protective Actions for Schools | 16 |
| 2.2.3 Traffic Control Points..... | 17 |
| 2.2.4 Back-up Route Alerting..... | 18 |

| | | |
|-------|-----------------------------------|----|
| 3. | HOST JURISDICTIONS | 18 |
| 3.1 | BREVARD COUNTY | 18 |
| 3.1.1 | Emergency Operations Center | 18 |
| 3.1.2 | Traffic Control Points | 19 |
| 3.2 | INDIAN RIVER COUNTY | 20 |
| 3.2.1 | Emergency Operations Center | 20 |
| 3.2.2 | Traffic Control Points | 20 |
| 3.3 | PALM BEACH COUNTY | 21 |
| 3.3.1 | Emergency Operations Center | 21 |
| 3.3.2 | Reception Center | 22 |

List of Appendices

| | |
|--|----|
| APPENDIX 1 - ACRONYMS AND ABBREVIATIONS..... | 23 |
| APPENDIX 2 - EXERCISE EVALUATORS | 25 |
| APPENDIX 3 - EXERCISE CRITERIA AND EXTENT-OF-PLAY AGREEMENT | 27 |
| APPENDIX 4 - EXERCISE SCENARIO | 49 |

List of Tables

| | |
|---|---|
| Table 1 - Exercise Timeline | 6 |
| Table 2 - Summary of Results of Exercise Evaluation | 8 |
| Table 2a - Summary of HSEEP Capabilities Evaluated | 9 |

I. EXECUTIVE SUMMARY

On February 24, 2010, the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), and Radiological Emergency Preparedness (REP) Program staff evaluated a plume exposure pathway exercise in the emergency planning zone around the St. Lucie Nuclear Power Plant.

The purpose of the exercise was to assess the level of State and local preparedness in responding and to a simulated radiological emergency that affected both the plume emergency planning zone. This exercise was held in accordance with DHS policies and guidance concerning the exercise of State and local radiological emergency response plans and procedures. It was designed and observed using the Homeland Security Exercise Evaluation Program (HSEEP) methodology that fully includes the requirements of the REP Program effective on the date of the exercise. The previous federally evaluated exercise was conducted on February 20 and 21, 2008, and the qualifying emergency preparedness exercise was conducted in October 20 and 21, 1980.

The State's direction and control responsibilities were demonstrated both at the State Emergency Operations Center (SEOC) in Tallahassee and at the State Management Team (SMT) deployed to the utility's Emergency Operations Facility (EOF) in St. Lucie County.

The following out-of-sequence activities were demonstrated and evaluated as part of this exercise on the dates indicated below:

| Date | County | Event |
|-------------|------------------|----------------------------------|
| Feb 9, 2010 | Martin County | • Protective Actions for Schools |
| Feb 9, 2010 | St. Lucie County | • Traffic Control Points |

Palm Beach County successfully leveraged this exercise to validate newly implemented National Incident Management System (NIMS) compliant, emergency response organizational protocols. They also conducted a concept demonstration to validate a proposed high density public reception area adjacent to the Florida Turnpike.

State and Local organizations demonstrated the knowledge and ability to effectively implement their emergency response plans and procedures. No Deficiencies or Areas Requiring Corrective Actions (ARCA) were identified during this exercise.

FEMA acknowledges the exceptional efforts of individuals at all levels of government and the volunteers who planned, prepared for and participated in this exercise. The State of Florida, the two risk counties Martin and St. Lucie, and three host counties Brevard, Indian River, and Palm Beach all participated in this exercise

II. INTRODUCTION

On December 7, 1979, the President directed the Federal Emergency Management Agency (FEMA) to assume the lead responsibility for all offsite nuclear planning and response. FEMA became a part of the Department of Homeland Security (DHS) with its creation in 2002. The Radiological Emergency Preparedness (REP) Program conducts its activities pursuant to Title 44 Code of Federal Regulations (CFR) Parts 350, 351 and 352. These regulations are a key element in the REP Program that was established following the Three Mile Island Nuclear Station accident in March 1979.

Title 44 CFR 350 establishes the policies and procedures for the REP Program'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 (FNF) include the following:

- Taking the lead in offsite emergency planning and in the review and evaluation of radiological emergency response plans (RERP) and procedures developed by State and local governments;
- Determining whether such plans and procedures can be implemented on the basis of observation and evaluation of exercises of the plans and procedures conducted by State and local governments;
- Responding to requests from the Nuclear Regulatory Commission (NRC) to the REP Program pursuant to the Memorandum of Understanding between the NRC and FEMA (Federal Register, Vol. 58, No. 176, September 14, 1993)
- Coordinating the activities of Federal agencies with responsibilities in the radiological emergency planning process:
 - Department of Agriculture
 - Department of Commerce
 - Department of Energy
 - Department of Health and Human Services
 - Department of Homeland Security
 - Department of the Interior
 - Department of Transportation
 - Environmental Protection Agency
 - Food and Drug Administration and
 - Nuclear Regulatory Commission.

Field representatives of these agencies serve on a Radiological Assistance Committee (RAC) which is chaired by FEMA Region IV.

Formal submission of the RERPs for the St. Lucie Nuclear Power Plant to FEMA by the State of Florida was made on August 26, 1983. Formal approval of these RERPs was granted on February 14, 1984.

A REP exercise was evaluated on February 24, 2010 with out-of-sequence activities conducted during the week of February 9th. The FEMA Region IV REP office assessed the capabilities of State and local emergency preparedness organizations to implement their RERPs and procedures to protect the public health and safety during a radiological emergency involving the St. Lucie Nuclear Power Plant. This report presents the results of the exercise and findings on the performance by offsite response organizations (ORO) during a simulated radiological emergency.

The findings presented are based on the evaluations of the Federal evaluator team, with final determinations being made by the RAC Chair and final approval by FEMA Region IV Administrator.

The criteria utilized in the 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;
- FEMA "Interim Radiological Emergency Preparedness Manual," dated August 2002.

Section III, entitled "Exercise Overview," presents basic information and data relevant to the exercise. This section contains a description of the plume pathway Emergency Planning Zone (EPZ), a listing of all participating jurisdictions and functional entities, which were evaluated, and a table presentation of the time of actual occurrence of key exercise events and activities.

Section IV, entitled "Exercise Evaluation and Results," presents summary information on the demonstration of applicable exercise criteria at each jurisdiction or functional entity evaluated in a results only format.

III. EXERCISE OVERVIEW

This section contains data and basic information relevant to the February 24, 2010 exercise and out-of-sequence activities associated with it. The purpose of the exercise was to test Federal, State and local response capabilities in the area surrounding the St. Lucie Nuclear Power Plant (SLNPP).

A. EPZ Description

PLUME EPZ - The SLNPP is located in St. Lucie County Florida, on Hutchinson Island approximately 4 miles east-northeast of the City of Port St. Lucie, and approximately 5.5 miles north of the Martin County/St. Lucie County boundary. Both Hutchinson Island and the southern portion of North Hutchinson Island are located within the EPZ. Three causeways link Hutchinson Island to the mainland, and lead to U S Highway 1 and I-95. Parts of St. Lucie and Martin Counties lie within the 10-mile EPZ. The 10-mile EPZ is divided into 8 emergency planning areas. The main use of the land is residential and recreational. Approximately 280,000 people reside within the 10-mile EPZ. This facility is owned and operated by the Florida Power & Light Company (FPL).

B. Exercise Participants

The following agencies, organizations and units of government participated in the exercise for the St. Lucie Nuclear Power Plant community on February 24, 2010.

STATE OF FLORIDA

- Department of Health
 - Bureau of Radiation Control
- Department of Transportation
- Florida Department of Community Affairs
 - Division of Emergency Management
- Department of Highway Safety and Motor Vehicles
 - Division of the Florida Highway Patrol
- Department of Agricultural and Consumer Services
 - Division of Agricultural Environmental Services
 - Division of Animal Industry
 - Division of Aquaculture
 - Division of Dairy Industry
 - Division of Food Safety
 - Division of Plant Industry
 - Geographic Information Systems

RISK JURISDICTIONS

Martin County
St. Lucie County

HOST JURISDICTIONS

Brevard County
Indian River County
Palm Beach County

PRIVATE/VOLUNTEER ORGANIZATIONS

American Red Cross (ARC)
Amateur Radio Emergency Services (ARES)
Radio Amateur Civil Emergency Service (RACES)

C. Exercise Timeline

Table 1, on the following page, presents the time at which key events and activities occurred during the St. Lucie Nuclear Power Plant exercise on February 24, 2010.

Table 1. Exercise Timeline

DATE AND SITE: February 24, 2010 - St. Lucie Nuclear Power Plant

| Emergency Classification Level or Event | Time Utility Declared | Time That Notification Was Received or Action Was Taken | | | | | | | | |
|--|-----------------------|---|--------------|--------------|--------------|------------------|---------------|----------------|---------------------|-------------------|
| | | SEOC | SMT | ENC | DOSE/EOF | ST. LUCIE COUNTY | MARTIN COUNTY | BREVARD COUNTY | INDIAN RIVER COUNTY | PALM BEACH COUNTY |
| Unusual Event | 0745 | 0745 | 0754 | | 0754 | 0759 | 0754 | 0809 | 0805 | 0805 |
| Alert | 0822 | 0842 | 0833 | 0829 | 0833 | 0835 | 0839 | 0848 | 0845 | 0845 |
| Site Area Emergency | 0935 | 0949 | 0937 | 0945 | 0937 | 0951 | 0953 | 1009 | 1007 | 1006 |
| General Emergency | 1045 | 1045 | 1045 | 1048 | 1045 | 1056 | 1057 | 1120 | 1116 | 1116 |
| Simulated Rad. Release Started | 0920/1150 | 1155 | 0952/1152 | 0945 | 0952/1152 | 0938/1155 | 0936/1157 | | 1003 | |
| Simulated Rad. Release Terminated | 1001 | Ongoing | 1021/Ongoing | 1111/Ongoing | 1021/Ongoing | 1001/Ongoing | 1001/Ongoing | | 1055/Ongoing | |
| Facility Declared Operational | | 0947 | 0947 | 0940 | 0947 | 1005 | 0839 | 0800 | 1008 | 0900 |
| Declaration of State of Emergency Local | | 0935/ 0948 | | 0948/1004 | | 0837 | 0853 | | 1003 | |
| State | | 1306 | 1045 | | 1045 | | 1121 | 0958 | | 1115 |
| Exercise Terminated | | 1306 | 1303 | 1317 | 1303 | 1310 | 1303 | 1143 | 1315 | 1315 |
| Early Precautionary Actions: Evacuate Schools | | | | 1018 | | 0952 | 0940 | | | |
| Evacuate Special Needs Population | | | | | | 1110 | 0940 | | | |
| Waterways Clear – St. Lucie and Martin Counties | | | | 1009 | | | | | | |
| Park and Beaches Closed – St. Lucie | | | | 1045 | | | | | | |
| 1 st Protective Action Decision Standby message | | | 1000 | | | 1000 | 1000 | | | |
| 1 st Siren Activation | | 1015 | 1005 | 1005 | | 1005 | 1005 | | | |
| 1 st EAS Message: Site A | | 1005 | 1005 | 1005 | | 1005 | 1005 | | | |
| 2 nd Protective Action Decision Evacuate Areas: 0-2 all, 2-5, L, M & N Shelter Areas: out to 10 | | 1116 | 1104 | 1104 | | 1104 | 1104 | 1104 | | |
| 2 nd Siren Activation: | | 1110 | 1110 | 1110 | | 1110 | 1110 | 1110 | | |
| 2 nd EAS Message: General A-3 | | 1115 | | 1115 | | 1115 | 1115 | | | |
| KI Decision: Emergency Workers Ingest | | 1252 | 1205 | 1203 | | 1155 | 1204 | N/O | | |

IV. EXERCISE EVALUATION AND RESULTS

This section contains the results and preliminary findings of the evaluation for all jurisdictions and functional entities that participated in the exercise on February 24, 2010 and out of sequence activities. The exercise tested the offsite emergency response capabilities of State and local governments within the 10-mile Plume Pathway area around the St. Lucie Nuclear Power Plant.

Each jurisdiction and functional entity was evaluated based on their demonstration of criteria as delineated in REP Exercise Evaluation Methodology, dated August 2002. Detailed information on the exercise criteria and the extent-of-play agreement used are found in Appendix 3 of this report.

A. Table 2: Summary of Results of Exercise Evaluation

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

- M - Met (No Deficiency or ARCAs assessed and no unresolved ARCAs from prior exercises)
- D - Deficiency assessed
- A - ARCA(s) assessed or unresolved ARCA(s) from prior exercise(s)
- N - Not Demonstrated (Reason explained in Subsection B)

Table 2a: HSEEP Capabilities Evaluated

This exercise was evaluated under Homeland Security Exercise Evaluation Program guidelines using Exercise Evaluation Guides (EEG) developed specifically for each jurisdiction. These unique EEGs comprise seventeen separate documents and is therefore much too lengthy to be included here.

The following chart synthesizes the HSEEP capabilities evaluated during this exercise, cross-referenced to their related (non-HSEEP) criterion:

Table 2. Summary of Results of Exercise Evaluation

DATE AND SITE: February 24, 2010 – St. Lucie Nuclear Power Plant

| ELEMENT/Sub-Element | SEOC | SMT | DOSE /EOF | ENC | ST. LUCIE COUNTY | MARTIN COUNTY | BREVARD COUNTY | INDIAN RIVER DOUNTY | PALM BEACH COUNTY |
|---|------|-----|-----------|-----|------------------|---------------|----------------|---------------------|-------------------|
| 1. EMERGENCY OPERATIONS MANAGEMENT | | | | | | | | | |
| 1.a.1. Mobilization | M | M | M | M | M | M | M | M | |
| 1.b.1. Facilities | | | | | M | | | | |
| 1.c.1. Direction and Control | M | M | M | M | M | M | M | M | |
| 1.d.1. Communications Equipment | M | M | M | M | M | M | M | M | |
| 1.e.1. Equipment & Supplies to Support Operations | M | M | M | M | M | M | M | M | M |
| 2. PROTECTIVE ACTION DECISION MAKING | | | | | | | | | |
| 2.a.1. Emergency Worker Exposure Control | M | M | M | | M | M | | | |
| 2.b.1. Rad Assessment & PARs Based on Available Information | | | M | | | | | | |
| 2.b.2. Rad Assessment and PADs for the General Public | M | M | M | | M | M | | | |
| 2.c.1. Protective Action Decisions for Special Populations | | | | | M | M | | | |
| 2.d.1. Rad Assessment & Decision Making for Ingestion Exposure | | | | | | | | | |
| 2.e.1. Rad Assessment & Decision Making for Relocation, Re-entry & Return | | | | | | | | | |
| 3. PROTECTIVE ACTION IMPLEMENTATION | | | | | | | | | |
| 3.a.1. Implementation of Emergency Worker Control | | | M | | M | M | M | M | M |
| 3.b.1. Implementation of KI Decisions | | | M | | | | M | | M |
| 3.c.1. Implementation of PADs for Special Populations | | | | | M | M | | | |
| 3.c.2. Implementation of PADs for Schools | | | | | M | M | | | |
| 3.d.1. Implementation of Traffic and Access Control | | | | | M | M | M | M | |
| 3.d.2. Impediments to Evacuation and Traffic and Access Control | | | | | M | M | M | M | |
| 3.e.1. Implementation of Ingestion Decisions Using Adequate Info | | | | | | | | | |
| 3.e.2. Implementation of IP Decisions Showing Strategies and Instr. Materials | | | | | | | | | |
| 3.f.1. Implementation of Relocation, Re-entry and Return Decisions | | | | | | | | | |
| 4. FIELD MEASUREMENT and ANALYSIS | | | | | | | | | |
| 4.a.1. Plume Phase Field Measurement & Analysis Equipment | | | | | | | | | |
| 4.a.2. Plume Phase Field Measurement & Analysis Management | | | M | | | M | | | |
| 4.a.3. Plume Phase Field Measurements & Analysis Procedures | | | | | | | | | |
| 4.b.1. Post Plume Field Measurement & Analysis | | | | | | | | | |
| 4.c.1. Laboratory Operations | | | | | | | | | |
| 5. EMERGENCY NOTIFICATION & PUBLIC INFO | | | | | | | | | |
| 5.a.1. Activation of Prompt Alert and Notification | M | M | | | M | M | | | |
| 5.a.2. Activation of Prompt Alert and Notification 15 Minute (Fast Breaker) | | | | | | | | | |
| 5.a.3. Activation of Prompt Alert & Notification Backup Alert & Notification | | | | | M | M | | | |
| 5.b.1. Emergency Info and Instructions for the Public and the Media | M | M | | M | M | M | | | |
| 6. SUPPORT OPERATIONS/FACILITIES | | | | | | | | | |
| 6.a.1. Monitoring & Decon of Evacuees & EWs & Registration of Evacuees | | | | | | | | | M |
| 6.b.1. Monitoring and Decon of Emergency Worker Equipment | | | | | | | | | M |
| 6.c.1. Temporary Care of Evacuees | | | | | | | | | |
| 6.d.1. Transport and Treatment of Contaminated Injured Individuals | | | | | | | | | |

LEGEND: M = Met A = ARCA

Table 2a. Summary of HSEEP Capabilities Evaluated

DATE AND SITE: February 24, 2010 - St. Lucie Nuclear Power Plant

| | STATE | | | | COUNTY | | | | |
|--|-------|-----------|--------------------|-----------------------|------------------|---------------|----------------|---------------------|-------------------|
| | SEOC | STATE IMT | DOSE ASSESMENT/EOF | EMERGENCY NEWS CENTER | St. LUCIE COUNTY | MARTIN COUNTY | BREVARD COUNTY | INDIAN RIVER COUNTY | PALM BEACH COUNTY |
| HSEEP CAPABILITIES | | | X | | | | | | |
| CBRNE DETECTION | | | X | | | | | | |
| CITIZEN EVACUATION & SHELTER-INPLACE | | | | | X | X | X | X | |
| COMMUNICATIONS | X | X | X | X | X | X | X | X | |
| CRITICAL RESOURCE LOGISTICS & DISTRIBUTION | X | X | | | X | X | X | X | |
| EMERGENCY OPERATIONS CENTER MANAGEMENT | X | X | X | | X | X | X | X | X |
| EMERGENCY PUBLIC INFORMATION & WARNING | X | X | | X | X | X | X | X | |
| EMERGENCY PUBLIC SAFETY & SECURITY RESPONSE | | | | | X | X | X | X | |
| ENVIRONMENTAL HEALTH | | | X | | | | | | |
| MASS PROPHYLAXIS | | | | | X | X | X | X | |
| RESPONDER SAFETY & HEALTH | X | X | | | X | X | X | X | |
| WMD/HazMat MATERIALS RESPONSE AND DECON | | | X | | X | X | X | X | X |

B. Status of Jurisdictions Evaluated

This subsection provides information on the evaluation of each participating jurisdiction and functional entity in a jurisdictional results based format. Presented below is a definition of the terms used in this subsection relative to Criterion 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 criterion 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 criterion under which one or more ARCAs were assessed during the current exercise or ARCAs assessed during prior exercises that remain unresolved. Included is a description of the ARCA 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** – Description(s) of ARCA(s) assessed during previous exercises, which were resolved in this exercise and the corrective actions demonstrated.
- **Prior ARCAs - Unresolved** – Description(s) of ARCA(s) assessed during prior exercises, which 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, which may be discussed in this report.

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

1. STATE OF FLORIDA

1.1 State Emergency Operations Center

The State Coordinating Officer (SCO) and the State Emergency Response Team (SERT) Chief demonstrated very capable direction and control of the State Emergency Operations Center (SEOC). The SMT Chief's decisions were effective, coordinated, concise and timely; with local jurisdictions needs always the top priority. The SEOC staff was very knowledgeable, well trained and dynamic in executing their duties. The SEOC was a technological marvel with layered communication levels, geographic information systems (GIS) mapping, meteorological data animation and out-of-the-box media monitoring capabilities with a cumulative outcome of enhancing the State's ability to make timely accurate public safety decisions.

a. MET:

Capabilities: Emergency Operations Center Management; Communications; Critical Resource Logistics and Distribution; Responder Safety and Health; and Emergency Public Information and Warning

Criteria: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 5.a.1 and 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

1.2 State Management Team

The State Management Team (SMT) Incident Commander (IC) worked with the counties to produce coordinated protective action decisions (PAD) and additional assets as required. The IC maintained constant communication and coordination with the SEOC. They had adequate equipment, supplies and primary back-up communications capabilities to accomplish their mission. Martin and St. Lucie Counties coordinated well, using well organized procedures, making PADs to ensure the health and safety of the public in their jurisdictions. The County decision makers promptly informed their County Emergency Operations Centers (EOC) to affect siren soundings and Emergency Alert System (EAS) messages. The SMT and counties worked well together to implement PADs in a timely manner.

a. MET:

Capabilities: Emergency Operations Center Management; Communications; Critical Resource Logistics and Distribution; Responder Safety and Health; and Emergency Public Information and Warning

Criteria: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 5.a.1 and 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

1.3 Emergency News Center

The St. Lucie Emergency News Center (ENC) was rapidly activated after notification of the ALERT Emergency Classification Level (ECL). The ENC was the joint source for the release of public information by the Utility, State, St. Lucie and Martin County, and the Nuclear Regulatory Commission (NRC). The utility spokesman and Public Information Officers (PIO) representing respective jurisdictions effectively managed their staffs. Proactive leadership of the PIOs ensured the ENC staff was provided situational awareness through frequent and timely update briefings.

a. MET:

Capabilities: Emergency Public Information and Warning

Criteria: 1.a.1, 1.c.1, 1.d.1, 1.e.1 and 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

1.4 Dose Assessment/Emergency Operations Facility

The St. Lucie Emergency Operations Facility (EOF) was an excellent facility having all of the necessary technical and administrative amenities for conducting emergency operations.

Officials representing the Bureau of Radiological Control, co-located in the EOF, performed independent accident analyses of the postulated emergency events. These analyses included, performing radiological dose assessment calculations, developing appropriate PADs, and serving as the technical advisor to the SCO.

Communications and coordination between and among all emergency response stakeholder organizations, which included officials of the State and applicable local governments, as well as with the utility operator and representatives of the NRC, were outstanding. The availability and flow of technical information was timely and accurate.

The SMT successfully demonstrated the capability to independently analyze the impact of the technical considerations, and to develop appropriate protective actions to ensure public health and safety.

The State officials responsible for conducting independent accident analyses, were well trained, knowledgeable, followed applicable procedures; and overall, they carried out their respective responsibilities in an efficient and professional manner.

a. MET:

Capabilities: Environmental Health; Communications; Emergency Operations Center Management; WMD/Hazardous Materials Response and Decontamination; and CBRNE Detection.

Criteria: 1.a.1, 1.c.1, 1.d.1, 1.e.1 2.a.1, 2.b.1, 2.b.2, 3.a.1, 3.b.1 and 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. RISK JURISDICTIONS

2.1 ST. LUCIE COUNTY

2.1.1 Emergency Operations Center

The EOC was a new, distinguished facility, a structure with both internal and external appeal. The facility had sufficient space and equipment to support EOC emergency response activities in response to an incident at the SLNPP. The Emergency Management Coordinator (EMC) was forward thinking, proactive and decisive as he effectively guided operations in response to the simulated incident. EOC staff was well trained, capable and performed their tasks in accordance with established plans and procedures. The performance of the EMC and the EOC staff during the exercise is indicative of the leadership, dedication and commitment of all to the protection and safety of the citizens of St. Lucie County.

a. MET:

Capabilities: Emergency Operations Center Management; Communications; Critical Resource Logistics and Distribution; Responder Safety and Health; Emergency Public Information and Warning; Citizen Evacuation and Shelter-In-Place; Mass Prophylaxis; and Emergency Public Safety and Security Response

Criteria: 1.a.1, 1.b.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 2.c.1, 3.a.1, 3.c.1, 3.c.2, 5.a.1, 5.a.3 and 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 Protective Actions for Schools

St. Lucie County School District demonstrated its ability to safeguard students, staff and faculty during out of sequence interviews. The fourteen principals or assistant principals interviewed were very knowledgeable in the implementation of district and supplemental school emergency plans and procedures. They successfully demonstrated their ability to coordinate school activities for an incident at the SLNPP.

- a. **MET:**
Capabilities: Citizens Evacuation and Shelter-In-Place; and Communications
Criterion: 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

2.1.3 Traffic Control Points

County Sheriff's Officers interviewed at Traditions Stadium on February 9, 2010, understood their overall role in implementation of traffic control and were aware of their responsibilities for the safe, orderly and expeditious flow of vehicle traffic. They had received radiological training and were well aware of dosimetry requirements, potassium iodide (KI) procedures, recording requirements, and the turn-back values. They were also knowledgeable of traffic control procedures, communications requirements, impediment removal, the overall evacuation plans for St. Lucie population and the proper evacuation routes. The officers shared a genuine concern for public safety.

- a. **MET:**
Capabilities: Emergency Public Safety and Security Response; Responder Safety and Health; WMD/Hazardous Materials Response and Decontamination; and Mass Prophylaxis
Criteria: 3.d.1 and 3.d.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 MARTIN COUNTY

2.2.1 Emergency Operations Center

EOC staff were well trained and responded in accordance with policies and procedures. Once the EOC was activated, personnel were provided a technological briefing which oriented staff to the multiple displays and tools utilized for situational awareness. The IC and the Operations Chief coordinated closely with the EOF, surrounding counties, and EOC staff to make timely and appropriate PADS for emergency workers and the public. Informative displays, accurate information gathering, checklists, and communication all contributed to the effective and efficient operation of the EOC.

a. MET:

Capabilities: Emergency Operations Center Management; Communications; Critical Resource Logistics and Distribution; Responder Safety and Health; Emergency Public Information and Warning; Citizen Evacuation and Shelter-In-Place; Mass Prophylaxis; and Public Safety and Security Response

Criteria: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 2.a.1, 2.b.2, 2.c.1, 3.a.1, 3.c.1, 3.c.2, 3.d.1, 3.d.2, 5.a.1 and 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 Protective Actions for Schools

The school district successfully demonstrated its ability to protect the student and staff populations in the Emergency Planning Zone (EPZ), through interviews with the School Administrator and Safety Officer, conducted at the Environmental Studies Center out of sequence on February 9, 2010. Upon notification of an Alert or greater ECL by the School Superintendent or designee, the students would be loaded onto their busses and transported to either the reception center or their home school if it was outside the 10 mile EPZ. The Administrator had a well thought out evacuation plan and was knowledgeable about district procedures including reunification policies. Procedures included actions to ensure special needs were accommodated. The school district utilized a robust communications system ensuring organized and redundant communications capability. The plan was organized and well understood. The Administrator and staff

interviewed were enthusiastic, professional and had thoroughly planned for the well being of their students, staff and faculty in the event of an emergency situation.

a. MET:

Capabilities: Citizen Evacuation and Shelter-In-Place; and Communications

Criteria: 1.a.1, 3.a.1, 3.b.1 and 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

2.2.3 Traffic Control Points

Traffic and access control points (TCP/ACP) were discussed by interview and their deployment was simulated. All TCP/ACP locations were pre-established in the plan. Deputies were trained in emergency worker exposure control, were familiar with administrative turn-back values, reading of dosimetry and recording the readings, proper wearing of dosimetry, and on the procedures for KI. In addition, the Police Departments of Sewels Point and Stuart planned for additional traffic management officers to be placed at major locations to keep traffic moving. There was coordination and cooperation on TCP/ACPs with the Sheriffs Office, local police departments and St. Lucie County.

a. MET:

Capabilities: Emergency Public Safety and Security Response; Responder Safety and Health; WMD/Hazardous Materials Response and Decontamination; and Mass Prophylaxis.

Criterion: 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

2.2.4 Back-up Route Alerting

Back-up route alerting and notification was accomplished by interview with the County Fire Chief and a Sheriff Deputy at the EOC. They were knowledgeable of their plans and procedures. Both agencies indicated there were enough vehicles, equipment, and personnel to adequately alert and notify each individual route within a timely manner without degrading other ongoing/anticipated operations..

- a. **MET:**

Capabilities: Emergency Public Information and Warning

Criterion: 5.a.3

- b. **DEFICIENCY:** NONE

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

- d. **NOT DEMONSTRATED:** NONE

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

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

3. HOST JURISDICTIONS

3.1 BREVARD COUNTY

3.1.1 Emergency Operations Center

The Director of the Office of Emergency Management and his staff provided good direction and control throughout the exercise. The EOC was very well equipped to handle any type of emergency situation. Staff were well prepared to perform their tasks, and consistently engaged in proactive problem-solving discussions. The Director and Radiological Coordinator leveraged the exercise to provide an opportunity for the group to review and suggest improvements to both radiological and all-hazards plans and procedures.

- a. **MET:**

Capabilities: Emergency Operations Center Management; Communications; Critical Resource Logistics and Distribution; Responder Safety and Health;

Emergency Public Information and Warning; and Citizen Evacuation and Shelter-In-Place

Criteria: 1.a.1, 1.c.1, 1.d.1, 1.e.1 and 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

3.1.2 Traffic Control Points

Representatives of the Sheriff's Office, Florida Highway Patrol, and Transfield Services (subcontractor to the Florida Department of Transportation) discussed procedures for the establishment of TCPs at the Valkaria Reception Center on I-95 and the process of managing evacuee traffic flow. They were well versed in the overall traffic management plan for the county and the roles and responsibilities of each agency. They were also knowledgeable in the use of personnel dosimetry and turn-back values.

- a. **MET:**

Capabilities: Emergency Public Safety and Security Response; Responder Safety and Health; WMD/Hazardous Materials Response and Decontamination; and Mass Prophylaxis

Criteria: 1.a.1, 1.e.1, 3.a.1, 3.b.1, 3.d.1 and 3.d.2

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

3.2 INDIAN RIVER COUNTY

3.2.1 Emergency Operations Center

The County Director of Emergency Services, supported by the Emergency Management Coordinator and REP analyst demonstrated extensive knowledge of the County's Comprehensive Emergency Management Plan and the supporting REP Plan Annex. The entire EOC staff worked cooperatively to develop a coordinated action plan for response to the exercise scenario and to manage essential assets. The EOC had sufficient communications equipment and visual references to enhance situational awareness. Interviews were conducted with the representatives from the County Department of Health on KI distribution and the Red Cross for reception center operations. Both were very familiar with all aspects of the tasks involved.

a. MET:

Capabilities: Emergency Operations Center Management; Communications; Critical Resource Logistics and Distribution; Responder Safety and Health; Emergency Public Information and Warning; and Citizens Evacuation and Shelter-In-Place

Criteria: 1.a.1, 1.c.1, 1.d.1, 1.e.1, 3.a.1, 3.c.2 and 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

3.2.2 Traffic Control Points

The Indian River County Sheriff's Office (SO) personnel in the EOC discussed and made calls to place SO and local police officers on standby (simulated) in the event the TCPs/ACPs were activated. In response to a controller inject identifying a traffic impediment at the intersection of State Road 60 and I-95, the SO simulated all procedures in place to dispatch patrol cars equipped with cones to establish and staff nine pre-designated TCPs/ACPs in the county needed to redirect traffic around the impediment. By interview, the sheriff deputies were knowledgeable about use of dosimetry, exposure limits, and that they were to read and record the readings every 30 minutes.

a. MET:

Capabilities: Emergency Public Safety and Security Response; Responder Safety and Health; WMD/Hazardous Materials Response and Decontamination; and Mass Prophylaxis

Criteria: 1.a.1, 1.e.1, 3.a.1, 3.b.1, 3.d.1 and 3.d.2

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

3.3 PALM BEACH COUNTY

3.3.1 Emergency Operations Center

Management of the County EOC was exceptional. During the exercise, the Operations Manager (OM) activated, staffed and managed the EOC in accordance with EOP. The Executive Policy Group made up of core Emergency Support Function (ESF) leadership planned and directed EOC activities while the OM coordinated information and functions both internally and externally until deactivation.

- a. **MET:**

Capabilities: Emergency Operations Center Management

Criteria: 1.e.1, 3.a.1, 3.b.1, 6.a.1 and 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

3.3.2 Reception Center

The County used the scheduled SLNPP exercise as an opportunity to validate the concept and operational procedures for a new reception center and decontamination station located adjacent to the Florida Turnpike at Okeehetee Park. Representatives of Palm Beach Fire and Rescue, Sheriff's Department, Animal Care and Control Department, along with Florida Department of Public Health followed their new procedures in a professional and experienced manner to demonstrate the concept of using Okeehetee park as a combination reception center and vehicle decontamination site.

a. MET:

Capabilities: WMD/Hazardous Materials Response and Decontamination

Criteria: 1.e.1, 3.a.1, 3.b.1, 6.a.1 and 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

APPENDIX 1

ACRONYMS AND ABBREVIATIONS

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

| | |
|------------|---|
| ANI | American Nuclear Insurers |
| ARC | American Red Cross |
| ARCA | Area Requiring Corrective Action |
| ARES | Amateur Radio Emergency Services |
| CEMP | Comprehensive Emergency Management Plan |
| CFR | Code of Federal Regulations |
| DHS | Department of Homeland Security |
| ECL | Emergency Classification Level |
| EMC | Emergency Management Coordinator |
| ENC | Emergency News Center |
| EOC | Emergency Operation Center |
| EOF | Emergency Operations Facility |
| EPZ | Emergency Planning Zone |
| FEMA | Federal Emergency Management Agency |
| FNF | Fixed Nuclear Facilities |
| FPL | Florida Power and Light |
| GE | General Emergency |
| GIS | Geographic Information System |
| HSEEP | Homeland Security Exercise Evaluation Program |
| IC | Incident Commander |
| ICF | ICF Consulting, Incorporated |
| ICS | Incident Command System |
| IMT | Incident Management Team |
| IRC | Indian River County |
| KI | Potassium Iodide |
| NIMS | National Incident Management System |
| NRC | Nuclear Regulatory Commission |
| NUREG-0654 | NUREG-0654/FEMA-REP-1, Rev. 1, <i>"Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, November 1980"</i> |

| | |
|---------|--|
| OM | Operations Manager |
| ORO | Offsite Response Organization |
| PAD | Protective Action Decision |
| PAR | Protective Action Recommendation |
| PIO | Public Information Officer |
| RAC | Regional Assistance Committee |
| RACES | Radio Amateur Civil Emergency Services |
| REP | Radiological Emergency Preparedness |
| RERP | Radiological Emergency Response Plan |
| SAE | Site Area Emergency |
| SCO | State Coordinating Officer |
| SEOC | State Emergency Operations Center |
| SERT | State Emergency Response Team |
| SLNPP | St. Lucie Nuclear Power Plant |
| SMT | State Management Team |
| TCP/ACP | Traffic Control Point(s)/Access Control Point(s) |

APPENDIX 2

EXERCISE EVALUATORS

The following is a list of the personnel who evaluated the St. Lucie Nuclear Power Plant exercise on February 24, 2010. The organization represented by each evaluator is abbreviated below.

DHS/FEMA - Department of Homeland Security/
Federal Emergency Management Agency
EPA - Environmental Protection Agency
ICF - ICF Consulting, Incorporated
NRC - Nuclear Regulatory Commission

Conrad Burnside

RAC Chairman

| EVALUATION SITE | EVALUATOR | ORGANIZATION |
|-----------------|-----------|--------------|
|-----------------|-----------|--------------|

| | | |
|----------------|----------------|------|
| Lead Evaluator | Obhie Robinson | FEMA |
|----------------|----------------|------|

STATE OF FLORIDA

| | | |
|-----------------------------------|-----------------|------|
| State Emergency Operations Center | Gerald McLemore | FEMA |
| | Lorenzo Lewis | FEMA |

| | | |
|-----------------------|-----------------|------|
| State Management Team | Joseph Harworth | FEMA |
| | Ron Shaw | FEMA |
| | Brad McRee | ICF |

| | | |
|-----------------------|------------------|-----|
| Emergency News Center | James McClanahan | ICF |
| | Alexis Gearing | ICF |

| | | |
|-----------------|--------------------|-----|
| Dose Assessment | Robert Trojanowski | NRC |
|-----------------|--------------------|-----|

| | | |
|-------------------------------|--------------------|-----|
| Emergency Operations Facility | Robert Trojanowski | NRC |
|-------------------------------|--------------------|-----|

ST. LUCIE COUNTY

| | | |
|-----------------------------|----------------|------|
| Emergency Operations Center | Odis Spencer | FEMA |
| | Terry Blackman | ICF |
| | Gary Bolender | ICF |

| | | |
|-------------------------------|---------------|-----|
| Protective Action for Schools | Roy Smith | ICF |
| | Gary Bolender | ICF |
| | Bud Iannazzo | ICF |

| | | |
|------------------------|-----------|------|
| Traffic Control Points | Lisa Rink | FEMA |
|------------------------|-----------|------|

Gerald McLemore FEMA

MARTIN COUNTY

Emergency Operations Center
Matthew Bradley FEMA
Robert Nash FEMA
Bud Iannazzo ICF

Protective Action for Schools
Helen Wilgus FEMA
Wayne Wylie FEMA

Traffic Control Points
Bud Iannazzo FEMA

BREVARD COUNTY

Emergency Operations Center
John Fill FEMA
Obhie Robinson FEMA

Traffic Control Points
Obhie Robinson FEMA

INDIAN RIVER COUNTY

Emergency Operations Center
Jon Sandberg FEMA
Richard Grundstrum ICF

Traffic Control Points
Richard Grundstrum ICF

PALM BEACH COUNTY

Emergency Operations Center
Lisa Rink FEMA
Roy Smith ICF

Traffic Control Points
Lou DeGilio FEMA
Wayne Wylie FEMA

APPENDIX 3

EXERCISE CRITERIA AND EXTENT-OF-PLAY AGREEMENT

This appendix contains the exercise criteria and the extent-of-play that were demonstrated during the St. Lucie Nuclear Power Plant exercise on February 24, 2010.

A. Exercise Evaluation Area Criteria

The specific radiological emergency preparedness criteria, which were to be demonstrated, have been consolidated with the extent-of-play for this event and are explained in subsection B.

B. Extent-of-play Agreement

The extent-of-play agreement on the following pages was submitted by the State of Florida, and was approved by DHS/FEMA Atlanta Office . The extent-of-play agreement includes any significant modification or change in the level of demonstration of each criterion listed.

B. Extent-of-play Agreement

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/FEMA REP-1, A.4; C.1, D.3, 4; E.1, 2; H.4)

St. Lucie County: Personnel will be pre-positioned at the Emergency Operations Center located at 15305 Midway Road, Ft Pierce, Florida. The hot ring down will be answered by either Emergency Operations Center or 911 personnel who will complete the Florida Notification Form. Response to the Emergency Operations Facility shall be scenario driven. Personnel recall procedures as dictated by St. Lucie County's REP plan will be available for review at the Emergency Operations Center.

Martin County: Martin County's 24 hour answering point will answer and fill out the Florida Emergency Notification Form with the information provided by the utility. The answering point will then provide a copy to, or read the copy to, Emergency Management Staff. Because of the compressed time, Martin County will have its EOC participants pre-positioned in the EOC. Copies of personnel recall lists will be available in the EOC.

Brevard County: Emergency Operations staff will be pre-positioned at the Brevard County Emergency Operations Center (EOC) located at 1746 Cedar Street, Rockledge, Florida. Emergency Management staff will remain at the EOC.

Indian River County: Personnel will be pre-positioned. Demonstrations will be conducted at the Indian River County Emergency Operations Center, located at 4225 43rd Avenue , Vero Beach, Fl. on February 24, 2010

Palm Beach County: Division of Emergency Management and other emergency operations center personnel will be pre-positioned at the Palm Beach County Emergency Operations Center at 0800 on February 24th, 2010 for a partial activation of the EOC in support of this exercise. The EOC is located at 20 S. Military Trail, West Palm Beach, FL. Division of Emergency Management - County Warning Point Personnel will document the notification of the event and simulate the EOC notification process as outlined in the Basic Plan of the county's Comprehensive Emergency Management Plan.

Florida Division of Emergency Management: Incident management team personnel will pre-position at the FP&L Emergency Operations Facility located at 9001 Midway Road, Ft. Pierce, Florida in anticipation of that facility being declared operational. Division of Emergency Management staff will be pre-

positioned at the State Emergency Operations Center located at 2575 Shumard Oak Boulevard, Tallahassee, Florida. The Division of Emergency Management will demonstrate a real-time activation of the State Emergency Operations Center in accordance with the State Radiological Emergency Preparedness Plan and Comprehensive Emergency Management Plan.

Florida Bureau of Radiation Control: Emergency Operations Facility personnel will arrive within one hour after the Alert emergency classification declaration.

Sub-element 1.b – Facilities

*Criterion 1.b.1: Facilities are sufficient to support the emergency response.
(NUREG-0654/FEMA REP-1, H.3, G.3.a, J.10.h, J.12)*

St. Lucie County: The St Lucie County Emergency Operations Center located at 15305 W Midway Rd, Ft Pierce, FL is a new facility and will be evaluated.

Martin County: Not applicable.

Brevard County: Not applicable.

Indian River County: Not applicable.

Palm Beach County: Not applicable.

Florida Division of Emergency Management: The State Emergency Operations Center's media briefing room will be evaluated by in sequence interview due to renovations.

Florida Bureau of Radiation Control: Not applicable.

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/FEMA REP-1, A.1.d; A.2.a, b)*

St. Lucie County: Direction and Control will be demonstrated by the Emergency Management Coordinator at the Emergency Operations Center and by the Public Safety Director at the Emergency Operations Facility.

Martin County: Direction and control will be demonstrated in the EOC by the Incident Commander, Director of Emergency Management, and the Radiological Emergency Plan Administrator. The Fire Rescue Division Chief of Operations will direct operations of Martin County's staff at the EOF. Martin County will use Incident Command system to manage the EOC.

Brevard County: Direction and control will be demonstrated on February 24th, 2010 from the Brevard County EOC in accordance with the Brevard County Comprehensive Emergency Management Plan (CEMP) and attached Radiological Emergency Preparedness Plan Annex.

Indian River County: Indian River County will demonstrate the provision of direction and control within the Emergency Operations center under the direction of the Emergency Management Coordinator. Personnel will demonstrate the ability to carry out essential functions of the response effort. Indian River County will demonstrate direction and control at the Indian River County Emergency Operations Center located at 4225 43rd Avenue, Vero Beach, FL on February 24, 2010.

Palm Beach County: The Director of Emergency Management or designee will provide direction and control over the decision making process on behalf of the Executive Policy Group during the exercise.

Florida Division of Emergency Management: Command and Control will be demonstrated at the State Emergency Operations Center and at the FP&L Emergency Operations Facility in accordance with the State Radiological Emergency Preparedness Plan.

Florida Bureau of Radiation Control: Will follow procedures as stated in standard operating procedures.

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/FEMA REP-1, F.1, 2)

St. Lucie County: Commercial telephone will be the main line of communications with cellular phones, 800mhz radio system, ARES/RACES, electronic methods and satellite phones as secondary systems.

Martin County: Primary communications will be held on commercial telephone, augmented by cellular phones. Back-up systems are 800Mhz radio, and ARES/RACES radio and computers.

Brevard County: A primary and a back-up communication system between the off-site response organizations and the EOC will be demonstrated to ensure that all message traffic is handled without delays per the CEMP and the Radiological Emergency Contingency Plan Annex. The primary communication system will be held on commercial telephones augmented by cellular phones. The back-up

communication system will be an 800 MHz radio system augmented by a computer network.

Indian River County: Indian River County will demonstrate a primary and at least one backup communication system at the Emergency Operations Center located at 4225 43rd Avenue, Vero Beach, FL on February 24, 2010.

Palm Beach County: Several communications systems will be utilized during the exercise including but not limited to, Web EOC computer network for information sharing as well as mission tasking and tracking, landline, cellular, and satellite telephone systems, and the county-wide 800 MHz radio system.

Florida Division of Emergency Management: A primary and one backup communication system between the incident management team at the FP&L Emergency Operations Facility and the State Emergency Operations Center will be demonstrated. Should an actual failure of the Hot Ring Down System occur during the exercise, a backup communications system will be demonstrated at the State Emergency Operations Center. This objective may be demonstrated through discussion should no actual failure occur.

Florida Bureau of Radiation Control: Will follow procedures as stated in standard operating procedures.

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

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

St. Lucie County: Demonstration of equipment and supplies to support Emergency Operations Center shall be performed during the exercise based on scenario. Upon evaluator request, inspection of KI, instruments and dosimeters will be done out of sequence.

Martin County: Maps, diagrams and visual aids will be used in the EOC as appropriate and additional information can be made available by interview as needed. Dosimetry will be used at the Station 14 decontamination site. Outdated KI will be used for demonstration purposes. Access control supplies will be discussed with ESF 3 in the EOC.

Brevard County: As stated in the Brevard County CEMP and Radiological Emergency Contingency Plan Annex.

Indian River County: Indian River County will demonstrate on February 24, 2010 under the direction of the Emergency Management Coordinator, sufficient equipment and supplies to support operations at the Indian River County

Emergency Operations Center located at 4225 43rd Avenue, Vero Beach, FL. The Department of Health representatives will provide insight to KI storage and procedures for KI issuance by interview at the Emergency Operations Center on February 24, 2010. Emergency Workers instrumentation was inspected at the Site Area Visit at the Emergency Operation Center on January 14, 2010.

Palm Beach County: ESF 5 – The Information & Planning Unit, will coordinate maps, diagrams and other visual aids that may be needed by the EOC. Personnel from the Division of Emergency demonstrate the readiness of field equipment, including potassium iodide (KI), field dosimeter kits and other supplies that may be required at the TCP & ERC.

Florida Division of Emergency Management: The incident management team will have sufficient equipment to support their mission as defined in the State Radiological Emergency Preparedness Plan. Dosimeters and potassium iodide for state emergency workers will be available for in sequence inspection at the State Emergency Operations Center and will not be transported. The radiological emergency preparedness technical specialist at the FP&L Emergency Operations Facility will provide information related to the distribution of dosimeters and potassium iodide.

Florida Bureau of Radiation Control: Will use equipment and supplies as stated in standard operating procedures.

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 ensure 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/FEMA REP-1, K.4, J.10. e, f)

St. Lucie County: The decision making process will be scenario driven and demonstrated through discussions and interview in the Emergency Operations Center.

Martin County: Exposure control for washdown, decontamination and field site emergency workers will be demonstrated out of sequence. KI decision making will occur in the EOF, and EOC, if driven by the scenario. Decisions to allow exposure above authorized levels can be evaluated by interview with the Radiological Emergency Plan Administrator at the EOC.

Brevard County: Decisions will be based on the directives in the CEMP and Radiological Emergency Contingency Plan Annex.

Indian River County: Not required.

Palm Beach County: The Director of Emergency Management or designee will provide direction and control over the decision making process on behalf of the Executive Policy Group. The Director of Emergency Management or designee will make protective action recommendations for emergency workers operating in Palm Beach County. These recommendations will be made in consultation with the Florida Department of Health, Palm Beach County Radiological Emergency Preparedness Planner and other subject matter experts.

Florida Division of Emergency Management: Information relative to state emergency worker exposure control will be provided through discussions with the radiological emergency preparedness technical specialist at the FP&L Emergency Operations Facility. The recommendation to ingest potassium iodide will be made by Florida Department of Health, Bureau of Radiation Control staff located at the FP&L Emergency Operations Facility.

Florida Bureau of Radiation Control: Will use dosimeters, instrumentation and the decision making process as stated in standard operating procedures.

Sub-element 2.b. – Dose Assessment and PARs and PADs for the Emergency Event

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 onsite and offsite environmental conditions. (NUREG-0654/FEMA REP-1, 1.8, 10 and Supplement 3)

St. Lucie County: Not applicable (not a county function).

Martin County: Not applicable (not a county function).

Brevard County: Not applicable (not a county function).

Indian River County: Not applicable (not a county function).

Palm Beach County: Not applicable (not a county function).

Florida Division of Emergency Management: Not applicable (not an agency function).

Florida Bureau of Radiation Control: Will use the RASCAL dose assessment code as stated in standard operating procedures.

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/FEMA REP-1, J.9, 10.f, m)*

St. Lucie County: This will be demonstrated by discussion and coordination at the Emergency Operations Facility.

Martin County: This will be demonstrated by discussion and coordination at the Emergency Operations Facility.

Brevard County: Not applicable (not a county function).

Indian River County: Not applicable (not a county function).

Palm Beach County: Not applicable (not a county function).

Florida Division of Emergency Management: The incident management team will participate in the development of initial and subsequent protective action decisions (state coordination role only with counties implementing) based on licensee and Bureau of Radiation Control protective action recommendations in accordance with the State Radiological Emergency Preparedness Plan. The decision making process will be briefed to federal evaluators during pre-exercise meeting.

Florida Bureau of Radiation Control: Will use the RASCAL dose assessment code as stated in standard operating procedures.

Sub-element 2.c – PAD Consideration for the Protection of Special Populations

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

St. Lucie County: Will be demonstrated by discussion and coordination in the Emergency Operations Center

Martin County: Martin County will make decisions on special needs and school populations based of plant conditions, plant trends, PARs and local conditions.

Brevard County: Not applicable (not a county function).

Indian River County: Not applicable (not a county function).

Palm Beach County: Not applicable (not a county function).

Florida Division of Emergency Management: Not applicable (not an agency function).

Florida Bureau of Radiation Control: Not applicable (not an agency function).

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's planning criteria. (NUREG-0654/FEMA REP-1, J.9, J.11)

St. Lucie County: Not required.

Martin County: Not required.

Brevard County: Not required.

Indian River County: Not required.

Palm Beach County: Not required.

Florida Division of Emergency Management: Not required.

Florida Bureau of Radiation Control: Not required.

Sub-element 2.e. – Radiological Assessment and Decision-Making Concerning Relocation, Reentry, and Return

Criterion 2.e.1: Timely relocation, reentry, 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/FEMA REP-1, I.10; J.9; M.1)

St. Lucie County: Not required.

Martin County: Not required.

Brevard County: Not required.

Indian River County: Not required.

Palm Beach County: Not required.

Florida Division of Emergency Management: Not required.

Florida Bureau of Radiation Control: Not required.

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/or 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/FEMA REP-1, K.3.a, b)

St. Lucie County: Demonstration shall be out of sequence and preformed by law enforcement personnel at Traffic Control Points near Traditions Stadium prior to emergency wash down training drill 0900 February 9, 2010. The use of Direct Reading Dosimetry and simulated Thermoluminescence Dosimetry will be demonstrated. Any criteria not observed will be determined by interview.

Martin County: Martin County will discuss emergency worker exposure control by interview in sequence at the EOC. Martin County will demonstrate emergency worker exposure control out of sequence at the TCP Drill at Fire Station 14 on 9 February 2010 at 0900. Dosimetry will be 0-20 REM and 0-200 mREM. TLD holders will be used to simulate TLDs. Outdated KI will be used for the demonstration. Personnel will demonstrate the use of survey instruments and use and read self reading dosimeters. Any criteria not seen by evaluators will be determined by interview, all exposures and contaminations site levels will be by inject.

Brevard County: Procedures for emergency worker exposure control will be discussed at the EOC by representatives of the Brevard County Fire Rescue Hazmat Team.

Indian River County: Procedures for the Implementation of Emergency Worker Exposure Control will be discussed by interview on February 24, 2010 at the Indian River County Emergency Operation Center located at 4225 43rd Ave., Vero Beach, Fl.

Palm Beach County: Palm Beach County will demonstrate emergency worker exposure control by walk-through and on-site discussion at Okeeheelee Park, 7500 Forest Hill Blvd, West Palm Beach, FL; on the day of the exercise.

Florida Division of Emergency Management: Not required.

Florida Bureau of Radiation Control: Will use dosimeters and instrumentation as stated in standard operating procedures.

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/FEMA REP-1, J.10.e)

St. Lucie County: KI decisions will be demonstrated in the Emergency Operations Center and Emergency Operations Facility based on scenario. Emergency worker knowledge will be determined by interview out of sequence on 2/9/10 at 0900 at Traditions Stadium during the emergency wash down drill. KI pills will be simulated. Any procedures not observed will be addressed by interview.

Martin County: Martin County emergency worker KI decisions will be made at the EOF and EOC. BRC will provide dose projections, EOC staff will determine if field personnel are in the affected areas. Personnel knowledge of KI will be determined by interview at the TCP drill on 2/9/10 at 0900 at Fire Station 14.

Brevard County: As stated in the Brevard County CEMP Radiological Emergency Contingency Plan Annex.

Indian River County: The Indian River County Department of Health will demonstrate Indian River County KI decisions and procedures through interview at the Emergency Operation Center located at 4225 43rd Avenue, Vero Beach, FL.

Palm Beach County: Palm Beach County will discuss distribution and instruction for use of KI by interview at Okeethee County Park at 7500 West forest Hill Blvd, West Palm Beach, FL; on the day of the exercise .

Florida Division of Emergency Management: Not required.

Florida Bureau of Radiation Control: Not required.

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/FEMA REP-1, J.10.c, d, g)

St. Lucie County: This criterion will be demonstrated by in sequence interview at the EOC

Martin County: Martin County will provide a current Special Needs client roster; the special needs coordinator and transportation coordinator will be available for interview. All of their actions during the drill will be simulations. There will be no

actual contact with special needs clients. Any elements of this criterion not observed may be determined by interview.

Brevard County: Not required.

Indian River County: Not required..

Palm Beach County: Not required..

Florida Division of Emergency Management: Not applicable (not an agency function).

Florida Bureau of Radiation Control: Not applicable (not an agency function).

*Criterion 3.c.2: OROs/School officials implement protective actions for schools.
(NUREG-0654/FEMA REP-1, J.10.c, d, g)*

St. Lucie County: This criterion will be scenario driven. School officials in the emergency operations center will simulate required protective actions following local procedures. Calls to affected schools will be simulated. The Emergency Operations Coordinator will notify the School District Superintendent and Transportation Director in accordance with local procedures. Interviews with school principals or their designee at 14 public schools to demonstrate their knowledge of evacuation plans will be preformed out of sequence Tuesday February 23, 2010. Schools to be visited are:

| 2010 St. Lucie County School Evaluations February 23, 2010 | | |
|---|---------------------|-----------------------------|
| Bayshore Elementary | Dan McCarty Middle | Frances K. Sweet Elementary |
| Ft. Pierce Magnet (Arts) | Fairlawn Elementary | Forest Grove Middle |
| Ft. Pierce Central H.S. | Lawnwood Elementary | Manatee Elementary |
| Northport K-8 | Parkway Elementary | St. Lucie West Centennial |
| Windmill Point | Dale Cassens. | |

Martin County: Martin County-School district personnel will be in the Emergency Operations Center and will take actions to safeguard students and staff. If for some unforeseen reason district personnel can not be in the Emergency Operations Center, they will be contacted via phone and directed to take the appropriate actions. Martin County does not intend to have a bus driver available for interview, The School District representative in the Emergency Operations Center will identify that all of the transportation employees do in fact know where the 4 schools are in the Emergency Planning Zone and where the host schools are located. Out of Sequence interview with school officials at the Environmental Studies Center will be conducted on February 9, 2009 at 1330.

Brevard County: Not applicable.

Indian River County: Not applicable.

Palm Beach County: Not applicable.

Florida Division of Emergency Management: Not applicable (not an agency function).

Florida Bureau of Radiation Control: Not applicable (not an agency function).

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/FEMA REP-1, J.10.g, j)

St. Lucie County: This criterion will be scenario driven and will be demonstrated through discussion between the Emergency Operations Center and the Emergency Operations Facility based on protective action decisions. Traffic Control Point procedures will be demonstrated out of sequence by St Lucie County Sheriff's Office and/or Port St Lucie Police Department personnel in area of Traditions Stadium prior to emergency wash down drill February 9, 2010, at 0900. Any criteria not observed will be determined by interview at the Emergency Operations Center.

Martin County: Martin County-Traffic Control Point evaluation will take place out of sequence at Fire Station 14 February 9, 2010 at 0900. Personnel from Martin County Sheriff's Office and Sewalls Point Police Department field personnel will be there for interview.

Brevard County: Procedures for implementing traffic and access control will be discussed in the by the Brevard County Sheriffs Dept and Florida Highway Patrol.

Indian River County: Indian River County Sheriff's Department will demonstrate implementation of Traffic and Access Control by interview on February 24, 2010 at the Indian River County Emergency Operation Center located at 4225 43rd Avenue, Vero Beach, Fl.

Palm Beach County: Palm Beach County will demonstrate the capability to select, establish and staff appropriate traffic and access control points in a timely manner consistent with the protective action decisions reached at the EOC. This will take place in sequence by interview in the EOC, and by limited practical demonstration and interview during non-graded activities at Okeehetee Park 7500 Forest Hill Blvd, West Palm Beach, FL.

Florida Division of Emergency Management: Not required.

Florida Bureau of Radiation Control: Not applicable (not an agency function).

*Criterion 3.d.2: Impediments to evacuation and/or response are identified and resolved.
(NUREG-0654/FEMA REP-1, J.10.k)*

St. Lucie County: This criterion will be demonstrated by injects and simulated response by law enforcement and fire rescue representatives in the Emergency Operations Center. Additional information may be required by interview.

Martin County: There will be county exercise injects that cause law enforcement and fire rescue personnel to simulate responses to traffic impediments. Any additional information required may be determined by interview.

Brevard County: Not required.

Indian River County: This criterion will be demonstrated by injects and simulated response by law enforcement and fire rescue representatives in the Emergency Operations Center. Additional information may be acquired by interview.

Palm Beach County: Not required.

Florida Division of Emergency Management: Not applicable (not an agency function).

Florida Bureau of Radiation Control: Not applicable (not an agency function).

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/FEMA REP-1, J.9, 11)

St. Lucie County: Not required.

Martin County: Not required.

Brevard County: Not required.

Indian River County: Not required.

Palm Beach County: Not required.

Florida Division of Emergency Management: Not required.

Florida Bureau of Radiation Control: Not required.

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/FEMA REP-1, J.9, 11)

St. Lucie County: Not required.

Martin County: Not required.

Brevard County: Not required.

Indian River County: Not required.

Palm Beach County: Not required.

Florida Division of Emergency Management: Not required.

Florida Bureau of Radiation Control: Not required.

Sub-element 3.f – Implementation of Relocation, Reentry, and Return Decisions

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

St. Lucie County: Not required.

Martin County: Not Required.

Brevard County: Not required.

Indian River County: Not required.

Palm Beach County: Not required.

Florida Division of Emergency Management: Not required.

Florida Bureau of Radiation Control: Not required.

Evaluation Area 4: Field Measurement and Analysis

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

Criterion 4.a.1: Field teams (2 or more) are managed to obtain sufficient information to help characterize the release and to control radiation exposure. (NUREG-0654/FEMA REP-1, H.12; I.8, 11; J.10.a)

St. Lucie County: Not applicable (not a county function).

Martin County: Not applicable (not a county function).

Brevard County: Not applicable (not a county function).

Indian River County: Not applicable (not a county function).

Palm Beach County: Not applicable (not a county function).

Florida Division of Emergency Management: Not applicable (not an agency function).

Florida Bureau of Radiation Control: Not required.

Criterion 4.a.2: 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/FEMA REP-1, I. 9, J.10.a)

St. Lucie County: Not applicable (not a county function).

Martin County: Not applicable (not a county function).

Brevard County: Not applicable (not a county function).

Indian River County: Not applicable (not a county function).

Palm Beach County: Not applicable (not a county function).

Florida Division of Emergency Management: Not applicable (not an agency function).

Florida Bureau of Radiation Control: Not required.

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

Criterion 4.b.1: The field teams (2 or more) 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/FEMA REP-1, I.8; J.11)

St. Lucie County: Not applicable (not a county function).

Martin County: Not applicable (not a county function).

Brevard County: Not applicable (not a county function).

Indian River County: Not applicable (not a county function).

Palm Beach County: Not applicable (not a county function).

Florida Division of Emergency Management: Not applicable (not an agency function).

Florida Bureau of Radiation Control: Not required.

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/FEMA REP-1, C.3; J.11)

St. Lucie County: Not applicable (not a county function).

Martin County: Not applicable (not a county function).

Brevard County: Not applicable (not a county function).

Indian River County: Not applicable (not a county function).

Palm Beach County: Not applicable (not a county function).

Florida Division of Emergency Management: Not applicable (not an agency function).

Florida Bureau of Radiation Control: Not required.

Evaluation Area 5: Emergency Notification and 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. (NUREG-0654/FEMA REP-1, E.5, 6, 7)

St. Lucie County: This criterion will be scenario driven. EAS messages and siren sounding decisions will be made based on coordinated discussions between decision makers at the Emergency Operations Center and the Emergency Operations Facility. Siren activation at Site Area Emergency will be a sounding of the quarterly test message. Siren sounding at General Emergency will be simulated. EAS messages will be simulated in accordance to local procedures.

Martin County: Simulated activation of the outdoor warning system for this exercise will occur at the site area emergency and general emergency classifications. Media contacts will be simulated. Coordination of siren sounding and EAS activation will occur between Martin and St. Lucie personnel at their respective EOCs and at the EOF.

Brevard County: Not required.

Indian River County: Not required.

Palm Beach County: Not required.

Florida Division of Emergency Management: The incident management team will play a coordination role only. The incident management team will not be responsible for the actual sounding of the sirens, the broadcast of EAS messages or route alerting.

Florida Bureau of Radiation Control: Not required.

Criterion 5.a.2: Reserved.

Criterion 5.a.3: 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/FEMA REP-1, E.6, Appendix 3.B.2.c)

St. Lucie County: .

Martin County: Martin County will demonstrate back-up route alerting through discussion at the EOC.

Brevard County: Not required.

Indian River County: Not required.

Palm Beach County: Not required.

Florida Division of Emergency Management: Not required.

Florida Bureau of Radiation Control: Not required.

Criterion 5.a.4: 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. (NUREG-0654/FEMA REP-1, E.6, Appendix 3)

St. Lucie County: Not applicable.

Martin County: Not applicable.

Brevard County: Not applicable.

Indian River County: Not applicable.

Palm Beach County: Not applicable.

Florida Division of Emergency Management: Not applicable.

Florida Bureau of Radiation Control: Not applicable.

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/FEMA REP-1, E.5, 7; G.3.a, G.4.c)

St. Lucie County: Will be demonstrated in Emergency Operations Facility. Rumor control will be manned in the Emergency Operations Center. Any areas not observed may be determined by interview.

Martin County: Martin County will have copies of emergency alert system messages and news releases available at the emergency news center and will simulate distribution of the emergency alert system messages from the EOC. Martin County will staff rumor control lines with one person, and generate enough calls so that the operator will recognize a trend of errant information. The operator will report this to the Emergency Operations Center Public Information Officer, who will forward the information to the Emergency News Center Public

Information Officer who will write a release for the media to correct the misperception. Any criteria not observed may be determined by interview.

Brevard County: Not required.

Indian River County: Not required.

Palm Beach County: Not required.

Florida Division of Emergency Management: This objective will be demonstrated at the State Emergency Operations Center and at the Emergency News Center co-located at the FP&L Emergency Operations Facility in accordance with the State Radiological Emergency Preparedness Plan.

Florida Bureau of Radiation Control: Not required.

Evaluation Area 6: Support Operations/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/FEMA REP-1, J.10.h; J.12; K.5.a)

St. Lucie County: Not required.

Martin County: Not required.

Brevard County: Not required.

Indian River County: This objective is not required to be evaluated for Indian River County. However, Indian River County will provide a non-evaluated interview with Fire/Rescue at the Emergency Operation Center on February 24, 2010

Palm Beach County: .

Florida Division of Emergency Management: Not required.

Florida Bureau of Radiation Control: Not required.

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

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

St. Lucie County: A training activity will be conducted at Traditions Stadium on February 9, 2010 at 0900.

Martin County: Martin County will demonstrate this criterion for training only, out of sequence on February 9, 2010 at 0900 at Fire Station 14 on the southern end of Huteson Island. Staff will demonstrate vehicle survey, wash down and routing of clean and contaminated vehicles, at least one person will be found to be contaminated. The contaminated personnel will be decontaminated. Vehicles at random will be found to be clean, or contaminated, and may have contaminated personnel onboard. Injects will be used to indicate location and amounts of contamination.

Brevard County: Not required.

Indian River County: Not required.

Palm Beach County: Not required.

Florida Division of Emergency Management: Not required.

Florida Bureau of Radiation Control: Not required.

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. (American Red Cross Disaster Services Program Guidance, Sheltering Handbook, May 2008). 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/FEMA REP-1, J.10.h, J.12)

St. Lucie County: Not required.

Martin County: Not required.

Brevard County: Not required.

Indian River County: This objective is not required to be evaluated for Indian River County. However, Indian River County will provide a non-

evaluated interview with the local chapter of the Red Cross at the Emergency Operation Center on February 24, 2010

Palm Beach County: Not required.

Florida Division of Emergency Management: Not required.

Florida Bureau of Radiation Control: Not required.

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/FEMA REP-1, F.2; H.10; K.5.a, b; L.1, 4)

St. Lucie County: Not required.

Martin County: Not required.

Brevard County: Not required.

Indian River County: Not required.

Palm Beach County: Not required.

Florida Division of Emergency Management: Not required.

Florida Bureau of Radiation Control: Not required.

APPENDIX 4

EXERCISE SCENARIO

This appendix contains a summary of the simulated sequence of events used as the basis for invoking emergency response actions by offsite response organizations in the St. Lucie Nuclear Power Plant exercise on February 24, 2010.

This exercise scenario was submitted by the State of Florida and approved by DHS/FEMA Region IV.

FLORIDA POWER AND LIGHT COMPANY
ST. LUCIE PLANT
2010 EVALUATED EXERCISE
FEBRUARY 24, 2010

4.1 NARRATIVE SUMMARY

The scenario begins with Unit 1 at 100% power. Unit 2 is at 100% power. The Protected Train for both units is A. The 2C Charging Pump is out of service for planned maintenance.

A steam generator tube leak occurs in the 2B Steam Generator. Chemistry and Health Physics will respond. The Shift Manager will declare an UNUSUAL EVENT (EAL 2.A) and assume the role of the Emergency Coordinator.

Operations will commence a down power of Unit 2. During the down power an electrical fault causes the Control Room to lose most of their annunciator indications. The Emergency Coordinator will declare an ALERT (EAL 17.B) and activate the Emergency Response Organization. Emergency Coordinator responsibilities are transferred to the Technical Support Center.

A Re-entry Team is successful in repairing the electrical fault thereby restoring the annunciators in the Control Room.

Component cooling water is lost to the Reactor Coolant Pumps. Operations will manually trip the reactor. During the trip four control rod assemblies fail to fully insert and a loss of coolant accident occurs. The Emergency Coordinator will declare a SITE AREA EMERGENCY (EAL 1.C). Non-emergency personnel will be directed to evacuate the site.

Both Trains of Emergency Core Cooling System provide injection flow to the core. Prior to the Recirculation Actuation Signal a bi-stable fails causing MV-07-1B (RWT suction valve) to close. Operations will secure the 2B Containment Spray, High Pressure Safety Injection and Low Pressure Safety Injection pumps. This leaves only the "A" train of Emergency Core Cooling operable.

~~A failure of breaker 2-20109, the 2A2 to 2A3 vital bus tie breaker occurs. Since the 2A Emergency Diesel Generator had failed to start at the Safety Injection Actuation Signal there is no power to the 2A3 vital bus. All Emergency Core Cooling is lost. With Reactor Core water level decreasing and temperatures increasing the Emergency Coordinator will declare a General Emergency (EAL 14.D) and recommend protective actions for the public.~~

With no cooling flow, the core is heated to over 1200F and fuel damage occurs.

A Re-entry Team is successful in repairing breaker 2-20109 and power is restored to the 2A3 vital bus. Operations restarts the 2A High Pressure Safety Injection pump. The establishment of flow causes a large amount of radioactive material to be released into the Reactor Containment Building. A Reactor Containment Building penetration fails resulting in a release of radioactive material to the environment via the plant vent.

Dose Assessment of the release will be performed. The Recovery Manager will evaluate the need for any changes to the existing protective action recommendations.

Operations will restart the 2A Containment Spray pump. With core cooling restored conditions improve and plant recovery and re-entry discussions commence.

FLORIDA POWER AND LIGHT COMPANY
 ST. LUCIE PLANT
 2010 EVALUATED EXERCISE
 FEBRUARY 24, 2010

4.2 SCENARIO TIMELINE

| S-TIME ¹ | CLOCK ² | SIMULATOR INSTRUCTION | EVENT NO. | EVENT DESCRIPTION | ANTICIPATED RESPONSE ACTIONS |
|---------------------|--------------------|---|-----------|--------------------------------------|--|
| 00/00 | 0730 | Initial Setup - Restore IC Set #1 - Wind direction from 72, speed 10 mph, delta T -1.1 - Start Recorder - Verify SEG Checklist Complete - Verify Ops Trn Pre-Setup Checklist Complete - Start data collection | --- | Shift Turnover Initial Conditions | Initial Conditions Unit 1 100% Unit 2 100% Protected Train "A" ORLM is "Green" AB Bus aligned to A 2C Charging Pump OOS, M-48 lit |
| 00/10 | 0740 | Insert 2B S/G Tube Leak (10 gpm) S/JAE Monitor Alarm _____ Charging/LTDN mismatch _____ Chemistry reports Sec Activity _____ | 1 | 2B S/G Tube Leak | Ops performs actions LAW 2-0830030 Operations starts the 2B Charging Pump HP dispatched for surveys per HP-204 Chemistry dispatched to perform S/G sampling per COP-06.05 |

¹ S-Time = Scenario time, which begins at zero.

² Clock = Actual time, all times approximate.

FLORIDA POWER AND LIGHT COMPANY
 ST. LUCIE PLANT
 2010 EVALUATED EXERCISE
 FEBRUARY 24, 2010

4.2 SCENARIO TIMELINE (continued)

| S-TIME ¹ | CLOCK ² | SIMULATOR INSTRUCTION | EVENT NO. | EVENT DESCRIPTION | ANTICIPATED RESPONSE ACTIONS |
|---------------------|--------------------|---|-----------|--|---|
| 00/25 | ~0755 | None Declaration Time _____ Notification Time _____ NRC Notified _____ | --- | Unusual Event Declaration Due to 2.A., <u>RCS PRI/SEC Leakage</u> . Measured RCS to secondary leakage > T.S. AND Secondary plant activity is detected | The SM classifies the emergency in accordance with EPIP-01. The SM becomes the EC and completes the Unusual Event Checklist per EPIP-02. The State and Counties are notified per EPIP-08. The NRC is notified per EPIP-08. |
| 00/30 | 0800 | None | | Contingency Message for the UE (if appropriate) | No entry |
| | | None | | Operations down powers Unit | Ops commences down power IAW 2-ONP-22.01 |
| | | Down power started | | | |
| 00/50 | 0820 | Insert loss of annunciators, ground "B" bus for DC power (AC breaker fail, 5 sec later DC breaker fail) | 2 | CR annunciators lost An electrical fault causes a ground on the "B" DC bus K-47 Annunciator Pwr Supply failure, followed by A-10 125V DC Bus/Batt Chgr 2B/2BB Ground | NLO dispatched to check 2B and 2BB side Battery Charger, Bus Ops performs actions of 2-ONP-100.3 |

¹ S-Time = Scenario time, which begins at zero.

² Clock = Actual time, all times approximate.

FLORIDA POWER AND LIGHT COMPANY
ST. LUCIE PLANT
2010 EVALUATED EXERCISE
FEBRUARY 24, 2010

4.2 SCENARIO TIMELINE (continued)

| S-TIME ¹ | CLOCK ² | SIMULATOR INSTRUCTION | EVENT NO. | EVENT DESCRIPTION | ANTICIPATED RESPONSE ACTIONS |
|---------------------|--------------------|---|-----------|---|---|
| 01/05 | ~0835 | None Declaration Time _____ Notification Time _____ Alert Announcement _____ | | ALERT Declaration Due to 17.B, Loss of Alarms; Unplanned loss of most (>75%) or all safety system annunciators AND Plant transient in progress | The SM/EC classifies the emergency in accordance with EPIP-01. The SM/EC completes the ALERT Declaration Checklist per EPIP-02. The State and Counties are notified per EPIP-08. The NRC is notified per EPIP-08. The FPL Emergency Response Organization (ERO) is activated in accordance with EPIP-03. The Technical Support Center (TSC) is activated in accordance with EPIP-04. The Operations Support Center (OSC) activates in accordance with EPIP-05. The Emergency Operations Facility (EOF) begins preliminary activation in accordance with EPIP-06. Health Physics (HP) implements the HP-200 Emergency Plan implementing procedures and dispatches 'Red' Field Monitoring Team. |
| 01/10 | 0840 | None | --- | <i>Contingency Message for the Alert</i> (if appropriate) | No entry |
| 01/45 | 0915 | Restore annunciators | | Annunciators restored | Re-Entry Team restores DC power |

¹ S-Time = Scenario time, which begins at zero.

² Clock = Actual time, all times approximate.

FLORIDA POWER AND LIGHT COMPANY
 ST. LUCIE PLANT
 2010 EVALUATED EXERCISE
 FEBRUARY 24, 2010

4.2 SCENARIO TIMELINE (continued)

| S-TIME ¹ | CLOCK ² | SIMULATOR INSTRUCTION | EVENT NO. | EVENT DESCRIPTION | ANTICIPATED RESPONSE ACTIONS |
|---------------------|--------------------|--|-----------|---|--|
| 01/50 | 0920 | Insert loss CCW to RCPs | 3 | Valve HCV-14-2 fails closed | Ops performs steps LAW 2-0120034 and 2-0310030 Re-Entry Team dispatched to investigate |
| 02/00 | 0930 | Insert LOCA and stuck CEAs when the reactor is tripped Time of Reactor Trip _____ | 4 | Manual Reactor trip, LOCA, CEAs 37, 49, 61, 81 stuck | Operations personnel perform Standard Post Trip Actions (SPTAs) in accordance with 2-EOP-01. Operations emergency borates Operations transitions form 2-EOP-1 to 2-EOP-15 |
| 02/15 | ~0945 | None Declaration Time _____ Notification Time _____ | | SITE AREA EMERGENCY Declaration Due to 1.C, <u>LOCA GREATER THAN make-up pump capacity</u> | The EC classifies the emergency in accordance with EPIP-01. The EC completes the Security and Site Area Emergency Declaration Checklist per EPIP-02. The State and Counties are notified per EPIP-08. The NRC is notified per EPIP-08. The Recovery Manager (RM) declares the EOF operational if it has not already been done. All Re-entry activities are controlled through the OSC in accordance with EPIP-05. Note: If steaming the 2B S/G via the ADVs then a release is in progress. |

¹ S-Time = Scenario time, which begins at zero.

² Clock = Actual time, all times approximate.

FLORIDA POWER AND LIGHT COMPANY
ST. LUCIE PLANT
2010 EVALUATED EXERCISE
FEBRUARY 24, 2010

4.2 SCENARIO TIMELINE (continued)

| S-TIME ¹ | CLOCK ² | SIMULATOR INSTRUCTION | EVENT NO. | EVENT DESCRIPTION | ANTICIPATED RESPONSE ACTIONS |
|---------------------|--------------------|---|-----------|---|---|
| 02/15 (cont) | ~0945 | None Time of site evacuation announcement | | Site Evacuation on non-emergency response personnel | All non-essential personnel are evacuated. The Assembly Area Supervisor is dispatched. NLOs are directed to report to the OSC following completion of immediate operator actions. |
| 02/20 | 0950 | None | --- | <i>Contingency Message for the Site Area Emergency</i> (if appropriate) | Additional Field Monitoring Teams are dispatched in accordance with EPIP-10. No Entry |
| | TBD | Insert failure of 2A EDG to start on SIAS | | 2A EDG fails to start | Re-entry Team dispatched to investigate |
| 02/30 | ~1000 | SIAS Insert RAS bistable failure @ 8ft. RWT level | 5 | MV-07-1B goes closed, S-9 is lit | Operations will secure the 2B Containment Spray, 2B LPSI and 2B HPSI pumps Re-Entry Team dispatched to investigate |
| 02/35 | ~1005 | None RAS | | RAS, "A" ECCS operating, MV-07-2B fails to open | Re-entry Team dispatched to MV-07-2B |
| 03/10 | 1040 | Insert failure of 2-20109 2A3 power loss Zones 7 and 8 void | 6 | Loss of power to 2A3, Loss of ECCS | Re-Entry Team dispatched to investigate |

¹ S-Time = Scenario time, which begins at zero.

² Clock = Actual time, all times approximate.

FLORIDA POWER AND LIGHT COMPANY
ST. LUCIE PLANT
2010 EVALUATED EXERCISE
FEBRUARY 24, 2010

4.2 SCENARIO TIMELINE (continued)

| S-TIME ¹ | CLOCK ² | SIMULATOR INSTRUCTION | EVENT NO. | EVENT DESCRIPTION | ANTICIPATED RESPONSE ACTIONS |
|---------------------|--------------------|---|-----------|--|--|
| 03/25 | ~1055 | None Declaration Time _____ Notification Time _____ PAR determined _____ | | GENERAL EMERGENCY Declaration Due to 14.D:Emergency Coordinator's judgement that plant conditions exist that make release of large amounts of radioactivity in a short period appear possible or likely (any core melt situation) | The EC classifies the emergency in accordance with EPIP-01. The EC completes the General Emergency Declaration Checklist per EPIP-02. The State and Counties are notified per EPIP-08. The NRC is notified per EPIP-08. The RM develops Protective Action Recommendations (PARs) in accordance with EPIP-08. Off-site dose assessment is performed in accordance with EPIP-09. Core damage assessment is performed in accordance with EPIP-11. Field monitoring teams will track the plume of radioactive material in accordance with EPIP-10. PAR affected sectors LMN 0-2 evacuate all 2-5 evacuate LMN, shelter all remaining 5-10 shelter all |
| | TBD | None CETs 700F _____ CETS ~1200 _____ | | Indication of superheat leading to core damage | |

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² Clock = Actual time, all times approximate.

FLORIDA POWER AND LIGHT COMPANY
ST. LUCIE PLANT
2010 EVALUATED EXERCISE
FEBRUARY 24, 2010

4.2 SCENARIO TIMELINE (continued)

| S-TIME ¹ | CLOCK ² | SIMULATOR INSTRUCTION | EVENT NO. | EVENT DESCRIPTION | ANTICIPATED RESPONSE ACTIONS |
|---------------------|--------------------|--|-----------|---|--|
| 03/30 | 1100 | None | | <i>Contingency Message for the General Emergency</i> (if appropriate) | None |
| | TBD | Insert failure of SBO Cross Tie | | SBO cross tie fails | Re-Entry Team dispatched to investigate |
| 03/45 | ~1115 | Restore 2-20109 | 7 | 2A3 reenergized | Note: Using SBO cross tie in this situation may require 50.54(x) Re-entry Team completes repairs of 2-20109 |
| 03/45 | ~1115 | Restore 2A EDG | 8 | 2A EDG started | Re-Entry Team repairs 2A EDG |
| 03/50 | 1120 | Insert big release upon start of 2A HPSI 2A HPSI started 2A Cont Spray started | 9 | "A" ECCS flow restored, Dose rates increase in CTMT, Plant Vent monitor increases | Operations restarts "A" ECCS pumps Flow should be throttled per criteria from PST. Off-site dose assessment is performed in accordance with EPIP-09. The RM develops Protective Action Recommendations (PARs) in accordance with EPIP-08. (Unchanged) |
| 05/30 | 1300 | | | Exercise is terminated | All Players and Controllers attend in-facility critiques. |

¹ S-Time = Scenario time, which begins at zero.

² Clock = Actual time, all times approximate.