May 06, 2024

L-2024-068
10 CFR 50.90
10 CFR 50.54(q)

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Re: Florida Power & Light Company
St. Lucie Units 1 and 2, Docket Nos. 50-335, 50-389
Turkey Point Units 3 and 4, Docket Nos. 50-250, 50-251

NextEra Energy Seabrook, LLC
Seabrook Station, Docket No. 50-443

NextEra Energy Point Beach, LLC
Point Beach Units 1 and 2, Docket Nos. 50-266, 50-301

Supplemental Information to License Amendment Request to Adopt Common Emergency Plan with Site-Specific Annexes

References:

1. Florida Power & Light Company letter L-2022-160, "License Amendment Request for Common Emergency Plan Consistent with NUREG-0654, Revision 2," October 4, 2022 (ML22278A031)
2. NRC Letter, "Point Beach Nuclear Plant, Units 1 and 2; Seabrook Station, Unit 1; St. Lucie Plant, Unit Nos. 1 and 2; and Turkey Point Nuclear Generating Unit Nos. 3 and 4 – Supplemental Information Needed for Acceptance of Requested Licensing Action RE: Amendment Request for Common Emergency Plan (EPID L-2022-LLA-0146)," November 22, 2022 (ML22311A558)
3. Florida Power & Light Company letter L-2022-185, "Supplement to License Amendment Request for Common Emergency Plan Consistent with NUREG-0654, Revision 2," December 9, 2022 (ML22343A254)
4. NRC Letter, "Point Beach Nuclear Plant, Units 1 and 2; Seabrook Station, Unit 1; St. Lucie Plant, Unit Nos. 1 and 2; and Turkey Point Nuclear Generating Unit Nos. 3 and 4 – Acceptance of Requested Licensing Action RE: Amendment Request for Common Emergency Plan (EPID L-2022-LLA-0146)" (ML22339A001)
5. NRC Message from Justin Poole, Project Manager for NextEra Fleet, "Request for Additional Information RE: Fleet Emergency Plan Amendment Request," June 22, 2023 (ML23173A152)
6. Florida Power & Light Company letter L-2023-098, "Response to Request for Additional Information Regarding License Amendment Request for Common Emergency Plan Consistent with NUREG-0654, Revision 2," August 7, 2023 (ML23219A102)

7. Florida Power & Light Company letter L-2023-155, "Supplement to Response to Request for Additional Information, Revised NextEra Common Emergency Plan, and Revised Site-Specific Emergency Plan Annexes Regarding License Amendment Request for Common Emergency Plan Consistent with NUREG-0654, Revision 2," November 28, 2023 (ML23332A005)
8. NRC Updated Slides for the Public Meeting on March 19, 2024, Regarding the NextEra Emergency Plan License Amendment (ML24078A023)

In Reference 1, Florida Power & Light Company (FPL), acting on behalf of itself and as agent for NextEra Energy Seabrook, LLC and NextEra Energy Point Beach, LLC submitted a license amendment request (LAR) to change the emergency plan for each site. Specifically, the proposed amendment would adopt a new fleet common emergency plan with site-specific annexes.

In Reference 2, the NRC staff requested supplemental information to enable the staff to make an independent assessment regarding the acceptability of the proposed amendment request.

Reference 3 provided supplemental information that enabled the NRC staff in Reference 4 to conclude the application provided technical information in sufficient detail to perform a detailed technical review and make an independent assessment regarding the acceptability of the proposed amendment in terms of regulatory requirements and the protection of public health and safety and the environment.

Reference 5 transmitted a request for additional information that the NRC staff has determined is necessary to complete its review.

Reference 6 provided information responsive to Reference 5 and requested an audit process to resolve some items more efficiently.

Reference 7 provided revised responses to requests for additional information, a revised Common Emergency Plan, and revised site-specific annexes due to information gained as a result of the audit process conducted on September 27, 2023, and September 28, 2023.

Enclosure 1 to this letter contains supplemental information regarding those requests for additional information identified in Reference 8 where responses failed to provide sufficient justification to allow the NRC to continue its review of the LAR. This enclosure is formatted to provide the conclusion from the NRC public meeting slides for a category of RAIs, then provide the previous RAIs and NextEra responses, and then provide supplemental responses intended to address the issues identified in the slides.

Enclosure 2 provides a revised Common Emergency Plan and Enclosures 3 through 6 provide revised site-specific annexes.

This letter does not alter the conclusions in Reference 1 that the proposed change does not involve a significant hazards consideration pursuant to 10 CFR 50.92, and there are no significant environmental impacts associated with the change.

This letter contains no new or revised regulatory commitments.

If you should have any questions regarding this submittal, please contact Kenneth Mack, Licensing Manager, at (561) 904-3635.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on May 06, 2024

Sincerely,

Paul Rasmus
General Manager, Regulatory Affairs

Enclosures:

1. Revised Response to Requested Information
2. EP-AA-100, NextEra Common Emergency Plan
3. EP-PBN-110, PBN Emergency Plan Annex
4. EP-PSL-120, PSL Emergency Plan Annex
5. EP-PTN-130, PTN Emergency Plan Annex
6. EP-SBK-140, SBK Emergency Plan Annex

cc: NRC Project Manager - Point Beach
NRC Project Manager - St. Lucie
NRC Project Manager - Turkey Point
NRC Project Manager - Seabrook
Regional Administrator - NRC Region 1
Regional Administrator - NRC Region 2
Regional Administrator - NRC Region 3
NRC Resident Inspector - Point Beach
NRC Resident Inspector - St. Lucie
NRC Resident Inspector - Turkey Point
NRC Resident Inspector - Seabrook
Wisconsin Emergency Management
Chief, Bureau of Radiation Control, Florida Department of Health
Director Homeland Security and Emergency Management (New Hampshire)

ENCLOSURE 1

Revised Response to Request for Additional Information

SUPPLEMENT INFORMATION FOR
REQUEST FOR ADDITIONAL INFORMATION RELATED TO
LICENSE AMENDMENT REQUEST TO REVISE THE EMERGENCY PLANS
FLORIDA POWER & LIGHT COMPANY
NEXTERA ENERGY POINT BEACH, LLC
NEXTERA ENERGY SEABROOK, LLC
POINT BEACH NUCLEAR PLANT
SEABROOK STATION UNIT 1
ST. LUCIE NUCLEAR PLANT
TURKEY POINT NUCLEAR GENERATING PLANT
DOCKET NOS. 50-250, 50-251, 50-266, 50-301, 50-335, 50-389, AND 50-443

By application dated October 4, 2022, as supplemented by letter dated December 9, 2022 (Agencywide Documents Access and Management System Accession (ADAMS) Nos. ML22278A031 and ML22343A254, respectively), Florida Power & Light Company, NextEra Energy Point Beach, LLC, and NextEra Energy Seabrook, LLC (collectively, NextEra Energy or the licensee), submitted a license amendment request (LAR)for Point Beach Nuclear Plant, Units 1 and 2; Seabrook Station, Unit No. 1; St. Lucie Plant, Unit Nos. 1 and 2; and Turkey Point Nuclear Generating Unit Nos. 3 and 4, to the U.S. Nuclear Regulatory Commission (NRC) for review and prior approval pursuant to Section 50.54(q) of Title 10 of the *Code of Federal Regulations* (10 CFR). Specifically, the proposed license amendment request would create a new fleet common emergency plan with site-specific annexes developed utilizing NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support Nuclear Power Plants," Revision 2 dated December 2019 (ML 19347D139), (NUREG-0654). The proposed fleet common emergency plan is referred to as the "NextEra Common Emergency Plan."

The application was not accepted (November 22, 2022, ML 22311A558) and NextEra Energy submitted supplemental information December 9, 2022 (ML 22343A254).

The NRC staff requested additional information (RAI) on June 22, 2023 (ML 23173A152). NextEra Energy responded to the RAIs partially on August 7, 2023, and with a post-audit (September 27-28, 2023 ML 23201A087) supplement sent on November 28, 2023.

Guidance in NUREG-0654, Section II provides evaluation criteria to address elements and attributes of emergency plans that are directly tied to meeting planning standards in 10 CFR 50.47(b) and the applicable sections of Appendix E to 10 CFR Part 50. The NRC evaluates the adequacy of the emergency plan based upon these evaluation criteria. Per NUREG-0654, methods or solutions that differ from those described in this document may be deemed acceptable if the licensee makes available sufficient bases and information for the NRC staff to evaluate whether the proposed alternative approaches meet the intent of the planning standard.

NextEra Energy has proposed alternative approaches bases upon NextEra Fleet and industry accumulated knowledge and experience. Accumulated lessons learned from declared emergencies, drills/exercises, training, all-hazards events (Florida hurricanes, etc.) and pandemic response have considerations in the NextEra Common Emergency Plan. The NextEra Common Emergency Plan being proposed allows for:

- Enhanced normal operations practices to be utilized during declared emergencies,
- Proactively addresses NextEra and industry future staffing issues,
- Improvements in technology, training, and processes to be credited and utilized during a declared emergency.

The NextEra emergency response organization (ERO) staffing plan (Table B-1) has been developed using a performance-based approach to the degree practicable. The staffing plan has been evaluated and validated, will continue to be evaluated under proposed additional NextEra Common Emergency Plan drills.

Per NRC public meeting conducted on March 19, 2024, the NRC staff does not see sufficient justification for the following issues. NextEra should provide sufficient justification for the discussed issues allowing the NRC staff to continue its review of the application (03/19/2024 Notice of Meeting with NextEra Energy/Florida Power & Light regarding license amendment request to create a fleet emergency plan ML 24066A167; NextEra - Updated - Slides for the Public Meeting on March 19, 2024, Regarding the Emergency Plan License Amendment ML 24078A023).

Command and Control

NRC Position:

Shift Manager only has a remote response at 60 minutes. The use of a remote responder performing the command-and-control functions has not been validated by the licensee and is not consistent with current industry initiative for remote ERO augmentation. The application did not provide sufficient justification that supports a finding of timely augmentation of the response capabilities is available. (RAI 1 and RAI 2)

RAI 1

Concerning Command and Control:

a. Provide a basis for adjusting the response time from 60 to 90 minutes. In your response, discuss unique NextEra design characteristics to support this reduction in effectiveness that are beyond the capabilities of typical operating reactors as these capabilities are subsumed in Table B-1 of NUREG-0654.
b. If the NextEra do not have unique design characteristics that support adjusting the response time from 60 to 90 minutes, provide clarification for who will relieve the Shift Manager of either the Shift Manager or Emergency Director functions within 60 minutes of an alert or higher emergency declaration.

NextEra Response:
Within 60-minutes of an Alert or higher declared emergency, a qualified Site Emergency Director (SED) will be in contact with the Shift Manager / Emergency Director (SM/ED) remotely to assist in Command and Control. Emergency Director responsibilities of classification, notification, and protective act recommendations remain with the SM/ED. This process aligns the CEP with the existing normal operations process. After a plant event (non-declared emergency), the Duty Station Manager is in contact with the Shift Manager to obtain extra resources as needed.

RAI 2

Provide objective evidence that LOR simulator training scenarios evaluated the performance of all shift manager ERO tasks as identified in the proposed NextEra

Common Emergency Plan. This evidence should demonstrate successful performance of these tasks for 90 minutes or more following an alert or higher declaration.

NextEra Response:
The discussion in Section 3.3.1 of each site-specific LAR enclosure was to support that the Shift Manager/Emergency Director (SM/ED) performs and is evaluated in scenarios without being augmented by the ERO. The scenarios and evaluations are performed under the License Operator Training program and are separate (not committed to) in the Emergency Plan. The License Operator Training program has no specified or committed scenario time requirements. As stated in the RAI 1 response, a qualified SED will remotely assist the SM/ED of Emergency Director responsibilities within 60 minutes. Therefore, in Section 3.3.1 of each site-specific LAR enclosure referencing the License Operator Training program is no longer applicable for the justification of the NUREG-0654 R2 deviation.

NextEra Supplemental Information:

The NextEra Common Emergency Plan provides an alternative approach to sufficiently meet the Command-and-control function. The SM/ED will remain in command-and-control until relieved by the Site Emergency Director (SED) in the TSC. Within 60 minutes a qualified SED will be in contact with the SM/ED to provide assistance; there is no transfer of authority to the interim qualified SED. The on-shift staff and the supporting remote/interim staff (refer to Attachment 1) provides the SM/ED adequate staffing to delegate task, prioritize, and provide command-and-control / oversite of the event. This alternative approach is consistent with the National Incident Management System (NIMS).

The NextEra alternative approach aligns with the Fleet's normal operating processes, as described below. The site specific On-shift Staffing Analyses supports the evaluation and validation of this alternative method.

NUREG/CR-7190, Workload, Situation Awareness, and Teamwork, describes several factors associated with operator workload, and the potential challenges increased workload poses to emergency response. The Shift Manager/Emergency Director (SM/ED) is no doubt exposed to a potential increase in workload following declaration of an Alert or higher emergency. NextEra mitigates this increase in workload through training and task sharing.

There are two theories of workload described in NUREG/CR-7190. Each of these theories is similar in that they view workload as a function of the limited cognitive resources available to a person allocated to meet their task demands. Essentially, task demands deplete the individual's cognitive resources, increasing workload. NUREG/CR-7190 further goes on to classify workload into four categories: performance criteria, task structure, human system interface, and individual factors.

Operators are expected to maintain high performance and safety standards, despite the presence of equipment failures or declared emergencies. Additionally, during emergencies, the information flow, multitasking, task difficulty, and task duration contribute to increased workload. Finally, the design of the control room's human system interface and individual factors, such as experience, training time, and personal physical factors affect workload.

One concern associated with increased workload is that when many tasks are required to be performed in parallel, operators may shed tasks that they do not believe to be important. This of

course is a concern because the shed task may be more important to a successful outcome than the operator believes. NUREG/CR-7190 cited work by Huey and Wickens, 1993 which found that:

- In operational situations, task prioritization may be formalized, based on safety or mission related concerns.
- An operator's ability to respond to changing priorities is influenced by the total demands of concurrent tasks, their resource requirements, instructions, feedback, and training.

The use of EOPs, EPIPs, position checklists, and organization of the control room staff leads to pre-determined task prioritization. The decision making that would have to occur in a less-formalized environment, such as the combat situations Huey and Wickens examined, would likely lead to task shedding more readily than the pre-scripted and rehearsed control room emergency response.

Within 60 minutes of an alert or higher declared emergency an individual qualified as a Site Emergency Director (SED) will be in contact with the Shift Manager/Emergency Director (SM/ED). This individual is not a remote responder and does not relieve the SM/ED. This individual supports the SM/ED with certain tasks. This process is consistent with normal Fleet practices meant to expeditiously pass responsibility for non-declared emergency event response to other individuals and allow the SM to focus on safe plant operations.

NextEra Nuclear Fleet procedure PI-AA-100, Condition Assessment and Response describes the process the NextEra Nuclear Fleet uses to respond to:

- Complex troubleshooting,
- Cyber security incidents,
- Equipment failure investigation,
- Forced outage response, and
- Significant events – those events with high regulatory or industrial, radiological, or nuclear safety significance

Among other responsibilities during these events, the SM contacts the Duty Station Manager (DSM). The DSM's responsibilities include:

- Reviews and understands the initiating condition and current plant status with the SM.
- Assumes responsibility for response implementation.
- Reviews the Event Response Decision Tree with the SM and gains concurrence on the proper level of response.
- Evaluates the need to Quarantine Areas, Equipment, or Records to preserve event facts or conditions.
- Makes proper notifications to senior plant management.
- Identifies the Response Team Leader based on the event response process being implemented.
- Ensures cross-functional support is considered when determining response team members.
- The DSM makes proper notifications for callouts.
- Organizes and leads initial response activities until a turnover is performed with the Response Team Leader.

- Periodically re-evaluates the event to determine if the event response process should be escalated based on transition and entry criteria.
- Periodically re-evaluates the event to determine if the event response process should be exited based on exit criteria identified by the process.

During an Alert or higher declared emergency, the SM/ED will use an individual qualified as a SED to assist with several functions, like those the SM relies on the DSM to perform during other non-declared emergency events. Table C shows the responsibilities of the SM/ED found in the NextEra Common Emergency Plan, and those that the individual qualified as a SED would be expected to assist the SM/ED with. The SM/ED may also task the qualified SED with other responsibilities. It is important to re-iterate that the individual qualified as a SED assists the SM/ED within 60 minutes of an Alert or higher emergency declaration and does not relieve the SM of the SED responsibilities. The SM/ED will be relieved of the ED duties by the SED reporting to the TCS within 90 minutes.

Operator training has demonstrated that shift managers can perform their duties in excess of 90 minutes. A review of NextEra sites' Licensed Operator Continuing Training simulator scenarios since 2019 found that the average length of all scenarios was 149 minutes. For those scenarios that included an alert or higher emergency classification, the average length was 178 minutes. Tables A and B provide greater site-specific detail.

Table A: Duration of all LOCT Simulator Scenario Durations

		Scenario Duration (minutes)			
Site	Scenarios	Average	Median	Minimum	Maximum
Turkey Point	58	162	180	90	360
St. Lucie	76	121	105	90	480
Seabrook	83	247	270	90	270
Point Beach	97	162	165	60	270
Total	314	149	150	60	480

Table B: Duration of LOCT Simulator Scenarios – Alert or Higher Declaration

		Scenario Duration (minutes)			
Site	Scenarios	Average	Median	Minimum	Maximum
Turkey Point	46	161	170	90	360
St. Lucie	35	108	90	90	240
Seabrook	20	225	240	120	270
Point Beach	41	178	180	90	270
Total	142	178	180	90	360

While each scenario did not include an emergency classification, operating crews performed duties like those they would perform in an emergency. Table D provides examples of the tasks

performed by the SM during simulator scenarios that do not require, or due to training objectives, do not include Alert or higher emergency classifications. From the Control Room's perspective, there is little change in intensity or actions required during scenarios, whether an emergency declaration is required or not. Several scenarios that would not meet the threshold for Alert or higher emergency classification can be more challenging to the operating crew. Events such as losses of instrument air, power block fires, and losses of component cooling water can be more challenging, and require more skillful control of the plant, than accident scenarios that result in an Alert or higher emergency classification.

Table C: SM/ED Responsibilities Supported by the Qualified SED 60-minute Assistant

SM/ED Responsibility	Supported by qualified SED	Notes
Organizational Interface and Coordination	Yes	Communication with senior management to reduce burden on SM/ED.
Command and Control	No	SM/ED retains facility command and control.
Facility/Group Management and Supervision	Partial	Manages other 60-minute support positions (RP and FIN Supervisors).
Contact and Use of External Support Services	Yes	Communicates with external organizations which the station has MOU/MOA, such as A/E service providers, etc. Responsibility for communications with the NRC and State/local officials remains with the SM/ED.
Use of Medical, Fire and Law Enforcement Support	No	
NRC Notification and Communications	No	
Event Classification	No	
ERO Notification	Partial	ERO personnel, including the qualified SED, are notified by the Control Room following emergency declaration. The qualified SED supports callout of additional responders as required.
State and Local Event Notification	No	
ERF Communications	Partial	Supports establishing telephone communication channels.
Accident Detection and Assessment	Partial	Evaluates information provided by the SM/ED and is available to provide the SM/ED a peer check.
Effluent Release and Dose Assessment	No	
OSC Team Priorities, Dispatch and Control	Partial	Qualified SED and the other 60-minute support positions (RP and FIN Supervisors) begin development of OSC Team employment.
Site Assembly and Accountability	No	
Site Evacuation	No	
ERO Radiological Protection	Partial	The qualified SED and the RP Supervisor 60-minute support position advise the SM/ED and support radiological protection strategy development.
Offsite Protective Action Recommendations	No	
Emergency Exposure	Partial	The qualified SED and the RP Supervisor 60-minute support position advise the SM/ED and support radiological protection strategy development; however, the SM/ED retains responsibility for approving emergency exposure authorizations.
First Aid	No	
Event Termination	Partial	Evaluates information provided by the SM/ED and is available to provide the SM/ED a peer check.

The use of crew performance evaluation (CPE) scenarios also demonstrates the ability of operating crews to prioritize several concurrent events. A CPE is typically a longer scenario that tests the ability of the crew to safely operate the plant despite multiple equipment failures. These scenarios test the crew's decision making, and ability to prioritize actions, while safely operating the plant.

CPE scenarios begin with only the minimum required control room staff in the simulator, typically one senior reactor operator (SRO) and two reactor operators. The SM, shift technical advisor (STA), and any additional SRO are not in the simulator. The minimum staff must manage any events which occur, without the support of the SM, STA, and any other SRO. These other personnel are not permitted to return to the simulator until the SRO in the simulator requests them to return, and sufficient time has elapsed to simulate their return from locations on the site outside the control room.

Table D: SM/ED Responsibilities Performed by SM during Simulator Scenarios that do not require Alert or Higher Emergency Classifications

SM/ED Responsibility	Description of how the Responsibility is Performed in Non-emergency Classification Simulator Scenarios
Organizational Interface and Coordination	Notification of and coordination with management, and maintenance work groups
Command and Control	Oversight of crew response to all equipment failures and events
Facility/Group Management and Supervision	Management of field operators, maintenance work groups, and support technicians
Contact and Use of External Support Services	Contact of management, maintenance groups, and support technicians
Use of Medical, Fire and Law Enforcement Support	For fire and medical scenarios, determination that offsite assistance is required and coordination of assistance
NRC Notification and Communications	Non-emergency reporting requirements and development of reports
Event Classification	Determination that no classification is required
ERO Notification	Notification of station personnel to perform repairs
State and Local Event Notification	
ERF Communications	
Accident Detection and Assessment	Recognition and diagnosis of events and impact to continued at-power operations
Effluent Release and Dose Assessment	Recognition and control of radioactive releases
OSC Team Priorities, Dispatch and Control	Shift priorities
Site Assembly and Accountability	Shift accountability
Site Evacuation	
ERO Radiological Protection	Radiological protection of shift personnel
Offsite Protective Action Recommendations	
Emergency Exposure	
First Aid	For medical scenarios, dispatch and oversite of shift first aid personnel
Event Termination	Recognition that equipment abnormalities have been resolved and conditions are met to resume normal operations

The NextEra Common Emergency Plan contains an extra drill to continue to evaluate and enhance this augmentation alternative approach. The On-Shift Response Drill (CEP Section N.4.m) requires demonstration with minimum shift staffing and 60-minute ERO responders.

The NextEra Common Emergency Plan Table B-1, On-Shift and Augmenting ERO Staffing Plan has been updated to reflect the Qualified Site Emergency Director as an Interim responder within 60 minutes. The tables note (h) explains the Interim responders and response.

The industry's initiative (NEI White Paper, Enabling a Remote Response by Members of an Emergency Response Organization) was developed as phase one of industry's remote ERO response. The White Paper's (phase one) scope was limited to changes which could be possible under 10 CFR 50.54(q) (based upon the individual sites evaluation). The White Paper was an attempt to provide a road map to identify and evaluate changes associated with ERO remote responders. The NEI White Paper is currently not endorsed by the NRC. The White Paper was used to inform the development of the NextEra remote ERO response.

The remote ERO and interim response was validated during a Point Beach drill on April 30, 2024.

Radiation Protection Function

NRC Position:

The supplements provide that this is not a fully qualified Radiation Protection position. This is not in accordance with NRC guidance nor past precedent. The application did not provide sufficient justification that supports a finding of adequate staffing to provide initial facility accident response in key functional areas and timely augmentation of response capabilities is available. (RAI 9, RAI 10, RAI 11, RAI 12, and RAI 15)

RAI 9

Explain what NextEra design features or capabilities, that are unique to NextEra facilities, that justify reliance on a single qualified radiation protection technician to perform all required RP functions for 90 minutes after the declaration of a radiological event or provide sufficient justification for the proposed deviation from the guidance of NUREG-0654.

NextEra Response:
Currently, two of the NextEra Energy stations have one (1) Radiation Protection Technician (RPT) and one (1) Chemistry Technician (CT) on-shift. Historically, there have been no issues identified with on-shift staffing (1 RPT and 1 CT) which required a change to the number of on-shift staff.

The NextEra Energy Common Emergency Plan (CEP) is revised to specify the following two (2) Radiation Protection positions on-shift:

- RPT-Experienced (RPT)
- Radiation Protection Operator (RP-Ops) (a second RPT can be assigned to the RP-Ops on-shift staffing position)

The RPT qualification is based upon ANSI standards.

The RP-Ops qualification is equivalent to a Junior RPT and qualified to the following Common Industry Radiation Protection (CIRP) tasks, at a minimum:

- Operate Portable Radiological Survey Instruments
- Perform Radiation and Contamination Surveys
- Collect and Evaluate Radiological Air Samples
- Post Low Level Radiological Hazards
- Control Access to High Radiation Areas
- Monitor Personnel Contamination
- Control Radioactive Material Within an RCA
- Control HEPA Vacuums and Ventilation Equipment
- Perform Low Risk Radiological Job Coverage

The CEP Section O requires RP-Ops training to be based upon the Systematic Approach to Training (SAT).

Non-license Operators (or other personnel as determined by station management) will be RP-Ops qualified and the proposed Common Emergency Plan (CEP) will replace the CT with the RP-Ops position. One (1) non-license Operator will be designated and dedicated to the RP-Ops shift position (similar to the on-shift Fire Brigade shift

designation). The RP-Ops would be qualified to perform everyday RP tasks during normal operations (similar to Operations performing minor maintenance).

During an emergency, the on-shift radiation protection function provides qualified radiation protection coverage for responders accessing potentially unknown radiological environments during emergency conditions, in-plant surveys, and control of dosimetry and radiological controlled area (RCA) access. A single qualified radiation protection technician (RPT) is adequate to perform these functions until augmented at 90-minutes.

During the early response phase, the RPT would be expected to provide radiation protection coverage for operators who are performing field actions in support of the Emergency Operating Procedures (EOP). These field actions are limited in nature and prescribed by the applicable EOP. Performance of troubleshooting or maintenance in the early phase of the emergency is not needed.

Each EOP is written in an "action/expected response" and "response not obtained" format. As the crew progresses through each EOP, actions are taken from the control room, and if successful (i.e., the expected response was obtained) the crew will continue moving through the EOP. In the event the expected response was not obtained, the EOP has alternate actions that may be taken by the crew. In some situations, the prescribed action may be to enter a contingency procedure. The EOPs do not assume that progress through the procedure network will stop due to some equipment failure. In any case, the EOP provides the crew with priorities that must be accomplished. Procedure directors are trained to use these procedures to prioritize the actions of the control room staff, field operators, and other supporting personnel, such as radiation protection and chemistry technicians.

The E-3, Steam Generator Tube Rupture, EOP series does direct the performance of in-plant surveys. The purpose of these surveys is to confirm the control room's diagnosis of the event in progress. These survey's provide meaningful data in slower moving events, such as small tube ruptures. In rapidly degrading emergencies or large tube ruptures, there are multiple, redundant, and obvious indications in the control room to diagnose the ruptured steam generator or steam generators. As these surveys are only of value in less-significant accidents, the single RPT or a radiation protection qualified operator (RPO) is adequate to perform them.

There is not a need for a RPT or RPO to control dosimetry or access to the RCA during emergencies. Standard practice is for operating crew members who have responsibility for field actions during an emergency to be issued dosimetry at the beginning of their shift. Installed equipment such as turnstiles activated by appropriately activated dosimetry, at the RCA entrance controls access.

Previous studies, such as those described in NRC Information Notice 95-48, Results of Shift Staffing Study, dated October 10, 1995 identified a high RPT workload during the selected scenarios. However, since IN 95-48 was issued significant technology, procedure and processes improvements in radiation protection and plant operations have occurred which have reduced RPT workload. The site specific on-shift staffing assessments (per NEI 10-05) data indicates minimal workload on the on-shift Radiation Protection Technician (RPT). Furthermore, drills, exercises, and actual events, such as the December 8, 2022, Turkey Point Unusual Event (retracted), a single RPT provides adequate support for the first 90 minutes of an emergency. Additionally, it is not

uncommon for Licensed Operator Continuing Training (LOCT) training and evaluation scenarios to last for two to three hours. These scenarios do not assume that the control room staff has any assistance other than the prescribed on-shift support. This demonstrates that operating crews have the ability and proficiency to manage emergencies, up to and including general emergencies, without the immediate assistance of the ERO.

With the implementation of the RP-Ops position and required training, NextEra will increase the overall on-shift and station RP knowledge (larger pool of personnel with RP training) - building flexibility to address multiple and wider spectrum of Emergency Plan and non-Emergency Plan events.

Additionally, the RP-Ops position provides long-term benefits to address emergencies, the RP-Ops format provides a pathway into Radiation Protection (ANSI Senior RPT) and Operations (NSO/SRO) professions. This career pathway includes a wider RP/Ops plant knowledge for individuals than what is currently provided or expected.

RAI 10

Provide a discussion of how RP-QIs will be qualified as RP Technicians in addition to training on the tasks listed on NUREG-0654, Table B-1.

NextEra Response:
The term Radiation Protection Qualified Individual (RPQI) is being changed to Radiation Protection Operator (RP-Ops) to eliminate confusion with the RPQI being used in the industry.

Refer to RAI 9 for response.

RAI 11

Provide clarification that addresses the following:

a. Provide an evaluation that supports the statement in the application that the key SG tube rupture responses of "identify – isolate –cooldown – depressurize – terminate safety injection" will be successfully completed for all conditions that may involve a SG tube rupture prior to ERO arrival.
b. Provide an evaluation of PWR and/or BWR design calculations that supports the NextEra assertion that PWR designs have a different ERO augmentation response basis to support NextEra ERO staffing.

NextEra Response:

a. The discussion regarding the main sequences for SG cooldown are for illustrative purposes only and not for bounding analysis. The general description is based on simulator scenarios, which routinely are accomplished in the stated time frame.

b. The discussion on the difference between BWRs v. PWRs annual dose data reported in NUREG-0713, Volume 42, Occupation Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities 2020 (ML22276A269) was to identify the difference between the reactor types and the improvements between years (refer to NUREG-0713 figures below). There is no calculation to associate the differences to

ERO staffing, but the information should be taken into consideration when evaluating ERO staffing levels (especially radiological protection personnel). NUREG-0713 states that the average collective dose and average number of individuals per BWR have been higher than those for PWRs for all years depicted. BWRs generally have higher collective doses because the steam produced directly from the reactor is used to drive turbines to produce electricity, which results in radioactivity being present in both the reactor and turbine systems. PWR systems are designed to keep the radioactivity within the reactor vessel and primary system and not in the turbine systems. The two loop/Steam Generator interface PWR design (verses single loop BWR) provides better initial containment during operating and emergency conditions. The proportionally lower PWR operating doses are representative of post-accident conditions.

A reasonable read of NUREG-0713 leads one to the conclusion that with less potential radiological exposure and radioactive controlled areas compared to a BWR, the PWR design allows for less fewer ANSI qualified RP technicians needed for emergency response.

RAI 12

For the RP technician, provide the following:

a. Explain how one RP technician can perform access control, personnel monitoring, and dosimetry, RP coverage for repair and corrective actions, search and rescue, first aid, and firefighting during emergency response operations for 90 minutes after an alert or higher declaration.
b. Explain how one RP technician performing the RP functions would also be available to assess the protected area for radiation and contamination levels.

NextEra Response:

The NextEra Energy Common Emergency Plan (CEP) contains:

- One (1) RPT and one (1) RP-Ops on-shift staffing (refer to RAI 9).
- Within 60 minutes remote "Interim" response by a Radiation Protection Coordinator (TSC) or Radiation Protection Supervisor (OSC) to support and discuss radiological considerations with the On-shift Staff (SM/ED) and remote staff (Dose Assessor and Engineers).
- Non-license Operators trained as RP-Ops and can be utilized to respond to multiple and wide spectrum of events.

RAI 15

Provide a regulatory or technical basis for using NEI 10-05 to extend or eliminate ERO augmentation positions. Include in your discussion how this basis specifically address how a 2-hour augmentation is consistent with the 10 CFR 40.47(b)(2) requirement for timely augmentation.

NextEra Response:

NextEra Energy Common Emergency Plan (CEP) requires two (2) Radiation Protection on-shift positions (refer to RAI 9) and remotely within 60 minutes a Radiation Protection Coordinator (TSC) or Radiation Protection Supervisor (OSC).

NEI 10-05 is no longer a justification for the Radiation Protection Personnel at 90 minutes deviations from NUREG-0654 R2 in the NextEra Energy CEP.

NextEra Supplemental Information:

NextEra (and the industry) has identified a reduced number of Radiological Protection Technician (RPT) professionals in the industry due to personnel exiting the profession and insufficient personnel interested in entering the profession. NextEra's alternative approach for the Radiation Protection function is taking a proactive measure to address this future issue. The Common Emergency Plan proposes that Operators (and others) would receive additional training and qualification equivalent to Jr. RPTs. The minimum training for the RP-Ops position is specified in the Common Emergency Plan Section O.1.

The RP-Ops position addresses the issue while placing more RP qualified personnel on-shift and within the ranks of the staff; increasing the overall RP knowledge on-shift. The on-shift operators would be qualified to address a wider scope of events (declared emergencies or non-emergencies). The RP-Ops personnel would be assigned RP tasks and responsibilities during normal operations to fully benefit from the change and maintain proficiency.

Crediting the NextEra (and industry) technology and process advancements n RP have been considered in the development of this proposed alternative approach, for example:

- Personal radiation monitoring – electronic monitoring devices
- In-plant radiation monitoring and data displays from the plant computer
- Pre-developed emergency RWPs
- Process and technology improvements in Radiological Control Area (RCA)access controls
- Dose assessment programs and processes.

During an emergency, the on-shift radiation protection function provides qualified radiation protection coverage for responders accessing potentially unknown radiological environments during emergency conditions, in-plant surveys, and control of dosimetry and radiological controlled area (RCA) access. Past precedent of two NextEra stations having a single RPT on-shift has demonstrated a single qualified RPT is adequate to perform these functions until augmented. The proposed alternative approach increases the overall on-shift RP knowledge and prepares for a wider spectrum of accidents. Referring to Attachment 1, all available on-shift RP-Ops qualified personnel would be available to respond and mitigate radiological events (spills, leaks, etc,).

During the early response phase, the RPT would be expected to provide radiation protection coverage for operators who are performing field actions in support of the Emergency Operating Procedures (EOP). These field actions are limited in nature and prescribed by the applicable EOP. Performance of troubleshooting or maintenance in the early phase of the emergency is not needed.

Each EOP is written in an "action/expected response" and "response not obtained" format. As the crew progresses through each EOP, actions are taken from the control room, and if successful (i.e., the expected response was obtained) the crew will continue moving through the EOP. In the event the expected response was not obtained, the EOP has alternate actions that may be taken by the crew. In some situations, the prescribed action may be to enter a

contingency procedure. The EOPs do not assume that progress through the procedure network will stop due to some equipment failure. In any case, the EOP provides the crew with priorities that must be accomplished. Procedure directors are trained to use these procedures to prioritize the actions of the control room staff, field operators, and other supporting personnel, such as radiation protection and chemistry technicians.

The E-3, Steam Generator Tube Rupture (SGTR), EOP series does direct the performance of in-plant surveys. The purpose of these surveys is to confirm the control room's diagnosis of the event in progress. These survey's provide meaningful data in slower moving events, such as small tube ruptures. In rapidly degrading emergencies or large tube ruptures, there are multiple, redundant, and obvious indications in the control room to diagnose the ruptured steam generator or steam generators. As these surveys are only of value in less-significant accidents, the single RPT or a Radiation Protection Operator (RP-OPS) is adequate to perform them. Per the Turkey Point Nuclear Station's Time Critical Operator Action Program (0-ADM-232), key SGTR responses of "identify – isolate –cooldown – depressurize – terminate safety injection" will be successfully completed for all conditions that may involve a SGTR prior to current ERO arrival (60 minute response).

Critical Operator Actions

SGTR (with LOOP occurring coincident with reactor trip)

Operator Action	Action Time (min)	Initiating Event	Manipulation Time (min)	Maximum Elapsed Time (min)
Isolate AFW flow to ruptured SG	5	Following reactor trip	1	5
Isolate HHSI flow from two of four pumps following Reactor Trip	10	Following reactor trip	1	10
Initiate cooldown	28	Following reactor trip	10	38
Initiate depressurization	6	Following completion of cooldown	11	55
Terminate HHSI flow	3	Following completion of depressurization	1	59

There is not a need for a RPT or RP-Ops to control dosimetry or access to the RCA during emergencies. Standard practice is for operating crew members who have responsibility for field actions during an emergency to be issued dosimetry at the beginning of their shift. Installed equipment such as turnstiles activated by appropriately activated dosimetry, at the RCA entrance controls access.

Previous studies, such as those described in NRC Information Notice 95-48, Results of Shift Staffing Study, dated October 10,1995 identified a high RPT workload during the selected scenarios. However, since IN 95-48 was issued significant technology, procedure and processes improvements in radiation protection and plant operations have occurred which have reduced RPT workload (examples, see above). The site specific on-shift staffing assessments (per NEI 10-05) data indicates minimal workload on the on-shift RPT. Furthermore, drills,

exercises, Licensed Operator Continuing Training (LOCT), and actual events, such as the December 8, 2022 Turkey Point Unusual Event (retracted), demonstrated that a single RPT provided adequate support for the first 90 minutes of an emergency.

The NextEra Common Emergency Plan contains an extra drill to continue to evaluate and enhance this augmentation alternative approach. The On-Shift Response Drill (CEP Section N.4.m) requires demonstration with minimum shift staffing and 60-minute ERO responders.

Supervision of Radiation Protection Function

NRC Position:

There is no discussion on how this was validated as well as it is not consistent with the current industry initiative for remote ERO augmentation, therefore the LAR has not provided information sufficient for the NRC to justify the proposed change. The application did not provide sufficient justification that supports a finding of timely augmentation of the response capabilities is available. (RAI 17 and RAI 18)

RAI 17

Provide the following clarifications regarding the OSC RP supervisor:

a) Provide objective evidence that a qualified and proficient RP supervisor will be available at the OSC within 90 minutes of an alert or higher declaration.
b) Provide objective evidence that one individual can concurrently perform the lead OSC supervisor and RP supervisor functions.

NextEra Response:
The NextEra Energy Common Emergency Plan (CEP) contains a Radiation Protection Supervisor (OSC) responding to the OSC within 90 minutes; with the following exception, if the Technical Support Center (TSC) and OSC are co-located then minimum staff ERO will consist of only the Radiation Protection Coordinator (TSC) (not requiring the a Radiation Protection Supervisor (OSC) as a minimum staff position) .

RAI 18

Provide the following clarifications regarding the TSC RP coordinator:

a) Although the NRC staff was able to locate information related to extending the augmentation time of the TSC RP coordinator in the LAR as supplemented, the staff could not find "Analysis 1" in either the LAR or the supplement. Provide Analysis 1 described in Section 2.2.5 of the LAR.
b) Although the emergency preparedness tasks for the RP coordinator and shift manager are similar, the training and qualifications for a RP supervisor and a shift manager are not typically the same. Provide objective evidence that shift managers have the required "significant expertise in radiation and radiological consequences" to evaluate radiological events during the period from 60 to 90 minutes after an alert or higher declaration.
c) Explain how NextEra EOP/AOP sets can provide "significant expertise in radiation and radiological consequences" could mitigate the experience of the shift manager. This explanation should include specific examples demonstrating that the NextEra EOP/AOP sets contain significant expertise in radiation and radiological consequences.
d) Explain how the operating crew and procedure sets could inform shift manager decisions related to immediate dose extensions for life saving, facility saving, or prevention/mitigation of release. This explanation should include objective evidence that the operating crew could provide the shift manager with "significant expertise in radiation and radiological consequences" to evaluate the radiological consequences related to these decisions.
e) Provide objective evidence that no events would exist that may require significant expertise in radiation and radiological consequences for 90 minutes following the declaration of an alert or higher declaration or explain who will provide significant

expertise in radiation and radiological consequences within 60 minutes of an alert or higher declaration.

NextEra Response:
The NextEra Energy Common Emergency Plan (CEP) contains within 60 minutes remote "Interim" response by a Radiation Protection Coordinator (TSC) or Radiation Protection Supervisor (OSC).

During the 60-90 minutes remote communications, the Radiation Protection Coordinator (TSC) or Radiation Protection Supervisor (OSC) will be able to discuss radiological considerations with the On-shift Staff (SM/ED) and remote staff (Dose Assessor and Engineers).

With the remote "Interim" response by the Radiation Protection Coordinator (TSC) or Radiation Protection Supervisor (OSC), the EOP/AOP sets are not necessary to support deviations from NUREG-0654 R2.

NextEra Supplemental Information:

The NextEra Common Emergency Plan provides an alternative approach to sufficiently meet the Supervision of Radiation Protection function. The SM/ED will maintain the Radiation Protection function until relieved by the Site Emergency Director in the TSC. Refer to Attachment 1, within 60 minutes a TSC Radiation Protection Coordinator or OSC Radiation Protection Supervisor will be in contact with the SM/ED to provide assistance and guidance; there is no transfer of authority.

The interim Radiation Protection supervision position would also provide guidance and assistance for the development of PARs and troubleshooting plans.

Since the OSC RP staff will be reporting at 90 minutes, there is no additional RP supervision needed at 60 minutes.

The NextEra Common Emergency Plan contains an extra drill to continue to evaluate and enhance this augmentation alternative approach. The On-Shift Response Drill (CEP Section N.4.m) requires demonstration with minimum shift staffing and 60-minute ERO responders.

The NextEra Common Emergency Plan Table B-1, On-Shift and Augmenting ERO Staffing Plan has been updated to reflect the RP Supervisor (TSC RP Coordinator or OSC RP Supervisor) as an Interim responder within 60 minutes. The tables note (h) explains the Interim responders and response.

The industry's initiative (NEI White Paper, Enabling a Remote Response by Members of an Emergency Response Organization) was developed as phase one of industry's remote ERO response. The White Paper's (phase one) scope was limited to changes which could be possible under 10 CFR 50.54(q) (based upon the individual sites evaluation). The White Paper was an attempt to provide a road map to identify and evaluate changes associated with ERO remote responders. The NEI White Paper is currently not endorsed by the NRC. The White Paper was used to inform the development of the NextEra remote ERO response.

The remote ERO and interim response was validated during a Point Beach drill on April 30, 2024.

Repair Team Activities Function

NRC Position:

LAR has not provided information sufficient for the NRC to justify the proposed extension in timing of augmenting electrical and mechanical maintenance technicians from 60 to 90 minutes. The application did not provide sufficient justification that supports a finding of timely augmentation or response capabilities is available. (RAI 26)

RAI 26

Provide the following clarifications regarding the NextEra FLEX strategy:

a. In addition to the requirements of 10 CFR 50.155 and based on an evaluation of an analysis, could the NextEra FLEX strategies be used to mitigate a broad spectrum of events in addition to design basis external events and large area of the plant loss due to explosions or fire?
b. Provide objective evidence that FLEX strategies are sufficiently effective and reliable to justify extending the response times of ERO augmenting mechanical and electrical technicians.

NextEra Response:
The FLEX strategies are no longer a justification for changes and deviations from NUREG- 0654 R2 in the NextEra Energy Common Emergency Plan (CEP). OSC craft personnel (Mechanical Maintenance, Electrical Maintenance, and Instrument & Control Technicians) responding within 90 Minutes as a deviation from NUREG-0654 R2 is justified by the following:

- Minor maintenance could be addressed by the on-shift Operations crew.
- Complex maintenance issues are addressed by the stations troubleshooting process. Troubleshooting plans will be developed per the current/ normal site processes. Engineering staff and FIN Supervisor will remotely report to the SM/ED within 60 minutes and start the development of the troubleshooting plan.

  If necessary, the Radiation Protection Coordinator (TSC) or Radiation Protection Supervisor (OSC) will as remotely respond within 60 minutes.

  If information is needed from the field (pictures, videos, instrument readings, etc.), then the on-shift Operations crew can provide the necessary information.

This reflects the current normal process used for day-to-day issues.

NextEra Supplemental Information:

The NextEra Common Emergency Plan provides an alternative approach to sufficiently meet the Repair Activities function. Per the CEP, the Repair Activities function is not delayed and is staffed and available within 60-minutes as prescribed in NUREG-0654 revision 2. Refer to Attachment 1, unexpected maintenance activities are addressed in the NextEra CEP with the of the interim and remote ERO 60-minute response:

- Qualified SED – Interim remote response – Ensures sufficient and correct resources are responding. As necessary can provide directions and oversight to the repair plan.

- Engineering staff – remote responders – assists in development of repair plan.
- FIN Supervisor - Interim remote response – Ensures sufficient and correct resources are responding and assists in development of repair plan.
- TSC RP Coordinator or OSC RP Supervisor – Interim remote response – provides RP aspects into the repair plan.

This is similar and takes advantage of NextEra's processes for response to normal operations equipment issues. MA-AA-100-1011, Equipment Troubleshooting:

- The on-shift Operating crews are the first responders to equipment failures and typically completes the initial condition assessment and data collection.
- Responsible for facilitating and setting plant conditions for troubleshooting.
- Evaluates equipment problems and determines station response actions.
- Records and/or preserves evidence as well as initiating information gathering and documentation per this procedure.

The use of maintenance personnel to "begin the maintenance process…" is inconsistent with how NextEra currently responds to equipment failures. The CEP provides a more seamless integration of our normal on-line responsibilities and our emergency responsibilities:

- Preserves normal structures, processes, and relationships (MA-AA-100-1011, Equipment Troubleshooting, and PI-AA-100, Condition Assessment and Response).
- As operators perform initial troubleshooting, there is less "startup cost" when maintenance personnel arrive in their facility, there is not a need for them to perform initial troubleshooting or data collection as it is already complete.
- As Operations typically completes initial troubleshooting, there is not a need for the craft to become proficient in initial troubleshooting.
- FIN Supervisor and Engineers report as remote/Interim ERO within 60 minutes to assist in planning the required repairs.
- Response of the Craft personnel places unnecessary burden on the SM/ED

The NextEra Common Emergency Plan contains an extra drill to continue to evaluate and enhance this augmentation alternative approach. The On-Shift Response Drill (CEP Section N.4.m) requires demonstration with minimum shift staffing and 60-minute ERO responders.

The NextEra Common Emergency Plan Table B-1, On-Shift and Augmenting ERO Staffing Plan has been updated to add note (n) which states:

Repair Activities include minor maintenance performed by on-shift operations staff (collateral duty) and development of troubleshooting/repair plans created by on-shift operations staff (collateral duty), Engineers (remote) and FIN Supervisor (interim remote).An additional change was made to the NextEra Common Emergency Plan associated with the Repair Team function, the requirement for the OSC Supervisor to be trained to perform RP supervisory tasks (CEP section O.1.4.a) was eliminated.

On-site and Off-site Field Monitoring Function

NRC Position:

LAR does not provide the capability to perform on-site and off-site field monitoring within 60 minutes of an alert or higher declaration. The Application did not provide sufficient justification that supports a finding of adequate staffing to provide initial facility accident response in key functional areas and timely augmentation of response capabilities is available. (RAI 28 and RAI 30)

RAI 28

Provide objective evidence that NextEra facilities can assess the protected area for radiation and contamination during radiological events within 60 minutes of an alert or higher declaration.

NextEra Response:
The NextEra Energy Common Emergency Plan (CEP) requires two (2) Radiation Protection on-shift positions (refer to RAI 9) and remotely within 60 minutes a Radiation Protection Coordinator (TSC) or Radiation Protection Supervisor (OSC). In addition, on-shift non-licensed operators will be trained on field monitoring techniques and strategies.

Therefore, onsite field monitoring will be performed by available Radiation Protection on-shift positions or non-licensed operators.

RAI 30

Provide the following clarifications regarding FMT augmentation.

a. If NextEra is proposing to staff field monitoring following the declaration of a SAE or greater, provide a basis supporting this deviation from staffing field monitoring following the declaration of an alert or higher as provided in NUREG-0654.
b. Provide an evaluation of an analysis that explains how one FMT will concurrently perform both the onsite and offsite FMT functions.

NextEra Response:
NextEra Energy Common Emergency Plan (CEP) will utilize the two (2) on-shift Radiation Protection positions and Operations (trained in field monitoring) to perform the on-site Field Monitoring Team function. Within 90 minutes of an Alert or greater classification, two field monitoring teams (FMT) will dispatch for the offsite FMT function and to assist with the onsite FMT function. The deployment of those teams will be guided by procedures and the decisions of the ERO.

NextEra Supplemental Information:

The NextEra Common Emergency Plan provides an alternative approach to sufficiently meet the Field Monitoring function. The CEP includes RP-OPS training for non-licensed operators. Shift staffing requirements include adequate staff to respond to fires and safe shutdown from outside the control room. Assuming one of two broad scenarios may occur that require on-site field monitoring, there are adequate RP-Ops personnel on-shift, in addition to the RPT and RP-Ops assigned, to perform on-site field monitoring. Note that RIS 2016-10 states "Licensees may

consider alternative approaches for staffing this functional area by training non-HP personnel to perform these survey tasks."

	Remaining RP-Ops			
Event	PB	PSL	PTN	SBK
Blue sky (SSD/FB)	3/5	4/5	3/5	2/5
Fire in radioactive material: no/limited plant response – safe shutdown NLO performs on-site field monitoring	2	2	3	2
Radiological emergency: no fire – fire brigade personnel perform on-site field monitoring	4	3	5	5
Total RP staff (worst case)	4	4	5	4

The Shift Manager/Emergency Director sets the emergency response priorities and therefore will prioritize the performance of onsite field monitoring based upon the event. Because there are no actions in the EOP/AOPs which requires field monitoring, the onsite field monitoring will presumably be a low priority relative to other EOP/AOP directed actions. The NextEra on-shift compliment will include one RPT, one dedicated RP-Ops position and additional RP-Ops qualified personnel which could be assigned the onsite field monitoring task. Therefore, there is abundant adequate on-shift staffing to provide initial facility accident response function of onsite field monitoring.

There is no credible postulated accident which would result in an undetected and unexpected (based on plant status and damage) release which would be an immediate risk to the health and safety of the public.

The NextEra Common Emergency Plan contains an extra drill to continue to evaluate and enhance this augmentation alternative approach. The On-Shift Response Drill (CEP Section N.4.m) requires demonstration with minimum shift staffing and 60-minute ERO responders.

The NextEra Common Emergency Plan Table B-1, On-Shift and Augmenting ERO Staffing Plan has been updated to reflect the On-Shift RP qualified individuals would perform the Field Monitoring function. The tables note (m) states:

> Onsite Field Monitoring Team function can be performed by any on-shift RP qualified individual (RPT or qualified RP-Ops) as collateral duty.

On-shift Emergency Classification Advisor position being filled by extra SRO

NRC Position:

NextEra is proposing to have the On-shift Emergency Classification Advisor (ECA) and using an extra senior reactor operator (SRO) on shift. There is no indication that there is an extra SRO on-shift and this has not been validated on how it would work at PSL (2 control rooms) and SBK (single unit). The application did not provide sufficient justification that supports a finding of adequate staffing to provide initial facility accident response in key functional areas is available. (RAI 5, RAI 6, RAI 23, RAI 24, and RAI 40)

RAI 5

Explain who will relieve the on-shift communicator of the ENS communication function within 60 minutes of an alert or higher declaration and how it meets NUREG-0654 guidance for the NRC communicator to not support the performance of collateral duties.

NextEra Response:
Refer to RAI 4 response for details on the ENS and ORO on-shift notifications and communications. In summary, an on-shift Communicator is available to make the ENS notification and further continuous communications with the NRC.

> RAI 4 Response:
> NextEra Energy employs a system (Emergency Response Notifications for Incidents and Events (ERNIE)) that performs initial ORO and NRC notifications using electronic means. This system is operated by the Emergency Classification Advisor (ECA) and notifications are approved by the Shift Manager in the control room. The electronic system takes inputs from the ECA, creates the site notification form, sends that notification form to ERO and offsite agency leadership, activates the ERO, and calls each warning point using an electronic voice. There is no need for the communicator at this point. In the event of a network outage or other connectivity issues, the company behind the electronic system operates an "Emergency Live Operator" service who can activate the system on behalf of the site in the emergency.
>
> The ERNIE system monitors responses and provides a visual representation of the responses to the system operator. There are no call back requirements to validate information as the validation occurs in the system.
>
> After the on-shift Dose Assessor is augmented by the Remote Dose Assessor (within 60 minutes), the on-shift Dose Assessor is available, as necessary, to assume the on-shift ORO Communicator (collateral duty) position between the 60 to 90 minutes period.
>
> Per current NRC regulations a phone call to the Headquarters Operations Officer (HOO) is still required immediately not to exceed 1 hour for a classified emergency. An on-shift communicator is available to make the ENS notification and further continuous communications with the NRC until relieved within 90 minutes.

RAI 6

Concerning ORO and ENS communication:

a) Provide clarification that describes who is expected to perform the on-shift ORO and ENS communication functions for alert or greater declarations. Note: this clarification should not rely on concurrent performance by individuals required to perform other functions such as fire brigade, plant operations during off-normal conditions, and ERO functions such as command-and-control.
b) Explain how NextEra determined that performance of the ORO and ENS communication function could be performed as a collateral duty for the shift manager, on-shift SROs responsible for the direction of licensed operators, or auxiliary operators required to support plant operations as described in NextEra technical specifications or the fire brigade. Note: if NextEra has an individual capable of performing ORO and ENS communication that is not required to concurrently perform actions in response to the event, describe that individual and explain where that capability is reflected in the proposed NextEra Common Emergency Plan.

NextEra Response:

a) NextEra Energy employs a system (Emergency Response Notifications for Incidents and Events (ERNIE)) that performs initial ORO and NRC notifications using electronic means. Additional ENS and ORO communications are performed by the following:
   - An on- shift Communicator is assigned and available to make the ENS notification and further continuous communications with the NRC until relieved within 90 minutes.
   - After the on-shift Dose Assessor is augmented by the Remote Dose Assessor (within 60 minutes), the on-shift Dose Assessor is available to assume on-shift ORO Communicator position until relieved at 90 minutes.
b) The site specific On-shift Staffing Analysis (OSA) per the NRC endorsed accepted method document (NEI 10-05). The OSA demonstrated can accomplish timely performance of their assigned functions as specified in the emergency plan . The analyses ran the sequence of tasks out to 120 minutes. The results of the analyses are:
   1) The task analyses did not identify non validated tasks that were performed by the on-shift positions.
   2) The task analyses did identify potential task overlaps in the events that were analyzed.
   3) The task timing study resolved the potential task overlaps in the events that were analyzed. Emergency response tasks were performed sequential with other tasks such that no overlap or overburden occurred.

RAI 23

Provide objective evidence that establishing a 90-minute requirement for the TSC classification advisor would not impact the ability to perform the classification function at the TSC.

NextEra Response:

The TSC Classification Advisor augmentation time of 90-minutes hinges upon other TSC staffing positions having an activation time of 90 minutes. Once the TSC is activated, the TSC Classification Advisor can officially augment the on-shift Classification Advisor

Extending the Classification Advisor's functions / tasks from 60 minutes to 90 minutes have no negative affect on the emergency response. The functions/ tasks would be performed by the On-shift Classification Advisor and assisted by the Remote Engineering ERO. The TSC Classification Advisor would perform no additional essential tasks than what is being performed by the on-shift staff.

RAI 24

Regarding on-shift ERO staffing:

a. Explain who would perform the STA function.
b. Explain who would perform the shift classification advisor function. Your discussion should specifically address the NextEra site-specific Technical Specifications and the proposed NextEra Common Emergency Plan that does not require a designated individual to perform the shift technical advisor function. The LAR describes that the only required individuals with the capability to perform the shift classification advisor function are the operating supervisors and the shift managers. Neither the operating supervisor nor the shift manager would be available to provide classification advice to the shift manager/emergency director during radiological events.

NextEra Response:
In accordance with Table B1 from NUREG-0654 R2, the Core/Thermal Engineer (STA) is a single person that can perform their function as a collateral duty. The STA function is performed by designated on-shift personnel, who meet the educational requirements for an STA. NextEra Energy uses individuals with an SRO license to perform this function. Normally, this function will be completed by the Shift Manager. In the event that the Shift Manager does not have the qualifications for the position, another shift personnel, with appropriate qualifications, will provide this function.

The ECA functions will be assumed by a SRO from the unaffected unit (PBN, PSL and PTN) or another on-shift qualified individual.

NextEra Energy performed site specific On-shift Staffing Analyses per the NRC endorsed accepted method document (NEI 10-05). Per NEI 10-05, detailed analyses demonstrating that on-shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan. The analyses ran the sequence of tasks out to 120 minutes and included the STA / ECA functions/tasks. The result of the analyses:

a. The task analyses did not identify non validated tasks that were performed by the on-shift positions.
b. The task analyses did identify potential task overlaps in the events that were analyzed.
c. The task timing study resolved the potential task overlaps in the events that were analyzed. Emergency response tasks were performed sequential with other tasks such that no overlap or overburden occurred.

RAI 40

Provide a supporting analysis or other objective evidence that justifies the NextEra conclusion that there would be no degradation or loss of function when ERO augmentation response time is increased from 60 minutes to 90 minutes.

NextEra Response:
The following technical advancements and program enhancements listed in the LAR (Enclosure 1 - 4) have been implemented and/or the proficiency of the advancement/ enhancements has evolved since NUREG-0654 R2 was drafted (and approved):

- Plant systems and procedures
  - Severe Accident Management Guidelines (SAMG)
  - FLEX Support Guidelines (FSG)
  - Extensive Damage Mitigation Guidelines (EDMG)
  - EOP/AOP
  - Plant computer, control and instrumentation systems
- Emergency preparedness (EP) programs, processes, and equipment
  - Communication and notification (see below) systems (plant and public) Dose Assessment programs and processes (enhanced dose assessment programs being implemented at the NextEra Energy stations for CEP)
  - Emergency Action Levels (EALs)
  - NRC ERDS system
- Operator, ERO, and General Employee Training (GET) training
- Radiological monitoring systems
- Computer and internet usage
- Work Control - Risk Assessment

Acknowledging the NUREG-0654 R2 issuance in December of 2019, advancements/ enhancements have continued to be implemented and evolved since, and have not been fully used (example; remote radiological monitoring) or credited in emergency response.

Each of the advancements/ enhancements has improved data availability, ease of use, timeliness, communications, the "tools in the toolbox" for an emergency response, etc. The advancements / enhancements need to be taken holistically in determining the ERO staffing and response. The above listing are high-level advancements / enhancements, other minor changes have improved normal operating and emergency response tasks (example, use of cell phones to text photos from the field to the Control Room or Engineering staff).

As described in RAI 9, NRC Information Notice 95-48, Results of Shift Staffing Study, dated October 10, 1995, identified a high RPT workload during the selected scenarios. However, since IN 95-48 was issued significant technology, procedure, and processes improvements in radiation protection and plant operations have occurred which have reduced Radiation Protection Technician (RPT) workload. The site specific on-shift staffing assessments (per NEI 10-05) data indicates minimal workload on the on-shift RPT. Furthermore, drills, exercises, and actual events provide additional objective evidence in workload reduction.

An example of improvement currently being implemented; the shift staff will be using an electronic communication system to perform initial notifications. Emergency Response Notifications for Incidents and Events (ERNIE) is the in-house name for the software performing all activations. The Emergency Classification Advisor will log into the system,

select the appropriate classification level and fill the form out electronically by use of question-and-answer dropdowns, text boxes, or other input styles.

When the input is sent, the system performs the following functions simultaneously:

1. Creates a formatted agency notification form to email to select ERO and offsite response members.
2. Contacts the warning points using an electronically generated voice to read a script that changes based on form inputs to provide the initial warning point message.
3. Contacts the ERO using all available communication methods to activate or inform the ERO of the event in progress, depending on emergency classification level or Shift Manager discretion.

Note: additional information can be sent to agencies/ ERO members based on agreed upon requests that are external to the Emergency Plan and managed external to the Emergency Plan or its sub procedures/ processes.

The system monitors responses and provides a visual representation of the responses to the operator. There are no call back requirements to validate information as the validation occurs in the system.

Following the initial notification, the Emergency Classification Advisor has another ERNIE selection to communicate with the NRC. The information is informed by ML 1916A 179, Power Reactor Emergency Notification Communication Guidance, but not committed to keeping questions or responses exactly as that guidance lays out.

This system has been in use at Point Beach Nuclear Plant since January 2022 and will be installed at all other sites as part of the installation of the Common Emergency Plan.

Once draft procedures and process are established incorporating the technical advancements and program enhancements, NextEra Energy will provide training, drills, and tabletops to the applicable ERO personnel.

NextEra Supplemental Information:

The Shift Classification Advisor would be assigned from the On-Shift staff. The Shift Classification Advisors tasks were evaluated for the SRO requirement. The evaluation determined that the SRO requirement was un-necessarily conservative, and the SRO requirement has been deleted from the CEP. NextEra CEP Personnel assigned as the Shift Classification Advisor will not have conflicting collateral duties, as evaluated per NEI 10-05. NextEra will maintain administrative control (shift roster) to ensure the qualification and prevent from conflicting collateral duties. Based upon current staffing, the Shift Classification Advisor position will normally be staffed by an SRO, but the SRO requirement is not required.

As an example, SROs on-shift for each station:

PBN	
SM/STA	Emergency Director
Operations Supervisor (affected unit)	AOP/EOP reader

Operations Supervisor (unaffected unit)	Shift Classification Advisor

PSL	
SM/STA	Emergency Director
Unit Supervisor (affected unit)	AOP/EOP reader
Unit Supervisor (unaffected unit)	Shift Classification Advisor

PTN	
SM/STA	Emergency Director
Control Room Supervisor (affected unit)	AOP/EOP reader
Control Room Supervisor (unaffected unit)	Shift Classification Advisor

SBK	
SM/STA	Emergency Director
Unit Supervisor	AOP/EOP reader
Work Control Supervisor (SRO)	Shift Classification Advisor

The NextEra Common Emergency Plan contains an extra drill to continue to evaluate and enhance this augmentation alternative approach. The On-Shift Response Drill (CEP Section N.4.m) requires demonstration with minimum shift staffing and 60-minute ERO responders.

The remote ERO and interim response was validated during a Point Beach drill on April 30, 2024.

Emergency Classification Advisor Tasks

NRC Position:

It is not clear to the staff how the on-shift ECA is able to do all of the task that could potentially assigned, classification, communications, dose assessment, supervision of engineering resources. Additionally, the applications did not describe how this would be accomplished using an extra SRO for PSL (2 control rooms) and SB, nor how it was validated. The application did not provide sufficient justification that supports a finding of adequate staffing to provide initial facility accident response in key functional areas is available. (RAI 4)

RAI 4

Concerning ORO and ENS communication, provide the following:

a. Explain who will relieve the on-shift communicator of the ORO communication function within 60 minutes of an alert or higher declaration and provide a discussion of how it meets NUREG-0654 guidance for the ORO communicator to not support the performance of collateral duties.
b. Explain who will be available to respond to ORO questions related to notification messages.

NextEra Response:
NextEra Energy employs a system (Emergency Response Notifications for Incidents and Events (ERNIE)) that performs initial ORO and NRC notifications using electronic means. This system is operated by the Emergency Classification Advisor (ECA) and notifications are approved by the Shift Manager in the control room. The electronic system takes inputs from the ECA, creates the site notification form, sends that notification form to ERO and offsite agency leadership, activates the ERO, and calls each warning point using an electronic voice. There is no need for the communicator at this point. In the event of a network outage or other connectivity issues, the company behind the electronic system operates an "Emergency Live Operator" service who can activate the system on behalf of the site in the emergency.

The ERNIE system monitors responses and provides a visual representation of the responses to the system operator. There are no call back requirements to validate information as the validation occurs in the system.

After the on-shift Dose Assessor is augmented by the Remote Dose Assessor (within 60 minutes), the on-shift Dose Assessor is available, as necessary, to assume the on-shift ORO Communicator (collateral duty) position between the 60 to 90 minutes period.

Per current NRC regulations a phone call to the Headquarters Operations Officer (HOO) is still required immediately not to exceed 1 hour for a classified emergency. An on-shift communicator is available to make the ENS notification and further continuous communications with the NRC until relieved within 90 minutes.

NextEra Supplemental Information:

The Common Emergency Plan section B.1.a states,

"The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility)".

The on-shift ECA is not performing all of the functions listed but may have involvement (or responsibilities) in each. The on-shift ECA position and tasks were evaluated and validated as part of the On-shift Staffing Analysis (NEI 10-05) for each station. Overall the stations' On-shift Staffing Analysis conclude:

- The task analysis did not identify non-validated tasks that were performed by the on-shift positions.
- The task analysis did identify potential task overlaps in the events that were analyzed.
- The task timing study resolved the potential task overlaps in the events that were analyzed. Emergency response tasks were performed sequential with other tasks such that no overlap or overburden occurred.

Additionally, not all of the functions/responsibilities will occur at the same time. Referring to Attachment 1, the Shift Classification Advisor will assist in classification and notification within the first 60 minutes. Once the Remote ERO (Remote Dose Assessor, and Engineering staff) and interim ERO are available (within 60 minutes), the Shift Classification Advisor will be involved in briefing and assigning / directing tasks based upon the event.

If a second classification occurs within 90 minutes, tasks would be prioritized to ensure the risk significant functions are completed in a timely fashion.

The NextEra Common Emergency Plan contains an extra drill to continue to evaluate and enhance this augmentation alternative approach. The On-Shift Response Drill (CEP Section N.4.m) requires demonstration with minimum shift staffing and 60-minute ERO responders.

The remote ERO and interim response was validated during a Point Beach drill on April 30, 2024.

On-shift Dose Assessment

NRC Position:

The NRC staff could not determine if there was sufficient on-shift capability to perform the dose assessment function and how the collateral duties could interfere with the performance of the dose assessment or other emergency plan functions. The application did not provide sufficient justification that supports a finding of adequate staffing to provide initial facility accident response in key functional areas is available. (RAI 19, RAI 20, and RAI 21)

RAI 19

Concerning the dose assessment function, provide the following:

a. Provide clarification that describes who is expected to perform the dose assessment function for alert or greater declarations. Your discussion should not rely on concurrent performance by individuals requi red to perform other functions such as fire brigade, plant operations during off-normal conditions, and the concurrence performance of ERO functions such as command-and-control.
b. Explain how NextEra determined that performance of the dose assessment function could be performed as a collateral duty for the shift manager, on-shift SROs responsible for the direction of licensed operators, or auxiliary operators required to support plant operations as described in NextEra technical specifications or the fire brigade. If NextEra has an individual capable of performing dose assessment that is not required to concurrently perform concurrent actions in response to the event, describe that individual and explain where that capability is reflected in the proposed NextEra Common Emergency Plan.

NextEra Response:
The NextEra Energy Common Emergency Plan (CEP) includes a designated on-shift individual available to perform the dose assessment function. The dedicated on-shift Dose Assessor will be augmented within 60 minutes by the Remote Dose Assessor.

As available, the on-shift Dose Assessor can perform collateral duties such as communications and radiological surveys if the collateral duties do not interfere or inhibit the performance of the dose assessment function.

RAI 20

Concerning the Dose Assessment function:

a. Provide clarification that identifies a specific individual to perform the dose assessment function for alert or greater declarations prior to ERO augmentation. Note: this clarification should not rely on concurrent performance by individuals required to perform other functions such as fire brigade, plant operations during off-normal conditions, and perform ERO functions such as command-and-control.
b. Provide an evaluation based on an analysis that explains how NextEra determined that performance of the dose assessment function could be performed as a collateral duty for the shift manager, on-shift SR Os responsible for the direction of licensed operators, or auxiliary operators required to support plant operations as described in NextEra technical specifications or the fire brigade.
c. If an evaluation is not available, identify an individual capable of performing dose assessment that is not required to concurrently perform other actions in response to the event, revise the proposed NextEra Common Emergency Plan accordingly.

NextEra Response:
NextEra Energy Common Emergency Plan (CEP) includes a designated on-shift individual available to perform the dose assessment function. The dedicated on-shift Dose Assessor will be augmented within 60 minutes by the Remote Dose Assessor.

As available, the on- shift Dose Assessor can perform collateral duties such as communications and radiological surveys if the collateral duties do not interfere or inhibit the performance of the dose assessment function.

RAI 21

Concerning the dose assessment function, provide the following:

a. Clarify how dose assessment will be controlled and communicated. Your discussion should identify who would be the primary individual providing oversight for dose assessment and explain how the results, including protective action recommendations, would be communicated to the site emergency director at the TSC.
b. Provide an evaluation through an analysis that explains how NextEra determined that the proposed NextEra Common Emergency Plan would not introduce potential delays in dose assessment development and communication of PARs to the OROs. In your discussion address the apparent dose assessment/PAR communication process from the EOF, which is responsible for dose assessment and PAR development, to the TSC; who is the individual responsible for overall emergency response, back to the EOF from the TSC; and who is responsible for coordinating response activities with federal, state, and local authorities.

NextEra Response:
Analysis 4 is used to compare ERO responsibilities from the current Emergency Plan to the Common Emergency Plan and Site Annexes. The ERO responsibilities listed are written as a brief description of the function/task the ERO position is involved in. In many cases, multiple ERO positions have a part in fulfilling a particular responsibility. For example, dose assessment is performed on-shift, remotely, and in the EOF. Input and output data of dose assessment involves the Shift Manager/Emergency Director, TSC Radiation Protection Coordinator, and EOF Radiation Protection Manager.

For the proposed emergency plan, once the emergency is declared, the on-shift Dose Assessor will start performing rapid dose assessment. The on-Shift Dose Assessor will be augmented by the Remote Dose Assessor within (no later than) 60 minutes. This will allow reassignment of the on-shift Dose Assessor to the communicator role until relieved by the TSC NRC Communicator. The Remote Dose Assessor will obtain data on-line and through a communications bridge network with the Reactor Engineer, who is also remote and responding within 60 minutes. As necessary, the assessment data will be transmitted to the Shift Manager/Emergency Director.

Within 90 minutes of the declared emergency, the EOF Dose Assessor will be activated. All dose assessors are working together through a communications bridge network to share information freely in real time. The remote dose assessor, the EOF dose assessor, TSC Radiation Protection Coordinator, and EOF Radiation Protection Coordinator are in communication with each other. Others (field monitoring teams,

state/county radiological protection, NRC health physics/ protective measures) may be invited onto this communications bridge depending on the event in progress.

As part of the command and control turnover process between the Shift Manager, Emergency Director, and EOF Manager, dose assessment responsibility will be discussed and accountability turned over to the EOF Manager's team in the EOF with the EOF RP Manager responsible for the task.

If the ORO or NRC dose assessment team(s) report to the EOF, the EOF Dose Assessor can work directly with the dose assessment teams.

The TSC, as designed in NUREG 0654 rev 2 table B1, is a fully capable facility with the EOF as a support facility. The TSC Radiation Protection Coordinator is the primary conduit of the dose assessment team to the Site Emergency Coordinator in the TSC, The Site Emergency coordinator maintains the non-delegable functions of classification and protective action recommendations (PARs). The EOF has responsibility for dose assessment, and the use of bridge communications network provides the TSC Site RP Coordinator the information, without delay, to be inputted into the classification/ PAR development. This process is similar to dose assessment being performed in a separate adjacent room and the dose assessment results being printed and hand delivered to the RP Manager/Coordinator. Except for the PAR notification (performed by the TSC via the electronic communication process discusses in response to RAI 16), the EOF is responsible for any coordinated response activities with federal, state and local authorities.

This process, including the dose assessment communications bridge, maintaining classification, notification, and PARs is currently performed at Point Beach Nuclear Plant using NUREG 0654 revision 2 Table B1 staffing since October 2019. No issues have been noted in dose assessment classification or PAR development using this process since October 2019.

NextEra Supplemental Information:

A qualified dose assessor would be assigned on-shift (currently planning on an additional RP-Ops qualified individual). After the initial dose assessment, if the emergency radiological conditions are steady, the Dose Assessor can perform communications, surveys or other tasks assigned. Within 60 minutes, the On-shift Dose Assessor will be augmented by Remote Dose Assessor (refer to Attachment 1).

The On-shift Dose Assessor position and tasks were evaluated and validated as part of the On-shift Staffing Analysis (NEI 10-05) for each station. Overall the stations' On-shift Staffing Analysis conclude:

- The task analysis did not identify non-validated tasks that were performed by the on-shift positions.
- The task analysis did identify potential task overlaps in the events that were analyzed.
- The task timing study resolved the potential task overlaps in the events that were analyzed. Emergency response tasks were performed sequential with other tasks such that no overlap or overburden occurred.

The NextEra Common Emergency Plan contains an extra drill to continue to evaluate and enhance this augmentation alternative approach. The On-Shift Response Drill (CEP Section N.4.m) requires demonstration with minimum shift staffing and 60-minute ERO responders.

The remote ERO and interim response was validated during a Point Beach drill on April 30, 2024.

A separate but an additional change associated with dose assessment; the following sentence was deleted from the NextEra Common Emergency Plan SectionB.1.b.2:

> Additionally, the Shift Dose Assessor from another NextEra site are capable of supporting the affected site as a backup to the Remote Dose Assessor position.

Fix-It-Now (FIN) Supervisor

NRC Position:

NextEra response to RAI 26 states that the engineering staff and FIN Supervisor will remotely report to the SM/ED within 60 minutes and start the development of the troubleshooting plans. This has not been validated for the FIN Supervisor and is not consistent with the current industry initiative for remote ERO augmentation. The application did not provide sufficient justification that supports a finding of timely augmentation of response capabilities is available. (RAI 26)

RAI 26

Provide the following clarifications regarding the NextEra FLEX strategy:

a. In addition to the requirements of 10 CFR 50.155 and based on an evaluation of an analysis, could the NextEra FLEX strategies be used to mitigate a broad spectrum of events in addition to design basis external events and large area of the plant loss due to explosions or fire?
b. Provide objective evidence that FLEX strategies are sufficiently effective and reliable to justify extending the response times of ERO augmenting mechanical and electrical technicians.

NextEra Response:
The FLEX strategies are no longer a justification for changes and deviations from NUREG- 0654 R2 in the NextEra Common Emergency Plan (CEP).

OSC craft personnel (Mechanical Maintenance, Electrical Maintenance, and Instrument & Control Technicians) responding within 90 Minutes as a deviation from NUREG-0654 R2 is justified by the following:

- Minor maintenance could be addressed by the on-shift Operations crew.
- Complex maintenance issues are addressed by the stations troubleshooting process. Troubleshooting plans will be developed per the current/ normal site processes. Engineering staff and FIN Supervisor will remotely report to the SM/ED within 60 minutes and start the development of the troubleshooting plan. If necessary, the Radiation Protection Coordinator (TSC) or Radiation Protection Supervisor (OSC) will as remotely respond within 60 minutes.

  If information is needed from the field (pictures, videos, instrument readings, etc.), then the on-shift Operations crew can provide the necessary information.

This reflects the current normal process used for day-to-day issues.

NextEra Supplemental Information:

The FIN Supervisor's interim remote response is consistent with normal operating processes and the NextEra Common Emergency Plan alternative approach to sufficiently meet the Repair Activities function. Per the CEP, the Repair Activities function is not delayed and is staffed within 60-minutes as prescribed in NUREG-0654 revision 2. Refer to Attachment 1, unexpected maintenance activities are addressed in the NextEra CEP with the interim and remote ERO 60-minute response:

- Qualified SED – Interim remote response – Ensures sufficient and correct resources are responding. As necessary can provide directions and oversight to the repair plan.
- Engineering staff – remote responders – assists in development of repair plan.
- FIN Supervisor - Interim remote response – Ensures sufficient and correct resources are responding and assists in development of repair plan.
- TSC RP Coordinator or OSC RP Supervisor – Interim remote response – provides RP aspects into the repair plan.

This is similar and takes advantage of NextEra's processes for response to normal operations equipment issues. MA-AA-100-1011, Equipment Troubleshooting:

- The on-shift Operating crews are the first responders to equipment failures and typically completes the initial condition assessment and data collection.
- Responsible for facilitating and setting plant conditions for troubleshooting.
- Evaluates equipment problems and determines station response actions.
- Records and/or preserves evidence as well as initiating information gathering and documentation per this procedure.

The CEP provides a seamless integration of the NextEra normal on-line responsibilities and the emergency responsibilities:

- Preserves normal structures, processes, and relationships (MA-AA-100-1011, Equipment Troubleshooting, and PI-AA-100, Condition Assessment and Response).
- As operators perform initial troubleshooting, there is less "startup cost" when maintenance personnel arrive in their facility, there is not a need for them to perform initial troubleshooting or data collection as it is already complete.
- As Operations typically completes initial troubleshooting, there is not a need for the craft to become proficient in initial troubleshooting.
- FIN Supervisor and Engineers report as remote/interim ERO within 60 minutes to assist in planning the required repairs.

The NextEra Common Emergency Plan contains an extra drill to continue to evaluate and enhance this augmentation alternative approach. The On-Shift Response Drill (CEP Section N.4.m) requires demonstration with minimum shift staffing and 60-minute ERO responders.

The NextEra Common Emergency Plan Table B-1, On-Shift and Augmenting ERO Staffing Plan has been updated to add note (n) which states:

> Repair Activities include minor maintenance performed by on-shift operations staff (collateral duty) and development of troubleshooting/repair plans created by on-shift operations staff (collateral duty), Engineers (remote) and FIN Supervisor (interim remote).

The industry's initiative (NEI White Paper, Enabling a Remote Response by Members of an Emergency Response Organization) was developed as phase one of industry's remote ERO response. The White Paper's (phase one) scope was limited to changes which could be possible under 10 CFR 50.54(q) (based upon the individual sites evaluation). The White Paper was an attempt to provide a road map to identify and evaluate changes associated with ERO remote responders. The NEI White Paper is currently not endorsed by the NRC. The White Paper was used to inform the development of the NextEra remote ERO response.

The remote ERO and interim response was validated during a Point Beach drill on April 30, 2024.

Radiation Protection Function

NRC Position:

NextEra response to RAI 36 states that it is not intended for any risk significant functions to be performed remotely. However, the remote Emergency Director and remote TSC RP Coordinator have PAR development or recommendations as a responsibility. The application did not provide sufficient justification that supports a finding of timely augmentation of response capabilities is available. (RAI 33, RAI 34, RAI 35, RAI 36, and RAI 41)

RAI 33

Concerning remote dose assessment:

a. Explain how the reactor engineer and dose assessor will obtain timely and accurate plant status.
b. Explain how timely and accurate plant status communication to the dose assessor and reactor engineer was validated.
c. Explain how the shift manager will concurrently provide operations oversight, oversight for the reactor engineer and dose assessor, and perform the command-and-control function.
d. Explain how the shift manager to would be able to maintain command-and-control of the emergency response organization and operating aspects of the facility while concurrently communicating with the remote dose assessor and reactor engineer with a pre-established communication medium with the following attributes:
    - Audio/visual communication,
    - Sharing screens/documents,
    - Ability to grant access to other ERO members and ORO agencies, and
    - Transfer capacity to handle any reasonably expected data and communications needs.
e. Explain how the above communication attributes were validated for dose assessment in response to a spectrum of events including internet connection interruptions, loss of offsite AC power, and other Teams/internet interruptions.

NextEra Response:

a. The subject position functions can easily be performed remotely, given the availability of plant real-time information and programs through the corporate computer network.
b. That same information is available in real-time today. In the event ERO is activated, personnel fulfilling these positions would be performing those tasks and accessing information the way that they do in routine performance of their normal jobs supporting fleet operations.
c. The Shift Manager provides command and control for responders in an event until relieved of that duty by the Emergency Director. NextEra Energy routinely uses video and audio conferencing capabilities to leverage all necessary resources to support any of our sites during emergent and normal conditions. The use of that same technology for the ERO functions is no different. During the brief time period prior to arrival of an Emergency Director in the TSC, the Shift Manager will have command and control of all responding personnel. The following remote "interim" response positions will contact the on-shift staff and will relieve, assist, and provide expertise to the Shift Manager within 60 minutes to 90 minutes (activation of ERFs):
    - Qualified Site Emergency Director

- OSC FIN Supervisor
- Radiation Protection Coordinator (TSC) or Radiation Protection Supervisor (OSC)

d. While the Shift Manager retains overall command and control until relieved by the responding Emergency Director, direction and communications with individual positions may be delegated to another available person, if those functions are immediately required. Current computer and conferencing capabilities in the Control Room and each of the Emergency Preparedness facilities provide technology that can accommodate all those tasks. The qualified Site Emergency Director, OSC FIN Supervisor and RP Coordinator (TSC) / RP Supervisor (OSC) will use the same communication capabilities. The shift manager is able to maintain command-and-control of the emergency response organization and operating aspects of the facility while concurrently communicating with the remote ERO position with pre-established communication medium attributes:
    - A/V Communications - videoconferencing software, such as WebEx or Teams, is used on a routine basis for meetings involving multiple personnel across the fleet on a daily basis, so virtually all personnel have familiarity and proficiency with it, through the course of normal work activities.
    - Sharing Screens - this practice is also used routinely as part of daily business activities, whether it be presenting material via video conference, or a small group of employees collaborating and reviewing drawings in separate locations.
    - Ability to grant access to other ERO members or ORO - Shift Manager (or other participants) can easily provide access to additional personnel through electronic invite or verbally sharing video access number.
    - Transfer capacity - would be seamless once the initial turnover is complete, the remote Site Emergency Director can take over coordination and direction of the call, while shift manager focuses on other control room activities.
e. As previously stated, those technologies are routinely used during day-to-day activities in support of fleet operations. Remote personnel have multiple locations from which they can perform those functions. Internet connection to the sites is robust and of high re liability. Power to the emergency facilities is also robust with backup capabilities.

RAI 34

Concerning remote dose assessment:

a. Provide the referenced evaluation demonstrating that remote dose assessment can successfully be performed.

b. Provide the referenced evaluation regarding the impact of remote dose assessment on the dose assessment team.

c. Although the LAR uses "If all else fails," it appears that remote dose assessment would require multiple elements to support dose assessment. Provide the evaluation demonstrating all required elements of dose assessment would reliably function at each remote ERO locations.

NextEra Response:

a. The dose assessment functions can easily be performed remotely, given the availability of plant real-time information and programs through the corporate

computer network. Employees are issued laptop computers with the capability of remote access to the corporate network.

b. That same information is available in real-time today. In the event ERO is activated, personnel fulfilling these dose assessment positions would be performing those tasks and accessing information the way that they do in routine performance of their normal jobs supporting fleet operations.

c. Any member of the ERO who may be affected by a network or power outage preventing him or her from performing ERO functions, would simply travel to the normal work location, which would either be the corporate office or one of the other sites for power and internet connectivity. The normal work location would be within the 90-minute activation time. Additionally, with numerous personnel having capability to respond, any local power or internet outages would not affect others who would also be responding remotely.

RAI 35

For remote dose assessment, provide the following:

a. Explain whether remote ERO augmentation will be considered as part of accredited training programs pursuant to 10 CFR 50.120 or would otherwise follow the same SAT process as an accredited training program.
b. Provide evidence that the NextEra SAT process was used to determine the required knowledges, skills, and abilities for the procedures required to implement remote ERO augmentation.
c. Provide evidence that the initial and continuing training needs have been identified for the proposed NextEra remote ERO augmentation.

NextEra Response:

a. The remote ERO members will be part of the same training program as other members. That training program is developed following the Systematic Approach to Training (SAT) process, which will determine the knowledge, and skills to design initial and continuing training requirements for all ERO positions, whether in a ERO facility or remote.

b. Currently, procedures and process are being developed for the Common Emergency Plan and once established, NextEra will provide initial and continuing training, drills, and tabletop exercises to the all personnel filling ERO positions, including the remote ERO personnel.

c. Initial and continuing training have not yet been developed, but will follow the SAT process for all ERO positions, as previously stated.

NextEra will not treat remote responders any differently from ERO responders at a site experiencing an event, as remote ERO positions will be filled by members from other Fleet sites and corporate staff members.

RAI 36

Provide the following:

a. Clarify whether the risk significant areas for classification of events, development of PARs, and assessment of offsite consequences are intended as performance determination criteria or were included as requests for additional remote ERO augmentation consideration.
b. If NextEra intended prior NRC staff approval for remote ERO augmentation for these positions, provide a justification that supports the remote ERO augmentation of these risk significant functions.

NextEra Response:
NextEra does not intend for any risk significant functions to be performed remotely. Classification of events, PAR development, and assessment of offsite dose will not to be completed remotely.

RAI 41

Provide a supporting analysis that supports the NextEra conclusion that extending ERO augmentation response time from 60 to 90 minutes does not delay turnover of responsibilities.

NextEra Response:
Tasks performed by the on-shift Staff were evaluated under NEI 10-05 for a 2-hour augmentation. The scope of tasks evaluated pursuant to NEI 10-05 is limited to the immediate actions performed by the on-shift staff. NEI 10-05 does not evaluate any tasks specifically performed by the augmenting ERO. Because NEI 10-05 does not include the tasks performed by the augmenting ERO, NextEra analyzed tasks which the On-shift staff would perform and the augmenting ERO would perform to identify any additional tasks (capabilities) that are specifically performed by the augmenting ERO. The majority of the tasks performed specifically by the augmenting ERO were associated with the facility activities (briefings, activation, etc.). No tasks specifically performed by the augmenting ERO being delayed by 30 minutes would negatively affect the emergency response.

In addition to the above referenced evaluation, the following remote positions will contact the on-shift staff and will relieve, assist, and provide expertise to the Shift Manager within 60 minutes to 90 minutes (activation of ERFs):

- Qualified Site Emergency Director
- OSC FIN Supervisor
- Radiation Protection Coordinator (TSC) or Radiation Protection Supervisor (OSC)

NextEra Supplemental Information:

The interim qualified Site Emergency Director and interim TSC RP Coordinator / OSC RP Supervisor are associated with the NextEra Common Emergency Plan alternative approach to sufficiently meet emergency planning functions. The SM/ED will maintain responsibility of functions until relieved by the Site Emergency Director in the TSC. Refer to Attachment 1, within 60 minutes a qualified Site Emergency Director and TSC Radiation Protection Coordinator / OSC Radiation Protection Supervisor will be in contact with the SM/ED to provide assistance and guidance; there is no transfer of authority.

As far as PAR development or recommendations, the Site Emergency Director and TSC RP Coordinator (or OSC RP Supervisor) would provide assistance or peer review in the interim phase (within 60 minutes), but responsibility for PARs will remain with the Shift Manager.

The Common Emergency Plan Section B.1.b was revised by removing "relieve" to prevent future confusion of responsibilities during the interim phase.

> The following remote "interim" response positions will contact the on-shift staff and will ~~relieve,~~ assist and provide expertise to the Shift Manager within 60 minutes:
>
> - Qualified Site Emergency Director
> - OSC FIN Supervisor
> - Radiation Protection Coordinator (TSC) or Radiation Protection Supervisor (OSC)

The NextEra Common Emergency Plan contains an extra drill to continue to evaluate and enhance this augmentation alternative approach. The On-Shift Response Drill (CEP Section N.4.m) requires demonstration with minimum shift staffing and 60-minute ERO responders.

The interim response was validated during a Point Beach drill on April 30, 2024.

NUREG-0654 Figure B.4

NRC Position:

NextEra response to RAI 42 states Figure B.4 was eliminated. However, if the diagram is simply eliminated, NextEra would then have to describe the interface to meet B.4 not just delete the figure. The application did not provide sufficient justification that supports a finding that State and local organizations within the Emergency Planning Zones have been assigned, the emergency responsibilities of various supporting organizations have been specifically established, and each principal response organization has staff to respond. (RAI 42)

RAI 42

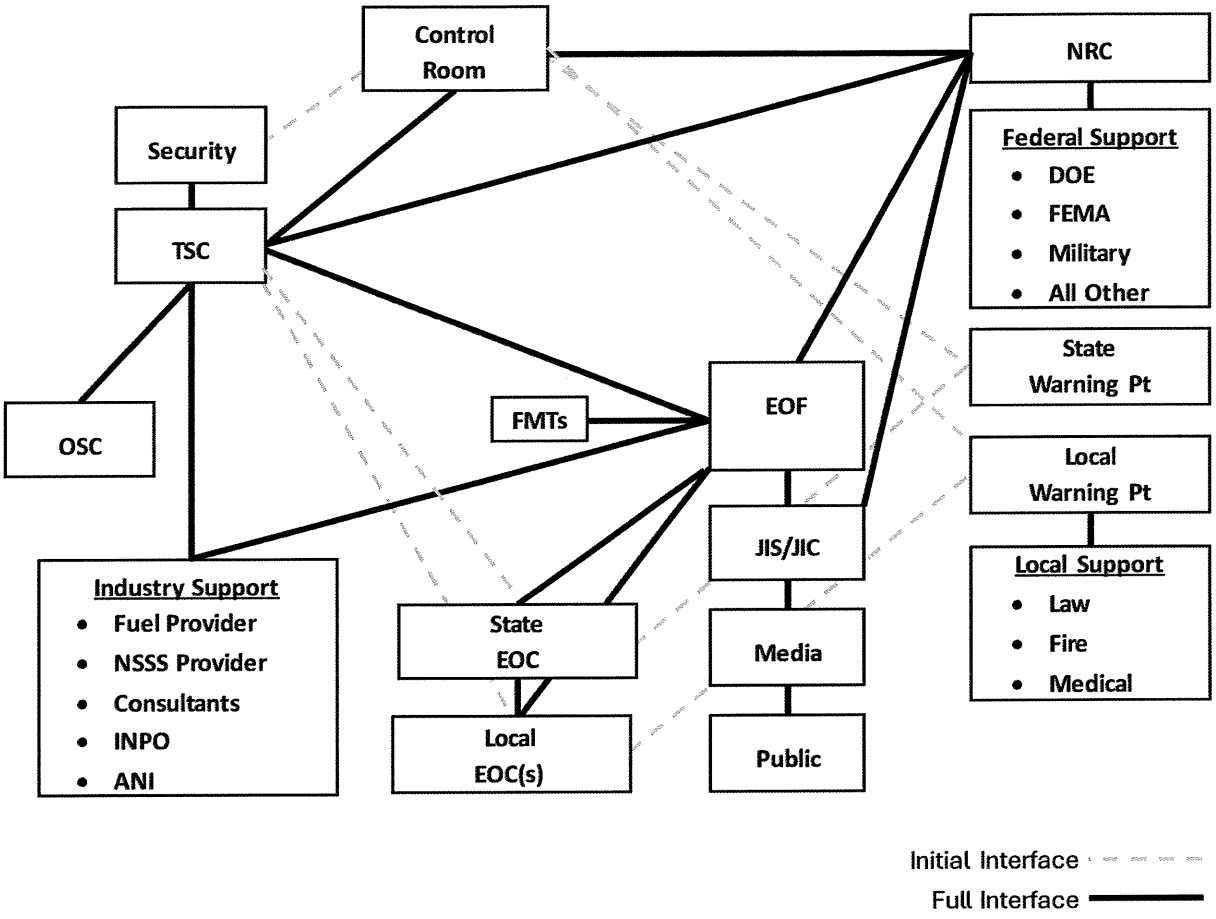
Provide clarification of the apparent differences between TSC and EOF interfaces between Figure B.4, "Interrelationship of Emergency Response Organizations," and the ERO responsibilities described in the proposed NextEra Common Emergency Plan.

NextEra Response:
Figure B.4 is being removed from the Common Emergency Plan as it was deemed to be complicated and unnecessary.

NextEra Supplemental Information:

Figure B.4 has been reinserted into the Common Emergency Plan with a link indicating the interface between the TSC and State and local EOCs.

Figure B.4: Interrelationship of Emergency Response Organizations



Alert and Notification System (ANS)

NRC Position:

Provide additional information that meets Evaluation Criteria E.2 related to the alert and notification systems. This should include description of primary and backup methods, and the organizations or titles/positions responsible for activating the system. The application did not provide sufficient justification that supports a finding that prompt notification of the public and for public evacuation or other protective measures, should they become necessary, shall be described. (RAI 45)

RAI 45

Provide additional information that meets Evaluation Criteria E.2. This should include description of primary and backup methods, and the organizations or titles/positions responsible for activating the system.

NextEra Response:
ANS design reports are a part of the emergency plans for all sites except for Point Beach, as they have no responsibility for any maintenance of their program.

A table has been created here to answer the question in a succinct way for evaluation purposes.

Site Name	Primary ANS	Secondary ANS:
Point Beach	IPAWS – WEA and IPAWS – EAS	Route Alerting
Seabrook	Siren System	Reverse 911
St. Lucie	Siren System	Route Alerting
Turkey Point	Siren System	Route Alerting

Add the following to the Common Emergency Plan Section E.2:

NextEra ANS used to alert and notify the general public within the plume exposure pathway EPZ is described as follows. Detailed information is maintained in the ANS design report for each site as listed in the site-specific annexes to the Common Emergency Plan.

General Description: The ANS is designed to provide an alerting signal throughout the population on an area wide basis throughout the 10-mile EPZ. The OROs provide an informational or instructional message to the population via various methods as approved by FEMA.

If the primary alerting signal fails, back-up systems are described in the site-specific ANS design report.

Activation of the ANS requires procedures and relationships between both NextEra and the OROs. Prompt alerting and notification of the public within the plume exposure pathway EPZ is the obligation of state and county government or other responsible authority.

ANS is available and operational in the 10-mile EPZ area around each of the operating NextEra nuclear sites. The ANS provides an alerting signal to essentially 100% of the population on an area-wide basis throughout the 10-mile EPZ.

To ensure ANS is maintained in an operational readiness posture, the system is tested on a periodic basis as described in the station's ANS design report.

Add the following to each site annex:

Detailed information on the FEMA approved system used to alert and notify the general public is maintained in site specific Alert and Notification System Design Report

NextEra Supplemental Information:

The NextEra Common Emergency Plan and site specific annexes have been revised as follows:

CEP Section E.2

NextEra ANS used to alert and notify the general public within the plume exposure pathway EPZ is described as follows. Detailed information is maintained in the ANS design report for each site as listed in the site-specific annexes to the Common Emergency Plan.

General Description: The ANS is designed to provide an alerting signal to essentially 100% of the population on an area wide basis throughout the 10-mile EPZ. The OROs provide an informational or instructional message to the population via various methods as approved by FEMA.

If the primary alerting signal fails, back-up systems are described in the site-specific annexes and ANS design report.

Activation of the ANS requires procedures and relationships between both NextEra and the OROs. Prompt alerting and notification of the public within the plume exposure pathway EPZ is the obligation of state and county government or other responsible authority.

ANS is tested on a periodic basis (Element F.3) as described in the station's ANS design report.

PBN Annex	PSL Annex	PTN Annex	SBK Annex

Primary Alert and Notification System (ANS): IPAWS-WEA and IPAWS-EAS. Backup ANS: Route Alerting. Manitowoc County is responsible for activation of primary and backup ANS. Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-PBN-115, PBN Alert and Notification System Design Report.	Primary Alert and Notification System (ANS): Siren system. Backup ANS: Route Alerting. St. Lucie and Martin County Public Safety/Emergency Management are responsible for activation of primary and backup ANS. Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-PSL-125, PSL Alert and Notification System Design Report.	Primary Alert and Notification System (ANS): Siren system. Backup ANS: Miami-Dade and Monroe Counties route alerting. Miami-Dade County is responsible for activation of primary ANS. Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-PTN-135, Alert and Notification System Design Report.	Primary Alert and Notification System (ANS): Siren system. Backup ANS: Automated dialing system. State of New Hampshire and Massachusetts are responsible for activation of primary and backup ANS. Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-SBK-145, SBK Alert and Notification System Design Report.

Technical Support Center (TSC) Details

NRC Position:

Provide site-specific details for the Technical Support Centers in the site-specific annexes of the functional criteria in NUREG-0696 (i.e., function, size, structure, habitability, and instrumentation, data system equipment and power supplies). The application did not provide sufficient justification that supports a finding that adequate emergency facilities to support the emergency response are provided. (RAI 48)

RAI 48

Provide site-specific details in these site-specific annexes of the functional criteria in NUREG-0696 (i.e., size, structure, habitability, and instrumentation, data system equipment and power supplies) or provide a justification for not addressing all of the functional criteria in these site-specific annexes.

NextEra Response:

NextEra Energy existing emergency plans are not wholly committed to NUREG 0696 and Common Emergency Plan is written to not commit to NUREG-0696. The current TSC, EOF, and alternate facilities were evaluated as part of Analysis Report #4 for each site and noted therein that "no added, removed or altered commitments, or change of intent" non-Reduction In Effectiveness was noted.

Each facility is sized to meet the functional needs of the responders. The communications equipment (which includes plant instrumentation/ data) to connect each facility to each other is appropriate. All on site facilities have habitability controls to ensure radiological breathing protection for all responders and alternate power sources to provide power in the case of normal power being lost

NextEra Supplemental Information:

The NextEra Common Emergency Plan and site specific annexes have been revised as follows:

CEP Section H.1

The Technical Support Center (TSC) provides a dedicated location for management and technical support to operations personnel and to relieve the operations staff of emergency response actions and communications not related to plant system manipulations.

The TSC is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the TSC's primary functions include:

- Provide ERO command & control
- Continued evaluation of event conditions
- Develop and issue offsite protective action recommendations
- Provide ORO event notifications
- Provide ENS communications with the NRC

- Display and trend plant data
- Develop response priorities and mitigative actions
- Coordination of site emergency response actions
- Provide engineering support

The Technical Support Center (TSC) is a permanent facility in a well-engineered structure in accordance with standard building codes.

The TSC is sized to accommodate ERO responders and NRC representatives.

Personnel in the TSCs are protected from radiological hazards, including direct radiation and airborne contaminants under accident conditions, with radiological habitability standards similar to the Control Room. To ensure adequate radiological protection, radiation monitoring equipment is located in the TSCs, or periodic radiation surveys are conducted. These systems indicate radiation dose rates while in use. In addition, potassium iodide (KI) is available to TSC personnel for use.

The facility has the capability to supply and display technical information for use by technical and designated management personnel in support of reactor operations and Control Room functions during emergency and recovery operations.

The TSCs normal power is from onsite power and backup power is supplied from emergency power source.

Each TSC provides communications to the Control Room, OSC, EOF, Corporate Headquarters, NRC, and OROs.

The TSCs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents.

Site specific details of the TSC are described in the site annexes.

PBN Annex	PSL Annex	PTN Annex	SBK Annex
Site specific TSC details: • The Technical Support Center (TSC) is located on Elevation 8' of the Admin Building. • The TSC has its own emergency	Site specific TSC details: • The TSC is on the 62-foot elevation of the Unit 1 Reactor Auxiliary Building (RAB). • The TSC is located adjacent to the Unit 1	Site specific TSC details: • The Technical Support Center is located on the second floor of the Nuclear Support Building inside the protected area. • The TSC has its own emergency	Site specific TSC details: • The Technical Support Center (TSC) in the Control Building • The TSC is located adjacent to the Control

ventilation system. • If the TSC is unavailable, the Control Room is the designated backup TSC for radiological emergencies; otherwise, NSB Second floor or EOF may be used.	Control Room and is enclosed in the same habitability envelope. • Should the Unit 1 Control Room envelope require evacuation, alternate locations for the TSC have been identified as follows: o South Service Building o Nuclear Training Center	ventilation system. • If the TSC is unavailable, the Control Room is the designated backup TSC for radiological emergencies, otherwise the OSC or EOF may be used.	Room and is enclosed in the same habitability envelope. • If the TSC is unavailable, the Outage Control Center is the designated backup.

Emergency Operations Facility (EOF) Details

NRC Position:

Provide site-specific details for the Emergency Operations Facility in the site-specific annexes of the functional criteria in NUREG-0696 (i.e., function, size, structure, habitability, and instrumentation, data system equipment and power supplies). The application did not provide sufficient justification that supports a finding that adequate emergency facilities to support the emergency response are provided. (RAI 49)

RAI 49

Provide site-specific details in these site-specific annexes to address the functional criteria in NUREG-0696 (e.g., function, size, structure, habitability, instrumentation, data system equipment and power supplies, etc.). Or, provide a justification for not addressing all of the functional criteria in these site-specific annexes.

NextEra Response:
Analysis Report #4 for each station compared the current stations' emergency plan to the Common Emergency Plan (CEP) and site-specific Annex. Section H.3 of the CEP and site annexes was evaluated in Analysis Report #4 as "no added, removed or altered commitments, or change of intent", non-Reduction In Effectiveness or editorial.

Therefore, the CEP and site annexes were purposely written to meet regulations and current emergency plan commitments.

NextEra Energy existing emergency plans are not wholly committed to NUREG-0696 and the Common Emergency Plan is written to not commit to NUREG-0696. The current TSC, EOF, and alternate facilities were evaluated as part of Analysis Report #4 and noted that "no added, removed or altered commitments, or change of intent" non-Reduction In Effectiveness was noted.

Each facility is sized to meet the functional needs of the responders. The communications equipment (which includes plant instrumentation/ data) to connect each facility to each other is appropriate. The TSC facilities have habitability controls to ensure radiological breathing protection for all responders and alternate power sources to provide power in the case of normal power being lost.

NextEra Supplemental Information:

The NextEra Common Emergency Plan and site specific annexes have been revised as follows

CEP Section H.3 (EOF)

The Emergency Operations Facility (EOF) provides a dedicated location for support of the site event response activities.

The EOF is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the EOF's primary functions include:

- Coordinate emergency response activities with federal, state, and local authorities.
- Coordinate support activities performed by personnel brought in to assist NextEra personnel.
- Perform offsite dose assessment and field monitoring activities.
- Development of dose based offsite protective action recommendations.
- Coordination of radiological and environmental assessment activities with offsite agencies.
- Communicate with the NRC HPN line.
- Coordinate corporate support.
- Support site acquisition of external assistance (technical, craft, admin, etc.).
- Support site acquisition of equipment, supply, and logistic resources.

The EOF is a permanent facility in a well-engineered structure in accordance with standard building codes.

The EOFs are sized to accommodate ERO responders and NRC, FEMA, and state representatives.

Because the EOF is located outside the plume exposure EPZ for all NextEra sites, specialized ventilation systems and radiological monitoring are not required. The EOF ventilation system is consistent in design with standard building codes.

The EOFs has the capability for the acquisition, display, and evaluation of unit, radiological and meteorological conditions necessary to perform accident assessment and determine protective measures.

Each EOF provides communications to the Control Room, TSC, field monitoring teams, NRC, and OROs.

The EOFs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents.

The EOFs provides working areas for Federal, State and local response personnel. Including conference areas with white boards, separate briefing/debriefing areas, telephones, ERO telephone contact lists, access to the internet, necessary office supplies and photocopier access, and access to plant radiological information.

Normal power to the EOFs is from a reliable offsite source.

Alternate temporary locations for the Emergency Operations Facility may be designated by the EOF Manager if a natural disaster or other (non-radiological) external event significantly affects the operational capability of the facility.

Site specific details of the EOF are described in the site annexes.

PBN Annex	PSL Annex	PTN Annex	SBK Annex
The Emergency Operations Facility (EOF) is located at 3060 Voyager Drive, Green Bay, WI., approximately 24 miles northwest of the plant.	The Emergency Operations Facility is located at the intersection of State Route 712 (Midway Road) and I-95 approximately 10 ½ miles west of PSL.	The Emergency Operations Facility (EOF) is located at the FPL building (10705 Quail Roost Dr, Cutler Bay, FL) approximately 13 miles north of the Turkey Point site.	An Emergency Operations Facility (EOF) is located at the Pease International Tradeport in Portsmouth, New Hampshire.

Emergency Medical Drill Offsite Participation

NRC Position:

The following information is included in the evaluation criteria N.4.a, and should be removed from the common emergency plan because it provides a different participation and periodicity than NUREG-0654 criteria.

> Emergency Medical Drill offsite participation and periodicity for support Hospital and Ambulance services are performed in accordance with the 42 CFR 482.15 regulations and are not included in the scope of the station medical drills.

The application did not provide sufficient justification that supports a finding that periodic drills are (will be) conducted to develop and maintain key skills are provided. (RAI 54)

RAI 54

a. Provide a justification for the removal of the following NUREG-0654 criteria:
   ...and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility).

b. Describe how will the ORO meet the demonstration standards for the FEMA REP Program assessment if only following Joint Commission standards?

NextEra Response:
NextEra Energy will conduct Emergency Medical Drills in accordance with NUREG-0654 R2, Planning Standard criteria N.4.a.

> Emergency medical drills are conducted annually. These drills involve a simulated, contaminated individual and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility).

Hospitals and ambulance services will conduct Medical Services Drills in accordance with NUREG-0654 R2, Planning Standard criteria N.4.b.

> Medical services drills are conducted annually at each medical facility designated in the emergency plan. These drills involve a simulated, contaminated emergency worker and/or member of the general public and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility).

As N.4.b is not a licensee commitment, this activity will not be covered under the NextEra Energy Common Emergency Plan. The provisions for hospitals and ambulance services to participate in the Emergency Medical Drill from N.4.a will be based upon 42 CFR 482.15 regulations and their requirements under N.4.b of NUREG 0654 revision 2. Hospitals and other OROs define and manage their own programs for conformance with applicable requirements.

NextEra Supplemental Information:

NextEra agrees that referring to 42 CFR 482.15 regulations in evaluation criteria N.4.a provides a different participation and periodicity, The referenced paragraph has been removed from the NextEra Common Emergency Plan.

Attachment 1

On-Shift and ERO Timeline

Time	Event / Action	Non-EPlan Onshift Staff	EP Function Position																		
			Command and Conrol		Facility Management	Emergency Classification		Communications		Supervisor of RP		Dose Assessment		Radiation Protection		Field Monitoring	Engineering	Supervision of Repair Activities	Repair Activites	Security	Media Information
			SM/ED	Interim - SED		Shift - CA	Interim - ECA and TSC RP Coord / OSC RP Supv	Shift - CA (Shift Communicator)	Shift Dose Assessor	SM/ED	Interim - TSC RP Coord or OSC RP Supv	Shift Dose Assessor	Remote Dose Assessor	RPT	RP-Op	RPT Qualified RP-Op	Engineers - Remote	Intermin - FIN Supv	Shift - Op Intermin - FIN Intermin - Eng	Security Shift Supv	JIS Staff
-15	Event occurs	Operations works through Operations EOP, AOP, Security or other appropriate procedures																			
-10																					
-5																					
0	**Classification** Leak is determined to be greater than normal makeup capability. Alert (?) emergency declaration is declared		Declares Emergcy (<15 min) Assumes ED Responsibilities			Provides review and peer check of Emergency Classification															
5	On-shift ERO report to the Control Room		Previous in Control Room			Previous in Control Room				Previous in Control Room		Report to Control Room		Communication with Control Room - Start monitoring RP conditions by viewing Area Rad Monitors, Effluent Rad Monitors and electronic dosemeters in the field						Communication with Control Room	
10	Initial Dose Assessment completed											Preforms Initial Dose Assessment								Performs site access , accountibility and assignments as directed by ED	
15	**Notification** ORO Notifications and ERO activation complete via ERNIE							Completes ORO and ERO Notifications via ERNIE (<15 min)	Available as a collateral duty - not to interfere with Dose Assessment												
20	NRC Notification sent to NRC via ERNIE							Completes NRC Notification with ERNIE													
25								Available for NRC or ORO Communications													
30	**Release** NUREG-0654 bases - release in 30 minutes																				
35																					
40																					
45																					
50																					
55																					
60	NRC Open Line Remote and Interim ERO available on Emergency Bridge – Briefed on station status and priorities	Provide minor maintenance and start troubleshooting plan		Provides assistance to SM/ED Monitors plant status and priorities Provide oversitght of troubleshooting and repair			Provides assistance to Emergency Classification Monitors plant status and priorities - provides peer review	NRC open line is established (< 60min)	Avilable for ORO Communications		Provides assistance to SM/ED Monitoring RP conditions by viewing Area Rad Monitors, Effluent Rad Monitors and electronic dosemeters in the field	Onshift Dose Assessor is relieved by Remote Dose Assesor	Preforms Dose Assessments			Onsite out-of-plant FMT - as necessary	Reviews station status and review indications remotely - preparing to assist with repair plan	Provides assistance to SM/ED - preparing to assist with repair plan	Shift Ops, Interim FIM Supv and Engineering create troubleshooting and/or repair plans		Performs Media response as necessary
65																					
70																					
75																					
80																					
85																					
90	ERF Activation																				

ENCLOSURE 2

EP-AA-100, NextEra Common Emergency Plan

NEXTera ENERGY	**NUCLEAR FLEET** **PROGRAM DESCRIPTION** NON-SAFETY RELATED **INFORMATION USE**	Program No. **EP-AA-100** Revision No. **0**

Title:

NextEra Common Emergency Plan

Responsible Department: REGULATORY AFFAIRS

Special Considerations:

Revision	Approved By	Approval Date
0		

TYPE	
DATE	
DOCT	PROGRAM
DOCN	EP-AA-100
SYS	
STATUS	DRAFT
REV	0
# OF PAGES	99

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INTRODUCTION

The NextEra Common Emergency Plan provides the means to protect the health and safety of the general public, persons temporarily visiting or assigned to nuclear power plants operated by NextEra Energy Point Beach, LLC, NextEra Energy Seabrook, LLC, and ~~Floirda~~Florida Power & Light ~~c~~Company (collectively "NextEra"), and plant employees. NextEra operates the Point Beach, Seabrook Station, Saint Lucie, and Turkey Point nuclear plants.

The NextEra emergency preparedness program is based upon the requirements of 10 CFR 50.47 and 10 CFR 50 Appendix E, and the guidelines of the U.S. Nuclear Regulatory Commission (NRC) as established in NUREG-0654/FEMA-REP-1, Revision 2.

The NextEra emergency plan and site annexes are formatted using the outline numbering style of NUREG-0654 R2 to explicitly align with the 10 CFR 50.47(b) planning standards, the requirements of 10 CFR 50 Appendix E, and the elements of NUREG-0654 R2. That formatting provides a direct cross-reference to the elements of NUREG-0654 R2.

The formal NextEra emergency plan for each NextEra site consists of the following program and bases documents:

- NextEra Common Emergency Plan – The NextEra common emergency plan identifies and describes the methods for responding to emergencies and maintaining emergency preparedness. Planning efforts common to all NextEra power reactor sites are encompassed within the NextEra common emergency plan.
- Site Emergency Plan Annex – The site emergency plan annexes contain information and guidance that is unique to the site. The site annexes are subject to the same review and audit requirements as the common emergency plan.
- Site Emergency Action Level (EAL) Technical Basis Document (TBD) – The EAL TBD establishes the classification scheme used to declare emergencies. The EAL TBD documents references and inputs used to determine values or events that would result in declaration of an emergency. The EAL TBD fulfills requirements of 10 CFR 50 Appendix E.IV.B.1.
- Site On-Shift Staffing Analysis – The on-shift staffing analysis documents that the minimum shift crew can perform the actions required by Emergency Operating Procedures (EOP) and the emergency plan, without task overlap or overburden, prior to Emergency Response Organization (ERO) augmentation. The on-shift staffing analysis fulfills requirements of 10 CFR 50 Appendix E.IV.A.9.
- Site Evacuation Time Estimate (ETE) Study – The ETE study defines the plume exposure (~10 mile) Emergency Planning Zone (EPZ). It documents the population within defined areas of the EPZ and establishes evacuation routes and ETEs for different scenarios for those populations. The ETE study fulfills requirements of 10 CFR 50 Appendix E.IV paragraphs 2-7.
- Site Protective Action Recommendation (PAR) Technical Basis Manual (TBM) – The PAR TBM document the bases used to develop site-specific protective action recommendation procedures. The PAR TBM fulfills requirements of 10 CFR 50 Appendix E.IV paragraph 3.

- Site Alert and Notification System (ANS) Design Report – The ANS design report is the FEMA-approved document that contains the specific design, testing, and maintenance of the system. The ANS design report fulfills requirements of 10 CFR 50 Appendix E.IV.D.3.

Except for the NextEra Common Emergency Plan, the above documents are maintained and revised separately but as part of the site emergency plan.

Any changes made that may affect or alter the emergency plan program or bases documents described above will be evaluated and made using the change process in 10 CFR 50.54(q) and Regulatory Guide 1.219.

There are supporting and complementing emergency plans, including those of federal agencies; the states of Florida, New Hampshire, Wisconsin, and Massachusetts; and local government agencies that support the NextEra sites. These plans contain coordinated emergency response and preparedness instructions for declared emergencies. Each plan has been prepared and is maintained by its respective organization, and is coordinated as appropriate with the other plans.

A: Assignment of Responsibility

Primary responsibilities for emergency response by the nuclear facility licensee, and by state and local organizations within the EPZs have been assigned, the emergency responsibilities of the various supporting organization have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

Regulatory References: 10 CFR 50.47(b)(1); 44 CFR 350.5(a)(1); 10 CFR Part 50 Appendix E.IV.A

A.1	The federal, state, local, tribal, licensee, and other private sector organizations that comprise the overall response for the EPZs are identified.

Element A.1.a.1 below provides a summary of NextEra response organization responsibilities as they relate to the overall concept of operations for event response. A detailed description of the NextEra Emergency Response Organization (ERO) is contained in Section B.

The elements below identify the federal, Offsite Response Organizations (OROs), and other organizations that encompass the overall response organization for an event at a NextEra site.

A.1.a	The organizations having an operational role specify their concept of operations and relationship to the total effort.

1. NextEra

   Emergencies are initially declared and responded to by the on-shift staff under the direction of the Shift Manager. Augmentation of the shift ERO is required at the Alert emergency classification level or higher, and discretionary at the Unusual Event emergency classification level. The ERO has the capability to expand or contract to meet the needs of the emergency.

   When the emergency response facilities are staffed the augmenting ERO relieves the on-shift personnel of emergency response functions not directly associated with unit operations. NextEra overall responsibilities for event response are as follows:

   - Recognize, classify and declare an emergency.
   - Notify appropriate NextEra personnel, federal, and OROs.
   - Request additional support from federal, ORO, and private organizations.
   - Establish and maintain effective communications with onsite and offsite entities.
   - Continuously assess the consequences of the accident, and periodically communicate response status and assessment information to the appropriate groups and authorities.
   - Take protective actions onsite and recommend protective actions to offsite authorities.
   - Monitor and control radiation exposure of personnel responding during an emergency.
   - In conjunction with OROs, provide emergency information to the media and public through periodic media briefings and media statements.

2. Federal Organizations

Control, responsibility and interface of federal organizations is governed by the National Response Framework (NRF) and the Nuclear/Radiological Incident Annex to the NRF when they are called to respond to an event at a nuclear power plant. The NRC acts as the lead federal agency with regard to technical matters during a nuclear incident, including providing radiological assistance.

3. Offsite Response Organizations

The NextEra ERO coordinates response actions with OROs. Interface between the site and the OROs is governed by their respective emergency plans, which are developed and maintained in coordination with the NextEra emergency plan. OROs are described in the site annexes.

A.1.b	Each organization's emergency plan illustrates these interrelationships in a block diagram.

Refer to Section B.4 for the interrelationships between the NextEra ERO, federal response organizations, and the OROs.

A.1.c	Each organization identifies the individual, by title/position, who will be in charge of the emergency response.

The title of the individual who will be in charge of the emergency response is provided in Elements B.2 and B.2.a.

A.2	References to the applicable acts, codes, or statutes that provide the legal basis for emergency response-related authorities, including those that delegate responsibility and authority to state, local, and tribal governments are included. Each emergency plan indicates who may declare a "State of Emergency" and the powers that ensue.

This element is not applicable to the licensee emergency plan.

A.3	Each organization specifies the key individual(s), by title/position, responsible for the following functions, applicable to their organizations: command and control, alerting and notification, communications, public information, accident assessment, public health and sanitation, social services, fire and rescue, traffic control, emergency medical services, law enforcement, transportation, protective response (including authority to request federal assistance and to initiate other protective actions), and radiological exposure control.

Refer to Element B.1.a and Table B-1 for a list of key individuals responsible for command and control, alerting and notification, communications, public information, accident assessment, protective response (including authority to request federal assistance and to initiate other protective actions), and radiological exposure control.

A.4	Written agreements with the support organizations having an emergency response role within the EPZs are included. The agreements describe the concept of operations, emergency measures to be provided, mutually acceptable criteria for their implementation, and arrangements for exchange of information.

Assistance will be provided, as necessary, by federal response organizations and OROs that are mandated by charter, regulation or law to protect public health and safety. Federal response organizations and OROs cooperate with NextEra and have developed radiological emergency plans and procedures in an integrated manner. Additional support agreements (Letter of Agreement – LOA/Memorandum of Understanding – MOUs) are not required with these agencies.

Support agreements are necessary when an organization or individual is expected to provide assistance to NextEra and is not required otherwise to do so. To that extent, LOAs have been developed between NextEra and several entities to provide emergency response support and services consistent with this plan.

Specifically, the agreement minimum content includes the following:

- A description of the concept of operations, meaning the mutually accepted criteria for implementation.
- When the support will be provided (as a minimum, the agreement states that the support provider will offer its services during an emergency at the affected site(s), including during a Hostile Action).
- Identification of the support to be provided.
- Arrangements for exchange of information during event support.

A contract/purchase order with a private contractor is considered acceptable in lieu of a LOA for the specified duration of the contract. The current signature copies of applicable LOAs and contracts are listed in the site annexes and are maintained locally on file.

A.5	Each principal response organization is capable of continuous operations for a protracted period. The principal response organization specifies the individual, by title/position, who is responsible for ensuring continuity of resources (technical, administrative, and material).

NextEra maintains a depth to the ERO that is capable of providing continuous (24 hour/day) operation throughout a declared emergency by providing relief of the on-shift and augmenting ERO positions by qualified individuals. The shift rotation and ERO staffing for protracted ERO operations is designated by the Emergency Director.

The Emergency Director is the individual responsible for assuring continuity of resources (technical, administrative, and material) within the ERO.

B: Emergency Response Organization

On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and the interfaces among various onsite response activities and offsite support and response activities are specified.

Regulatory References: 10 CFR 50.47(b)(2); 44 CFR 350.5(a)(2);
10 CFR Part 50, Appendix E.IV.A

B.1	The emergency plan specifies how the requirements of 10 CFR 50.47(b)(2) and the applicable sections of Appendix E to 10 CFR Part 50 are met.

1. 10 CFR 50.47(b)(2) Compliance

   In December of 2019, the NRC issued NUREG-0654 R2, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants. The scope of NUREG-0654 R2 states "NPP applicants and licensees may voluntarily use the guidance in this document to demonstrate compliance with the underlying NRC regulations." The NextEra emergency plan and site annexes are based on the criteria provided in NUREG-0654 R2 as approved by the NRC.

2. 10 CFR 50 Appendix E Compliance

   Refer to the 10 CFR 50 Appendix E.IV.A cross-reference in Appendix 3 of this emergency plan.

B.1.a	The site-specific emergency response organization (ERO) is developed. Note that while other site programs, such as operations, fire response, rescue and first aid, and security, may be controlled via other licensing documents, it is only when these personnel are assigned EP functions that they become part of this regulatory standard. Consideration is given to ensure that EP functions are not assigned to individuals who may have difficulties performing their EP function(s) simultaneously with their other assigned (non-EP) duties. Appendix E to 10 CFR Part 50 requires licensees to perform an on-shift staffing analysis to ensure on-shift staff can support the EP functions assigned, as well as other assigned duties.

A description of the normal site operating organization is contained in each sites' UFSAR (typically Chapter 13).

The requirements for on-shift operations staff, security force staff, and fire brigade/first aid staff are controlled by Technical Specifications and other licensing and administrative documents. Positions from these departments are described in the emergency plan only when assigned an emergency preparedness function that is performed during an emergency.

Site specific on-shift staffing analysis reports are developed in accordance with 10 CFR 50 Appendix E.IV.A.9 and NEI 10-05. The site specific on-shift staffing analysis reports are maintained as part of the site emergency plans and are referenced in the site annexes.

The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):

1. Control Room (CR)

   A. Shift Manager
      - Organizational Interface and Coordination
      - Command and Control
      - Facility/Group Management and Supervision
      - Contact and Use of External Support Services
      - Use of Medical, Fire and Law Enforcement Support
      - NRC Notification and Communications
      - Event Classification
      - ERO Notification
      - State and Local Event Notification
      - ERF Communications
      - Accident Detection and Assessment
      - Effluent Release and Dose Assessment
      - OSC Team Priorities, Dispatch and Control
      - Site Assembly and Accountability
      - Site Evacuation
      - ERO Radiological Protection
      - Offsite Protective Action Recommendations
      - Emergency Exposure
      - First Aid
      - Event Termination

   B. Radiation Protection Technician
      - Radiological Monitoring Activities
      - ERO Radiological Protection
      - Emergency Exposure
      - Contamination Control Measures
      - On-site radiological monitoring

   C. Radiation Protection Operator (RP-Ops)
      - Radiological Monitoring Activities
      - ERO Radiological Protection
      - Exposure Controls
      - Contamination Control Measures

- On-site radiological monitoring

D. Security Shift Supervisor

- Organizational Interface and Coordination
- Use of Medical, Fire and Law Enforcement Support
- NRC Notification and Communications
- Site Assembly and Accountability
- Site Evacuation

E. Shift Technical Advisor (STA)

Note – Assigned as a collateral duty in accordance with Technical Specification.

- Accident Detection and Assessment
- Core Damage Assessment

F. Shift Classification Advisor

Note – Assigned as a collateral duty to an on-shift ~~SRO~~ individual other than the Shift Manager.

- Event Classification
- NRC Notification
- ERO Notification
- State and Local Event Notification
- Accident Detection and Assessment
- Offsite Protective Action Recommendations

G. Shift Communicator

Note – Assigned as a collateral duty to an on-shift position other than the RPT or RP-Ops.

- NRC Notification and Communications
- ~~ERO Notification~~
- State and Local Event Notification and Communications
- OSC Team Priorities, Dispatch and Control

H. Shift Dose Assessor

Note – Assigned as a collateral duty to any on-shift position.

- Effluent Release and Dose Assessment

2. Technical Support Center (TSC)

A. Site Emergency Director

- Organizational Interface and Coordination

- Federal Assistance
- Continuous Emergency Response Operations
- Command and Control
- Facility/Group Management and Supervision
- Contact and Use of External Support Services
- Integration of Offsite Agency Personnel in the ERF
- NRC Notification and Communications
- Event Classification
- State and Local Event Notification
- ERF Communications
- Facility Activation
- Backup and Alternative Facilities
- Accident Detection and Assessment
- OSC Team Priorities, Dispatch and Control
- Site Assembly and Accountability
- Site Evacuation
- ERO Radiological Protection
- Offsite Protective Action Recommendations
- Emergency Exposure
- Event Termination
- Recovery

B. TSC Classification Advisor

- Facility/Group Management and Supervision
- Event Classification
- State and Local Event Notification
- ERF Communications
- Facility Activation
- Facility Operation
- Accident Detection and Assessment
- ERO Radiological Protection
- Offsite Protective Action Recommendations

C. Reactor Engineer – Remote position supervised by Classification Advisor

- Facility Operation
- Accident Detection and Assessment
- Core Damage Assessment

D. Electrical/I&C Engineer – Remote position supervised by Classification Advisor
- Facility Operation
- Accident Detection and Assessment

E. Mechanical Engineer – Remote position supervised by Classification Advisor
- Facility Operation
- Accident Detection and Assessment

F. ORO Communicator
- State and Local Event Notification
- ERF Communications

G. ENS Communicator
- NRC Notification and Communications
- ERF Communications

H. TSC Radiation Protection Coordinator
- Facility/Group Management and Supervision
- Contact and Use of External Support Services
- Event Classification
- State and Local Event Notification
- ERF Communications
- Facility Activation
- Facility Operation
- Backup and Alternative Facilities
- Accident Detection and Assessment
- Effluent Release and Dose Assessment
- OSC Team Priorities, Dispatch and Control
- Site Evacuation
- ERO Radiological Protection
- Offsite Protective Action Recommendations
- Emergency Exposure
- Contamination Control Measures
- Decontamination
- Recovery

3. Operations Support Center (OSC)

A. Lead OSC Supervisor
- Facility/Group Management and Supervision

- ERF Communications
- Facility Activation
- Facility Operation
- Backup and Alternative Facilities
- OSC Team Priorities, Dispatch and Control
- Site Evacuation
- First Aid
- Recovery

B. Fix-It-Now (FIN) Supervisor

- Facility/Group Management and Supervision
- Contact and Use of External Support Services
- Facility Activation
- Backup and Alternative Facilities
- Accident Detection and Assessment
- OSC Team Priorities, Dispatch and Control
- Site Assembly and Accountability

C. Radiation Protection Supervisor (position not required if TSC and OSC are co-located)

- Facility/Group Management and Supervision
- Contact and Use of External Support Services
- Facility Activation
- Backup and Alternative Facilities
- Accident Detection and Assessment
- OSC Team Priorities, Dispatch and Control
- Site Assembly and Accountability
- Site Evacuation
- ERO Radiological Protection
- Radiation Protection Briefings

D. Maintenance (Mechanical, Electrical and I&C)

- OSC Team Priorities, Dispatch and Control

E. Radiation Protection Technician

- Radiological Monitoring Activities
- OSC Team Priorities, Dispatch and Control
- ERO Radiological Protection
- Emergency Exposure

- Contamination Control Measures
- Decontamination
- Radiation Protection Briefings

F. Radiation Protection Operator (RP-Ops)

- Radiological Monitoring Activities
- OSC Team Priorities, Dispatch and Control
- ERO Radiological Protection
- Exposure Controls
- Contamination Control Measures
- Decontamination

4. Emergency Operations Facility (EOF)

A. EOF Manager

- Organizational Interface and Coordination
- Continuous Emergency Response Operations
- Facility/Group Management and Supervision
- Contact and Use of External Support Services
- Integration of Offsite Agency Personnel in the ERF
- Dispatch and Control of Offsite EOC Liaisons
- ERF Communications
- Facility Activation
- Facility Operation
- Site Evacuation
- Recovery

B. EOF Radiation Protection Coordinator

- Facility/Group Management and Supervision
- Integration and Use of the Radiological Laboratory
- Facility Operation
- Accident Detection and Assessment
- Effluent Release and Dose Assessment
- Radiological Monitoring Activities
- Offsite Protective Action Recommendations
- Radiation Protection Briefings
- Post-Accident Environmental Sampling

C. Field Monitoring Team Technician
- Facility Activation
- Radiological Monitoring Activities

D. Field Monitoring Team Driver
- Facility Activation
- Radiological Monitoring Activities

E. EOF Dose Assessor
- NRC Notification and Communications
- ERF Communication
- Facility Activation
- Facility Operation
- Effluent Release and Dose Assessment
- Offsite Protective Action Recommendations

F. Remote Dose Assessor – Remote position supervised by EOF RP Coordinator
- Effluent Release and Dose Assessment
- Offsite Protective Action Recommendations

5. Joint Information System (JIS) / Joint Information Center (JIC)

NextEra Corporate Communications and key business units maintain a staff to operate a Joint Information System.

Refer to Sections H.5 and G for JIC/JIS details.

A. Site JIS Manager
- Facility/Group Management and Supervision
- Integration of Offsite Agency Personnel in the ERF
- ERF Communications
- Media Briefings
- Facility Activation

B. Site JIS Coordinator
- Media Briefings
- Accommodation of News Media Personnel
- Facility Activation
- Facility Operation

C. Remote JIS Manager– Remote interface position to the corporate JIS
- Facility/Group Management and Supervision

- ERF Communications
- Media Statements
- Media Briefings
- Accommodation of News Media Personnel
- Media Monitoring
- Rumor Control

B.1.b	The remote emergency response organization (ERO) positions are defined. Resources necessary to perform the functions and tasks assigned to the remote response positions, as well as a backup capability, are described.

The NextEra ERO includes remote response positions. Remote response positions are not required to physically manipulate plant equipment or take other physical actions at the site. Remote response positions are provided the resources to collaborate with ERO personnel in their assigned emergency facility. These resources provide;

- the ability to communication audio/visually between emergency facility and the remote responder.
- the ability to access procedures, information and data.
- the ability to share screens/documents.

ERO members responding remotely to an emergency are capable of performing all functions and tasks assigned to their position, including support provided to other ERO members, as described in the emergency plan and implementing procedures.

These positions support the on-shift staff prior to activation of the TSC and EOF.

1. Remote Responders Assigned to the TSC (refer to Section B.1.a.2)

   The Reactor Engineer, Electrical/I&C Engineer, and Mechanical Engineer ERO minimum staff positions are remote responders assigned to the TSC.

   NextEra provides a corporate facility that provides the equivalent resource capability as a backup for the remote ERO engineering positions.

2. Remote Responders Assigned to the EOF (refer to Section B.1.a.4)

   The Remote Dose Assessor ERO minimum staff position is assigned to the EOF.

   NextEra provides a corporate facility that provides the equivalent resource capability as a backup for the Remote Dose Assessor position. ~~Additionally, the Shift Dose Assessor from another NextEra site are capable of supporting the affected site as a backup to the Remote Dose Assessor position.~~

The following ~~remote~~ "interim" response positions will contact the on-shift staff and will ~~relieve,~~ assist and provide expertise to the Shift Manager within 60 minutes ~~to 90 minutes (activation of ERFs):~~

- Qualified Site Emergency Director
- OSC FIN Supervisor
- Radiation Protection Coordinator (TSC) or Radiation Protection Supervisor (OSC)

B.2	An individual is designated as the on-shift emergency coordinator (individual title may vary) who has the authority and responsibility to immediately and unilaterally initiate any emergency response measures, including approving protective action recommendations (PARs) to be disseminated to authorities responsible for implementing offsite emergency response measures.

The Emergency Director ERO position has overall command and control of a declared emergency at a NextEra site.

The Shift Manager is the individual who is on-shift at all times and assumes the role of Emergency Director upon emergency declaration. As Emergency Director, the Shift Manager has the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures,

The Shift Manager maintains overall command and control until relieved.

The remote positions (refer to Section B.1.b) report to the Shift Manager until their associated response facility is activated.

B.2.a	The functional responsibilities assigned to the ERO are established and the responsibilities that may not be delegated to other members of the ERO are clearly specified in the emergency plan.

The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level.

Non-delegable responsibilities include the following:

- Event declaration
- ORO and NRC Notification
- PARs for the general public
- Emergency Exposure (Dose limits and KI)

Approving departures from license conditions per 10 CFR 50.54(x) transition from the Shift Manager to the Site Emergency Director upon transfer of command and control.

B.3	A table is developed depicting the site-specific on-shift staffing plan, as well as the ERO staffing augmentation plan.

The ERO is composed of on-shift personnel located at the site at all times, and augmenting personnel (responding to their assigned emergency facility or remotely).

Refer to Table B-1 for the on-shift and augmenting ERO staffing plan.

Table B-1: On-Shift and Augmenting ERO Staffing Plan

Function	On-Shift	TSC/OSC/JIS/Remote		EOF/JIC[f]/JIS/ Remote
		Alert – 60 min.	Alert – 90 min.	Alert – 90 min.
Command and Control • Provide overall ERO command and control • Approve ECLs and PARs • Authorize personnel dose extensions	(1) Shift Manager	Qualified Site Emergency Director – Interim [h]	(1) Site Emergency Director–TSC	Not applicable
Facility Management • Facility/Group Management and Supervision	Not applicable	Not applicable	Not applicable	(1) EOF Manager–EOF
Emergency Classifications • Evaluate plant conditions and recommend ECLs	(1)Shift Classification Advisor[a]	Qualified Site Emergency Director – Interim [h] ~~Not applicable~~	(1) TSC Classification Advisor–TSC	Not applicable
Communications • Communicate ECLs and PARs to OROs, including the NRC	Shift Communicator[b]	Shift Communicator[b][i]	(1) ORO Communicator–TSC (1) ENS Communicator–TSC	Not applicable
Supervision of RP Staff and Site Radiation Protection • Evaluate and assess plant and offsite rad data in the development of onsite protective actions and offsite PARs • Recommend onsite protective actions and offsite PARs • Direct all RP activities including FMTs • Provide information to personnel communicating offsite PARs to OROs	Shift Manager[b]	~~(1) TSC~~ RP Supervisor ~~Coordinator–~~ Interim~~Remote~~[h]	(1) TSC RP Coordinator–TSC	(1) EOF RP Coordinator–EOF
Dose Assessments/ Projections • Perform dose assessments and projections and provide input to PAR decision-maker	(1)Shift Dose Assessor[b]	(1) Remote Dose Assessor–Remote	Not applicable	(1) EOF Dose Assessor–EOF

Function	On-Shift	TSC/OSC/JIS/Remote		EOF/JIC[f]/JIS/ Remote
		Alert – 60 min.	Alert – 90 min.	Alert – 90 min.
Radiation Protection • Provide RP coverage for accessing unknown radiological environments • Control dosimetry and RCA access • Provide in-plant surveys	(1) RP Technician (1) RP Operator (RP-Ops)[k]	Not applicable	(3) RP Technician – OSC (2) RP Operator (RP-Ops) – OSC[k]	Not applicable
Field Monitoring Teams[c] • Provide environmental surveys (inside and outside the Protected Area)	Not applicable	On-shift RP qualified individual [m]~~Not applicable~~	Not applicable	(2) FMT Technician (2) FMT Driver
Engineering • Provide engineering coverage related to the specific discipline of the assigned engineer	STA[b]	(1) Reactor Engineer–Remote (1) Electrical/I&C Engineer–Remote (1) Mechanical Engineer–Remote	Not applicable	Not applicable
Supervision of Repair Team Activities • Direct in-plant event response and repair activities	Not applicable	(1) FIN Supervisor–Interim[h] (1) RP Supervisor-Interim[h]	(1) Lead OSC Supervisor–OSC (1) FIN Supervisor–OSC (1) RP Supervisor - OSC[j]	Not applicable
Repair Team Activities • Provide support for event mitigation and equipment repair	Not applicable	~~Not applicable~~(n)	(1) Mechanic–OSC (1) Electrician–OSC (1) I&C Technician–OSC	Not applicable
Security • Coordinate security related activities	(1) Security Shift Supervisor Security staff[d]	Not applicable	Not applicable	Not applicable
Media Information • Manage and coordinate media information related to the event	Not applicable	JIS staff[e] –Remote	Not applicable	(1) Site JIS Manager–JIC (1) Site JIS Coordinator–JIC (1) Remote JIS Manager–Remote
Information Technology (IT) • Ensure IT equipment is operable.	(g)	(g)	(g)	(g)
Totals	**46**	**4**	**16**	**10**

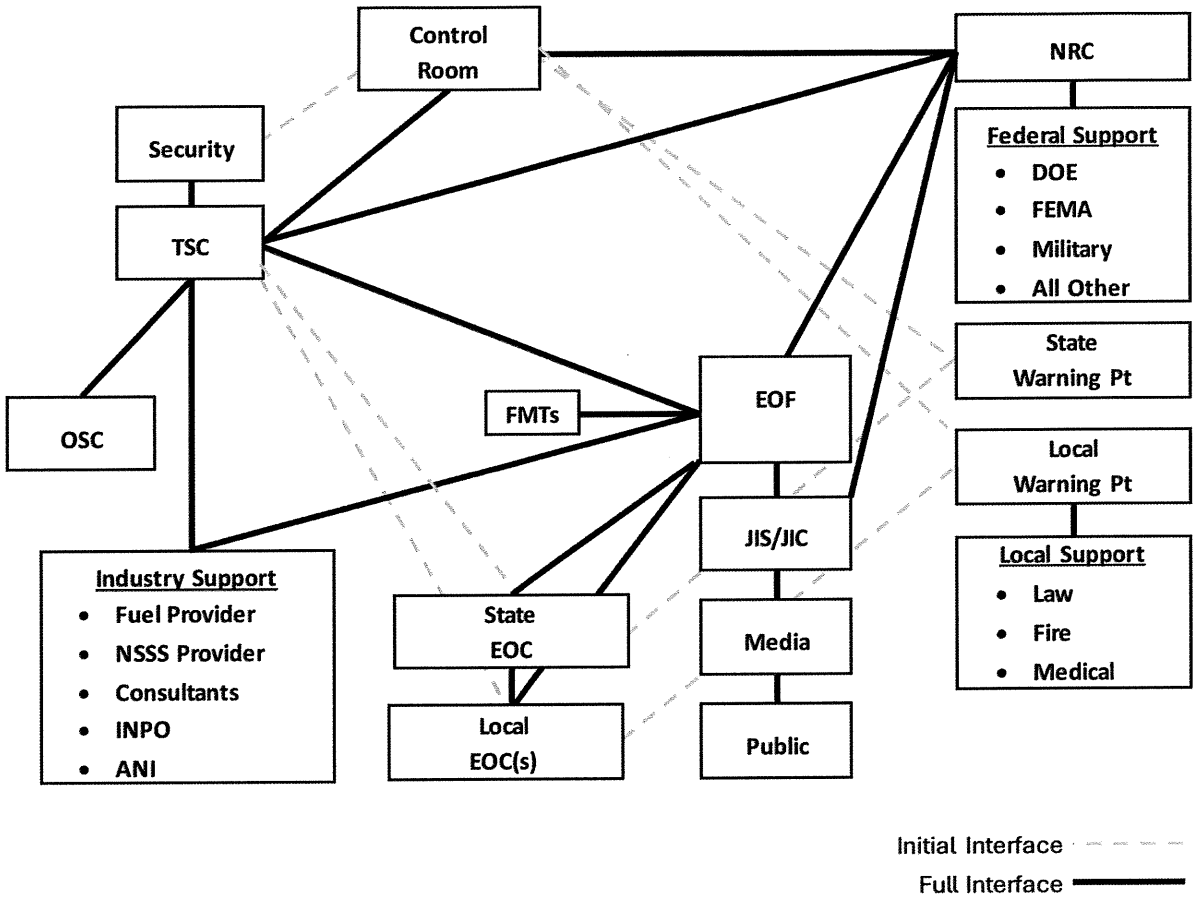
(a) Assigned as a collateral duty to an on-shift ~~SRO~~ individual other than the Shift Manager.

(b) Assigned as a collateral function.
(c) FMTs operate within the EPZ as directed by the EOF RP Coordinator.
(d) Per the site specific security plan.
(e) JIS per NextEra Communications Emergency Response Plan. Does not need to be performed in the JIC, but the JIS function needs to be established at this point.
(f) ERO staffing of the JIC is concurrent with other ERFs (although facility activation is coordinated with the ORO public information personnel and has no time requirement).
(g) IT personnel monitor critical digital assets remotely and respond any time an issue is identified.
(h) Qualified Site Emergency Director (TSC), ~~TSC~~ RP ~~Coordinator (TSC) or OSC RP~~ Supervisor, ~~-~~and FIN Supervisor (OSC) ~~remote~~ are interim ~~response at~~ 60 ~~to 90~~ minute responders~~s~~. RP Supervisor could be TSC RP Coordinator ~~(TSC)~~ or OSC RP Supervisor. Interim response positions assist the on-shift staff and remote responders (Engineers and Dose Assessor), but do not accept functions/responsibilities. Personnel counted in the Alert 90 Min column.
(i) Shift Dose Assessor assumes ~~ORO c~~Shift Communications after being relieved by the Remote Dose Assessor. Personnel counted in the Shift column.
(j) If TSC and OSC are co-located, RP Supervisor (OSC) is not a minimum staffing position.
(k) RP-Ops position can be filled by extra RPT qualified personnel.
(l) Shift Classification Advisor performs the initial ORO and NRC notifications.
(m) Onsite Field Monitoring Team function can be performed by any on-shift RP qualified individual (RPT or qualified RP-Ops) as collateral duty.
(n) Repair Activities include minor maintenance performed by on-shift operations staff (collateral duty) and development of troubleshooting/repair plans created by on-shift operations staff (collateral duty), Engineers (remote) and FIN Supervisor (interim remote).

B.4	The interfaces between and among the licensee functional areas of emergency activity, local services support, and state, local, and tribal government organizations are identified. The information includes all licensee emergency response facilities. A block diagram is preferred for ease of use, but not required.

Figure B.4 identifies the interfaces between NextEra ERFs, NRC, OROs, and local support organizations.

Figure B.4: Interrelationship of Emergency Response Organizations



Dependent upon the emergency, a near or on-site Incident Command Post (ICP) may be established in coordination with local support organizations. The ICP will interface with the site security, and NextEra response facilities. Based on the event, NextEra provides the appropriate liaison (Security, Operations or Radiation Protection) to the ICP.

B.5	The external organizations, including contractors, that may be requested to provide technical assistance to and augmentation of the ERO, as applicable, are specified.

1. Institute of Nuclear Power Operations (INPO)

   INPO has an emergency response plan that enables it to provide the assistance in locating sources of emergency personnel, equipment, and operational analysis.

2. Other External (non-NextEra) Support Organizations

   Other external (non-NextEra) support organizations are not used to provide additional personnel for positions on the NextEra ERO or to perform an operational role. Other external (non-NextEra) support organizations that may be requested to provide technical assistance are described in the site annexes.

C: Emergency Response Support and Resources

Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate state and local staff at the licensee's EOF have been made, and other organizations capable of augmenting the planned response have been identified.

Regulatory References: 10 CFR 50.47(b)(3); 44 CFR 350.5(a)(3);
10 CFR Part 50, Appendix E, Sec. IV.E

C.1	Emergency response support and resources provided to the licensee's EOF, as agreed upon, are described.

The EOF contains dedicated work areas and logistics resources for federal and, depending on the site, state response personnel. Federal and state personnel respond to the EOF in accordance with their emergency response plans and procedures.

C.2	Provisions made for additional emergency response support and resources are described and include the following:

C.2.a	The individual(s), by title/position, authorized to request emergency response support and resources from responding organizations.

The individual authorized to request assistance and resources from responding organizations is the Emergency Director.

Refer to Element B.2.a for greater detail regarding command & control.

C.2.b	(1) Each organization from which emergency response support and/or resources may be requested, (2) the circumstance(s) in which the emergency response support and/or resources would be required, (3) the process for requesting needed emergency response support and/or resources, (4) categories of capabilities and/or resources expected to be provided, (5) when the expected emergency response support and/or resources would be available once requested, and (6) how integration would occur.

Refer to Elements A.1.a and A.4 for the description and details of the provisions made for additional assistance and resources.

C.2.c	Coordination of NPP site access and support for external organizations that have agreed to provide requested emergency response support and resources.

Site access is controlled at all times by the Security organization in accordance with the site security plan and procedures. The Security organization is responsible for coordination with external organizations when site access is needed for non-badged response personnel at an Alert or higher emergency classification level.

C.2.d	Agreements between licensees and local agencies for law enforcement, medical and ambulance services, fire, hospital support, and other support.

Local support organizations may be called to assist onsite for events requiring firefighting, medical, or law enforcement. Immediate assistance with firefighting, medical, and law enforcement at the sites is initiated using pre-established site specific communications systems.

Agreements have been formally developed and documented through memorandums of understanding (MOUs), contracts, and/or letters of agreement (LOAs).

Refer to Element A.4 for details on agreements.

C.3	The capability of each principal organization to coordinate with other principal organizations leading the incident response is described.

Coordination of response actions and exchange of information among Emergency Directors from appropriate response organizations is provided via pre-designated communication links between NextEra, the NRC, and ORO EOCs.

C.4	Radiological laboratories, their general capabilities, and expected availability to provide radiological monitoring analysis services that can be used in an emergency are described. Plans to augment the identified radiological laboratories are described.

NextEra has radiological laboratories located at each site. The site laboratories are the central point for receipt and analysis of onsite samples and includes equipment for chemical and radiological analyses. The laboratories provide analyses of samples from plant systems. Environmental monitoring sample analysis is also performed on-site or arrangements are made with off-site facilities.

Site specific details for the radiological laboratories are described in the site annexes.

C.5	Arrangements are described for integrating the licensee's response with the NRC Headquarters and regional incident response centers and, when dispatched, the NRC's site response team.

The Site Emergency Director in the TSC and the EOF Manager are the initial primary contact positions for the NRC site response team personnel sent to those facilities.

Consistent with 10 CFR 50 Appendix E, areas within the EOF and TSC are established for NRC site response teams that include:

- Space for members of an NRC site team.
- Space for conducting briefings with emergency response personnel.
- Communication with other NextEra and offsite emergency response facilities.
- Access to plant data and radiological information.
- Access to office equipment and supplies.

C.5.a	The activation process for the NRC's emergency response data system (ERDS) during an emergency is described.

When an emergency occurs, ERO personnel will ensure ERDS operation as soon as possible but not later than one hour after an alert or higher emergency classification level is declared, in accordance with 10 CFR 50.72(a)(4).

C.5.b	Provisions to continuously maintain open communications lines with the NRC, when requested, are described.

The ERO is capable of maintaining continuous communications with the NRC. When requested, open communication lines will be staffed by knowledgeable personnel to ensure efficient and effective information flow.

D: Emergency Classification System

A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and state and county response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.

Regulatory References: 10 CFR 50.47(b)(4); 44 CFR 350.5(a)(4);
10 CFR Part 50 Appendix E.IV.B and C

D.1	A standard emergency classification and action level scheme is established and maintained. The scheme provides detailed EALs for each of the four ECLs in Section IV.C.1 of Appendix E to 10 CFR Part 50.

NextEra has established and maintains a standard emergency classification and emergency action level scheme. The EAL Technical Basis Document is referenced in the site annexes. The spectrum of postulated emergency events is categorized into the following four (4) emergency classification levels (ECLs):

- Unusual Event
- Alert
- Site Area Emergency
- General Emergency

The four ECLs are described as follows:

1. Unusual Event (UE)

   Events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.

2. Alert

   Events are in progress, or have occurred, which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life-threatening risk to site personnel or damage to site equipment because of hostile action. Any releases are expected to be small fractions of the EPA Protective Action Guideline exposure levels.

3. Site Area Emergency (SAE)

   Events are in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public or hostile action that results in intentional damage or malicious acts; 1) toward site personnel or equipment that could lead to the likely failure of or; 2) that prevent effective access to, equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA PAG exposure levels beyond the site boundary.

4. General Emergency (GE)

Events are in progress or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or hostile actions that result in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA PAG exposure levels offsite for more than the immediate site area.

D.1.a	The EALs are developed using guidance provided or endorsed by the NRC that is applicable to the reactor design.

Emergency Action Levels (EALs) at NextEra sites have been developed in accordance with NRC endorsed guidance. This guidance and the NextEra site EAL schemes have been approved by the NRC.

If the entire EAL scheme is to be changed, then the new EAL scheme will be submitted to the NRC for approval prior to implementation.

D.1.b	The initial emergency classification and action level scheme is discussed and agreed to by the licensee and OROs, and approved by the NRC. Thereafter, the scheme is reviewed with OROs on an annual basis.

The NRC approved NextEra EAL schemes have been agreed to by the OROs associated with the site.

The current EAL scheme is reviewed with the sites' respective OROs on an annual basis.

D.2	The capability to assess, classify, and declare the emergency condition within 15 minutes after the availability of indications to NPP operators that an EAL has been met or exceeded is described.

NextEra has and maintains the capability to assess, classify, and declare an emergency condition within 15 minutes after the availability of indications to plant operators that an EAL threshold has been met or exceeded. Details for classification timeliness criteria are documented in the site specific EAL Technical Bases Document.

D.3	A summary of emergency response measures to be taken for each ECL is provided. The detailed emergency response measures are described in implementing procedures.

NextEra maintains procedures that include immediate actions to be taken that are consistent with any declared ECL.

Emergency Operating Procedures provide instructions to Control Room personnel to assist in mitigating the consequences of a broad range of accidents and multiple equipment failures. These procedures are based on guidelines developed by the owners' groups.

Emergency plan implementing procedures provide instructions to ERO personnel for response activities primarily associated with assessment, classification, notification and protective actions. Other functions such as communications, termination and recovery are also addressed.

A summary of response actions taken at each ECL is as follows:

1. Unusual Event (UE)
   - Initial and follow-up event notification to the OROs and NRC.
   - Notification of ERO personnel. This is an information only notification and does not require activation of emergency facilities or response organizations. Any Emergency Response Facility (ERF) may be activated at the discretion of the Emergency Director.
2. Alert
   - Initial and follow-up event notification to the OROs and NRC.
   - Augmentation of the shift ERO (refer to Element A.1.a) by activating the Technical Support Center, Operations Support Center and Emergency Operations Facility.
   - The Joint Information System shall be established at this ECL, with Joint Information Center activation determined in coordination with the offsite agencies.
   - If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.
3. Site Area Emergency
   - Initial and follow-up event notification to the OROs and NRC.
   - Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.
   - The Joint Information System is in operation or Joint Information Center is staffed by NextEra ERO (JIC activation determined in coordination with the offsite agencies).
   - Implementation of onsite protective actions (refer to Section J).
   - If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.
   - Offsite precautionary actions may be recommended under certain conditions (as required by site specific OROs).
4. General Emergency
   - Initial and follow-up event notification to the OROs and NRC.
   - Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.
   - The Joint Information System is in operation or Joint Information Center is staffed by NextEra ERO (JIC activation determined in coordination with the offsite agencies).
   - Implementation of onsite protective actions (refer to Section J) if not previously performed.
   - If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.
   - Offsite protective action recommendations are communicated to the OROs and NRC.

D.4	Emergency response measures based on the ECL declared by the licensee and applicable offsite conditions are described.

This element is not applicable to the licensee emergency plan.

E: Notification Methods and Procedures

Procedures have been established for notification, by the licensee, of state and local response organizations and for notification of emergency personnel by all organizations; the content of initial and follow up messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway EPZ have been established.

Regulatory References: 10 CFR 50.47(b)(5); 44 CFR 350.5(a)(5);
10 CFR Part 50 Appendix E.IV.A, C, D and E

E.1	The mutually agreeable process for direct and prompt notification of response organizations, aligned with the emergency classification and action level scheme, is described.

1. ERO Notification

   The Emergency Director will direct or perform notification of the ERO for all emergency classification levels. ERO personnel report to their assigned emergency response facilities as directed. In the event of a security threat, personnel may be instructed to respond to alternative facilities, or seek cover if on-site.

   The means for alerting and notifying ERO members are described in Element F.1.c.

2. ORO Event Notification

   NextEra, in cooperation with the OROs, has established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is initially declared, or upgraded, or changes are made to PARs, a notification to the OROs is made within 15 minutes.

   Receipt location of notification messages is site specific. ORO notification locations are described in the site annexes.

3. NRC Event Notification

   NextEra will notify the NRC using ENS as soon as possible after notification of the OROs, and not later than 60 minutes after event declaration.

   An accelerated call to the NRC will be made immediately after notification of local law enforcement agencies (LLEAs), or within about 15 minutes of the recognition of the security-based threat (discovery of an imminent threat or attack against the site), to ensure the NRC is notified of safeguards events. The information provided in the accelerated NRC notification will be limited to the following:

   - Site name.
   - ECL if determined prior to the accelerated notification.
   - Nature of the threat and the attack status.

E.1.a	Provisions for notification of response organizations are established, including the means for verification of messages.

The provisions for notification of response organizations are described above in Element E.1.

Notifications to OROs include a means of verification or authentication within the automated system or by providing call back verification phone numbers.

E.1.b	The capability to notify responsible OROs within 15 minutes and the NRC within 60 minutes is described.

The capability to notify offsite response organizations and the NRC within the required time periods is described above in Element E.1.

E.2	**The alert and notification systems (ANSs) used to alert and notify the general public within the plume exposure pathway EPZ and methods of activation are described. This description includes the administrative and physical means, the time required for notifying and providing prompt instructions to the public within the plume exposure pathway EPZ, and the organizations or titles/positions responsible for activating the system.**

NextEra ANS used to alert and notify the general public within the plume exposure pathway EPZ is described as follows. Detailed information is maintained in the ANS design report for each site as listed in the site-specific annexes to the Common Emergency Plan.

General Description: The ANS is designed to provide an alerting signal to essentially 100% of the population on an area wide basis throughout the 10-mile EPZ. The OROs provide an informational or instructional message to the population via various methods as approved by FEMA.

If the primary alerting signal fails, back-up systems are described in the site-specific annexes and ANS design report.

Activation of the ANS requires procedures and relationships between both NextEra and the OROs. Prompt alerting and notification of the public within the plume exposure pathway EPZ is the obligation of state and county government or other responsible authority.

~~To ensure~~ ANS ~~is maintained in an operational readiness posture, the system~~ is tested on a periodic basis (Element F.3) as described in the station's ANS design report.~~Detailed ANS information is maintained in the ANS design report for each site as listed in the site annexes.~~

E.3	**The licensee, in conjunction with state, local, and tribal organizations, establishes the contents of the initial and follow-up emergency notifications to be sent from the NPP.**

NextEra sites and OROs have established the content of the initial notification message to be used during an emergency. Minimum content of the initial notification will include the following:

- The site's name

- Time of event
- The ECL
- Protective Action Recommendation (PAR)
- Whether a release is taking place

In conjunction with OROs, NextEra sites have established the content of the follow-up messages, which will include additional information regarding event conditions and response actions.

E.4	**Each organization establishes the contents of the initial and follow-up messages to the public including, as applicable, instructions for protective actions.**

This element is not applicable to the licensee emergency plan.

E.5	**Provisions are made to provide timely supplemental information periodically throughout the radiological incident to inform the public.**

ORO procedures provide for initial and follow-up messages to the public including instructions for protective actions, if required. NextEra will assist with establishment appropriate instructions and message content when requested by the ORO.

F: Emergency Communications

Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

Regulatory References: 10 CFR 50.47(b)(6); 44 CFR 350.5(a)(6);
10 CFR Part 50, Appendix E.IV.E

F.1	**Each principal response organization establishes redundant means of communication and addresses the following provisions:**

F.1.a	**Continuous capability for notification to, and activation of, the emergency response network, including a minimum of two independent communication links.**

Each site maintains communications systems that are designed to facilitate normal and emergency communication. Refer to Chapter 9 of the UFSARs for descriptions of the primary site communications systems.

Provisions exist for continuous capability of communications with OROs and the NRC. Systems available for internal and external communications include:

- Telephone Systems
- Public Address System
- Radio Communications
- Cellular Telephones
- Satellite Telephones
- Local and Wide Area Networks
- Data Systems

Cellular and satellite telephones provide communications capability should the main telephone systems lose power.

Site specific communications system beyond the above are described in the site annexes.

F.1.b	Communication with applicable organizations to include a description of the methods that may be used when contacting each organization.

The methods for notification of response organizations are described in Elements E.1 and F.1.a.

F.1.c	Systems for alerting or activating emergency personnel in each response organization.

Personnel within the Protected Area are notified of the emergency classification via the public address system. The sounding of alarms and announcement of the emergency classification and other pertinent data relating to the emergency classification are made over the public address system.

Notification of personnel located onsite, but outside the Protected Area, is accomplished through PA system announcements, administrative controls, and by Security personnel.

NextEra sites use an automated ERO notification system to notify ERO members of a declared emergency. Multiple redundancies are incorporated such that activation of the system can be performed by computer or from any phone system, and operation can take place from more than one location.

F.2	**Systems for coordinated communication methods for applicable fixed and mobile medical support facilities are described.**

Communications methods have been coordinated with medical facilities (ambulance and hospital). Site specific communications systems used for hospital and ambulance coordination are described in the site annexes.

F.3	**The testing method and periodicity for each communication system used for the functions identified in evaluation criteria E.2, F.1, and F.2 are described.**

Communication systems testing is accomplished in accordance with Table F-1.

Table F-1: Communication System Testing Requirements

Communication System	Testing Requirement
ORO Notification System	Monthly [a]
NRC FTS (ENS) Network	Monthly [b]
ERDS	Verify Transmission Quarterly
ERO Notification System	Per Elements N.4.h and N.4.i
Field Monitoring Teams Communication	Annually [a]
Telephone System	Frequent Use [c]
Station Radio System	Frequent Use [c]
Station PA System	Frequent Use [c]
ANS	per site specific ANS Design Report

(a) Test credit may be given by successful use in a drill.

(b) NRC ENS in the Control Room is Frequent Use. TSC and EOF require monthly testing.

(c) Communication systems that are listed with a testing frequency of "Frequent Use" indicate that the associated equipment is normally used at a sufficient high regularity, such that separate additional testing is not needed.

G: Public Education and Information

Emergency planning information is made available to the public on a periodic basis and includes information on how they will be notified and what actions they may be asked to take (e.g., listening to a local broadcast station, remaining indoors, etc.). Information will also be provided to the news media to include principal points of contact to receive information (including the physical location(s)) and information about the coordinated dissemination of information from all agencies engaged in the response.

Regulatory References: 10 CFR 50.47(b)(7); 44 CFR 350.5(a)(7); 10 CFR Part 50, Appendix E.IV.D and F

G.1	Provisions are made for a coordinated annual dissemination of information to the public within the plume exposure pathway EPZ, including transient populations and those with access and functional needs, regarding how they will be notified and what actions should be taken. The information is disseminated using multiple methods, to include non-English translations per current Federal guidance.

NextEra, in coordination with OROs, updates and distributes site related emergency planning information annually to residents living within the plume-exposure pathway emergency planning zone (EPZ). Information disseminated to the public is in the form of printed or electronic materials. Public information for the transient population is also provided.

Annual distribution of safety information which contains educational information on emergency preparedness, sheltering, ANS, radiation, and telephone numbers of agencies to contact for more information.

Information for residents with special needs and non-English translations is incorporated per current federal guidance.

G.2	Methods, consistent with JIS concepts, are established for coordinating and disseminating information to the public and media. Plans include the physical location(s) for interacting with the media.

NextEra Corporate Communications and business unit personnel maintain programs and processes for the coordination and dissemination of information to the public and media using JIS concepts. Specifically, the process provides a structure and system for developing and delivering coordinated interagency messages; developing, recommending, and executing public information plans and strategies; advising decision makers concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort.

Physical locations for interacting with the media are maintained at the corporate headquarters and locally near each site. Specific site locations are described in the site annexes Element H.5.

G.3	Organizations designate news media points of contact and a spokesperson(s) with access to necessary information.

A spokesperson is designated as the primary point of contact for NextEra and is responsible for the consistency of the information released by the utility. The spokesperson may select individuals to address the public on behalf of NextEra as their respective expertise is needed. This position is not designated as an ERO position.

G.3.a	Arrangements are made for the timely exchange of information among the designated spokespersons representing the entities involved in incident response.

Arrangements are made for the exchange of information among the designated spokespersons that use various means and technologies as agreed upon by the particular agencies. NextEra will provide information and updates to the ORO and federal public information officers (PIOs) to address the emergency, including plant conditions and associated response actions.

OROs address public response and actions in accordance with their respective plans.

G.4	Organizations establish coordinated arrangements for identifying and addressing public inquiries and inaccurate information.

NextEra personnel coordinate with ORO and federal PIOs via the JIS, or in a JIC when activated, to identify and address public inquiries and inaccurate information.

Public information personnel monitor media and public sources for misleading or erroneous information and to address inquiries. Rumors and misinformation are collected and provided to the appropriate individual or agency PIO. The PIOs assess and discuss the rumors and misinformation to coordinate responses.

ORO and federal PIOs address misinformation relating to offsite conditions, including protective action directives. NextEra spokespersons address misinformation regarding station/utility rumors. Rumors and incorrect information are addressed in media statements and at news conferences as appropriate.

G.5	Organizations conduct programs to acquaint news media with the emergency plans at least annually.

The news media will be provided materials to acquaint them with emergency planning effort at the NextEra specific site(s) annually.

Typical content includes site information, information concerning radiation, emergency planning, and points of contact for release of information to the media during an emergency.

H: Emergency Facilities and Equipment

Adequate emergency facilities and equipment to support the emergency response are provided and maintained.

Regulatory References: 10 CFR 50.47(b)(8); 44 CFR 350.5(a)(8);
10 CFR Part 50, Appendix E.IV.E

H.1	A TSC is established, using current Federal guidance, from which NPP conditions are evaluated and mitigative actions are developed.

The Technical Support Center (TSC) provides a dedicated location for management and technical support to operations personnel and to relieve the operations staff of emergency response actions and communications not related to plant system manipulations. ~~The TSC is sized to accommodate ERO responders and NRC representatives.~~

The TSC is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the TSC's primary functions include:

- Provide ERO command & control
- Continued evaluation of event conditions
- Develop and issue offsite protective actions recommendations
- ~~Develop~~ Provide ORO event notifications
- Provide ENS communications with the NRC
- Display and trend plant data
- Develop response priorities and mitigative actions
- Coordination of site emergency response actions
- Provide engineering support

The TSC is a permanent facility in a well-engineered structure in accordance with standard building codes.

The TSC is sized to accommodate ERO responders and NRC representatives.

Personnel in the TSCs are protected from radiological hazards, including direct radiation and airborne contaminants under accident conditions, with radiological habitability standards similar to the Control Room. To ensure adequate radiological protection, radiation monitoring equipment is located in the TSCs, or periodic radiation surveys are conducted. These systems indicate radiation dose rates while in use. In addition, potassium iodide (KI) is available to TSC personnel for use.

The facility has the capability to supply and display technical information for use by technical and designated management personnel in support of reactor operations and Control Room functions during emergency and recovery operations.

The TSCs normal power is from onsite power and backup power is supplied from emergency power source.

Each TSC provides communications to the Control Room, OSC, EOF, Corporate Headquarters, NRC, and OROs.

The TSCs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents.

Site specific details of the ~~primary and backup~~ TSC are described in the site annexes.

H.2	An OSC is established, using current Federal guidance, from which repair team activities are planned and teams are dispatched to implement actions.

The Operations Support Center (OSC) provides a dedicated location for coordinating and planning event response activities and for staging personnel and equipment. The OSC is sized to accommodate ERO responders.

The OSC is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the OSC's primary functions include:

- Provide staging area for maintenance, operations, RP, and other support personnel.
- Provide for briefing, dispatch, and coordination of emergency response teams.

Dosimetry (dose of legal record and self-reading capable of monitoring emergency radiation exposure), respiratory protection, radiation survey equipment, and RWPs are available to OSC personnel. In the event of a personnel contamination, decontamination will be performed in the area normally designated for this purpose.

Radiation and contamination levels in and around the OSC are assessed during emergencies.

Each OSC provides communications to the Control Room, TSC, and emergency response teams.

The OSCs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents.

Site specific details of the primary and backup OSC are described in the site annexes.

H.3	An EOF is established, using current Federal guidance, as the primary base of emergency operations for the licensee during a radiological incident. The EOF facilitates the management and coordination of the overall emergency response, including the sharing of information with Federal, state, local, and tribal government authorities.

The Emergency Operations Facility (EOF) provides a dedicated location for support of the site event response activities. ~~The EOF is sized to accommodate ERO responders and NRC, FEMA, and state representatives.~~

The EOF is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the EOF's primary functions include:

- Coordinate emergency response activities with federal, state, and local authorities.
- Coordinate support activities performed by personnel brought in to assist NextEra personnel.
- Perform offsite dose assessment and field monitoring activities.
- Development of dose based offsite protective actions recommendations.
- ~~Coordination of emergency response activities with federal, state, and local authorities.~~
- Coordination of radiological and environmental assessment activities with offsite agencies.
- Communicate with the NRC HPN line.
- Coordinate corporate support.
- Support site acquisition of external assistance (technical, craft, admin, etc.).
- Support site acquisition of equipment, supply, and logistic resources.

The EOF is a permanent facility in a well-engineered structure in accordance with standard building codes.

The EOFs are sized to accommodate ERO responders and NRC, FEMA, and state representatives.

Because the EOF is located outside the plume exposure EPZ for all NextEra sites, specialized ventilation systems and radiological monitoring are not required. The EOF ventilation system is consistent in design with standard building codes.

The EOFs ~~has~~ have the capability for the acquisition, display, and evaluation of unit, radiological and meteorological conditions necessary to perform accident assessment and determine protective measures. ~~The EOFs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents.~~

~~The EOF has the capability to support the remote response of~~

Each EOF provides communications to the Control Room, TSC, field monitoring teams, NRC, and OROs.

The EOFs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents.

The EOFs provides working areas for Federal, State and local response personnel. Including conference areas with white boards, separate briefing/debriefing areas, telephones, ERO telephone contact lists, access to the internet, necessary office supplies and photocopier access, and access to plant radiological information.

Normal power to the EOFs is from a reliable offsite source.

Alternate temporary locations for the Emergency Operations Facility may be designated by the EOF Manager if a natural disaster or other (non-radiological) external event significantly affects the operational capability of the facility.

Site specific details of the EOF are described in the site annexes.

H.3.a	For an EOF that is located more than 25 miles away from the NPP site, provisions are made for locating NRC and offsite responders closer to the NPP site.

This element does not apply as the NextEra EOFs are not located more than 25 miles from the sites.

H.4	An alternative facility (or facilities) is established, using currently provided and/or endorsed guidance, which would be accessible even if the NPP site is under threat of or experiencing hostile action.

An alternative facility provides a location for the staging of ERO personnel in the event of a Security or Hostile Action threat for each NextEra site. The alternative facility may also serve as an evacuation location for TSC and OSC personnel should those facilities become uninhabitable.

The alternative facility can communicate with the Control Room, site security, and EOF. The functions of offsite notification and PARs can be performed from the Alternative Facility. Emergency response team planning and preparation can be performed from the Alternative Facility.

Remote Engineering ERO is available to perform engineering assessments for both primary and alternate facilities.

Site specific details of the alternative facilities are described in the site annexes.

H.5	A JIC is established, and its location is identified, to coordinate communication from Federal, state, local, and tribal government authorities and licensee personnel with the public and media.

A near-site JIC (outside the 10 mile EPZ) is established for each site. ERO staffing of the JIC is concurrent with other ERFs, although facility activation is coordinated with the joint offsite agencies and has no time requirement.

When activated the JIC functions as a physical location for interacting with the media and for coordination between NextEra, federal and ORO PIOs regarding communications information to the public and the media.

NextEra provides space and equipment at their corporate facility to provide coordination of public information response activities with site and corporate JIS/JIC personnel.

Site specific details of the JICs are described in the site annexes.

H.6	Each organization establishes an emergency operations center (EOC) for use in directing and controlling response functions. For an EOC located within the plume exposure pathway EPZ, an alternate EOC or location outside the plume exposure pathway EPZ is identified to continue response functions in the event of an evacuation.

This element is not applicable to the licensee emergency plan.

H.7	Onsite monitoring systems used to initiate emergency response measures in accordance with the emergency classification scheme, as well as those to be used for conducting assessment, are identified. Monitoring systems consist of geophysical phenomena monitors, including meteorological, hydrologic, and seismic instrumentation; radiation monitors and sampling equipment; plant process monitors; and fire, toxic gas, and combustion products detectors.

NextEra sites have installed instrumentation for seismic monitoring, radiation monitoring, hydrologic monitoring, meteorological monitoring, and fire/ toxic gas/combustion products detectors in accordance with site Current Licensing Basis (CLB) documents.

1. Meteorological Monitoring

   Each NextEra site has a permanent on site meteorological monitoring station for the acquisition and recording of wind speed, wind direction, and stability class for use in offsite dose projection. Meteorological information is displayed in the Control Room, TSC, and EOF. Refer to Chapter 2 of the UFSARs for descriptions of the meteorological monitoring systems.

2. Hydrologic Monitoring

   Each NextEra site has hydrological monitors that support the acquisition of data used for event recognition and declaration. Refer to Chapter 2 of the UFSARs for descriptions of the hydrologic monitoring systems.

3. Seismic Monitoring

   Each NextEra site has a seismic monitoring system that supports the acquisition of data used for event recognition and declaration. Refer to Chapter 3 of the UFSARs for descriptions of the seismic monitoring system.

4. Process and Area Radiation Monitors

   Process Radiation Monitors (PRMs) measure radioactive noble gas, iodine, and particulate concentrations in gaseous effluent pathways and gross radioactivity in other gaseous and fluid streams, and are used for event recognition and declaration.

   Area Radiation Monitors (ARMs) measure in-plant dose rates and allow in-plant dose rate determinations to be made remotely. This information may be used to aid in the determination of plant area accessibility for the protective action function.

   Refer to Chapters 11 and 12 of the UFSARs for descriptions of the PRM and ARM systems.

5. Portable Radiation Monitors

   Portable radiation monitoring equipment is available for uses such as area monitoring, sampling, personnel surveys, and continued accident assessment.

6. Sampling Systems

   Liquid and gaseous sampling systems, consisting of normal sampling systems and panels located throughout the unit(s) at each site, are used for event recognition and declaration. Refer to Chapter 9 of the UFSARs for descriptions the sites sampling systems.

7. Fire Detection Systems

   The fire detection system, consisting primarily of fire/smoke detectors, control panel units, and annunciator panels, are used for event recognition and declaration. The fire detection equipment, alarms, and suppression equipment are described in detail in UFSAR Section 9.5 and in the sites' Fire Hazard Analysis Report.

H.8	Provisions are made to acquire data from offsite monitoring and analysis equipment, including data on geophysical phenomena (e.g., meteorological, hydrologic, and seismic monitors) and radiological data (e.g., from FMTs, environmental dosimeters, and laboratory analyses).

1. Meteorological Monitoring

   Weather forecasts and certain meteorological data is available from the National Weather Service.

2. Seismic Monitoring

   Seismic information from offsite sources can be obtained from the National Earthquake Information Center. The USGS is the contact agency to obtain information about a seismic event.

3. Hydrologic Monitoring

   Hydrologic information is available from the National Weather Service.

4. Radiological Environmental Monitoring

   Offsite programs and processes are developed within the Radiological Environmental Assessment Program (REMP) as described in the Offsite Dose Calculation Manual (ODCM) at each site. The Radiological Environmental Assessment Program includes:

   - Fixed continuous air samplers
   - Routine sampling of water, vegetation, consumable products
   - A dose monitoring network

   The locations of the normal onsite and offsite environmental monitoring stations are described in the ODCM. Additional predetermined emergency offsite monitoring locations are contained in procedures.

   Site specific details of the radiological environmental assessment program are provided in the site specific ODCMs.

5. Laboratory facilities, fixed or mobile

   Refer to Element C.4 for details on facilities for counting and analyzing samples.

H.9	Organizations directly responsible for offsite radiological monitoring provide for radiological monitoring equipment. This includes equipment that is located or stored near the NPP site, as well as additional equipment that may be brought to the site.

Each NextEra site maintains a supply of equipment, either at the site or the near-site EOF, for two Field Monitoring Teams assigned to perform onsite and offsite radiological monitoring and sampling functions.

Federal, industry and private entities can be contacted to coordinate additional materiel and personnel resources for offsite radiological monitoring.

H.10	Instrumentation is provided to obtain current meteorological information. Additional provisions are made to obtain representative meteorological information from other sources as needed by the NPP's radiological assessment models for site-specific characterization of plume dispersion and transport. Meteorological information is provided to the control room, TSC, EOF (or backup EOF), and NRC (via ERDS).

Refer to Element H.7.1 for a description of the onsite meteorological monitoring capabilities.

Refer to Element H.8.1 for a description of the offsite meteorological monitoring capabilities.

Site meteorological information is available on workstations in the Control Room(s), TSC, EOF, and to remote dose assessors.

ERDS provides the NRC with selected meteorological data points on a near real-time basis.

Meteorological inputs for the sites' dose assessment model are provided by ERF plant parameter display systems that obtain data from the site meteorological towers. Input parameters include wind speed, wind direction and stability class.

H.11	Provisions are made to ensure that emergency equipment and supplies are tested, maintained, and available in sufficient quantities, to include reserves and replacements, when needed. This includes:

NextEra emergency equipment and kits are inventoried to verify adequate supplies and materials, and to inspect condition semi-annually and following each use.

Emergency use equipment and instruments are operationally checked semi-annually during the inventory, and prior to use if needed as specified in procedures.

Sufficient reserves of instruments and equipment are maintained to replace those removed from service for calibration or repair.

H.11.a	Identification of the organization(s) responsible for the testing and maintenance of emergency equipment.

NextEra personnel are responsible for oversight of maintenance and testing of emergency equipment.

H.11.b	Calibration and operational checks of emergency equipment per national standards or the manufacturer's instructions, whichever is more frequent.

Requirements to calibrate emergency equipment and instruments are specified in site procedures.

H.12	Emergency kits are identified by general category. Contents and quantity of each emergency kit are specified in the emergency plan or other document(s) referenced in the emergency plan.

Emergency kits are assembled for radiation protection, field monitoring, first aid or other emergency use needs based on location and availability at each site.

Details of emergency kit contents and locations are contained in site procedures used to maintain facilities and equipment.

H.13	Each organization identifies the location(s) for the receipt and analysis of field monitoring data and coordination of sample media, and identifies the organization(s) responsible for assessing radiological data.

The site radiological laboratory is the primary location for receipt of field monitoring team samples. The EOF RP Coordinator is responsible for direction and coordination of field monitoring sample analyses, and for assessing the radiological data obtained from the Field Monitoring Teams.

Sampling and analysis equipment are available (see Element C.4) for quantitative activity determination of liquid and air samples, and qualitative activity determination of terrestrial samples.

I: Accident Assessment

Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

Regulatory References: 10 CFR 50.47(b)(9); 44 CFR 350.5(a)(9);
10 CFR Part 50, Appendix E.IV.A, B and E

I.1	Capabilities for performing radiological assessment for all reactor core and spent fuel pool sources, individually and collectively, including response to events occurring simultaneously at all units on the NPP site, are described. These capabilities include:

I.1.a	Methods for determining the magnitude and isotopic composition of an ongoing release of radioactive material through waterborne or airborne release pathways, or estimating these parameters for a potential release.

The magnitude of a release of radioactive material to the environment is primarily identified directly by effluent monitors. Survey and sample analysis may also be used to determine the magnitude of a release. Indirect means such as core damage estimates and release pathway assumptions may be used to estimate the magnitude of a release of radioactive material.

The isotopic composition of a release of radioactive material to the environment may be determined by; (1) effluent gaseous monitors, (2) survey and sample analysis, or (3) source term estimates based on core damage and release pathway assumptions.

Dose assessment model methods are capable of estimating source term and magnitude of gaseous releases from effluent monitors or plant parameter data and release rate projections.

I.1.b	A radiological assessment model for airborne releases that provides estimates of offsite radiation exposures and contamination levels using a dispersion model that is representative of the plant release points, topographical features, and meteorological regimes at the NPP site.

NextEra uses site specific versions of the Unified RASCAL Interface (URI) off-site dose projection computer model. The underlying dose assessment model in URI is the NRC RASCAL 4 model, based on the methods and equations documented in NUREG-1940.

The URI model provides off-site radiological dose and dose rate estimates based on near real time or hypothetical inputs. Projected dose is based on EPA-400-R92-001 dose conversion factors and provided as; (1) the total effective dose equivalent, or TEDE (the sum of the effective dose equivalent from immersion, 4 days of ground deposition, and the committed effective dose equivalent from inhalation), and (2) the committed dose equivalent to the thyroid (CDE thyroid).

URI dose projection results are given for various locations from the site boundary to 10 miles. URI is capable of providing dose assessment results for multiple release points from the site.

URI dose projection results and field monitoring readings are used in assessing radiological EALs and PARs.

I.1.c	A capability to coordinate and implement in-field radiological assessments by FMTs and/or sampling teams and to assess the data obtained.

Environmental surveys inside and outside the protected area are performed by Field Monitoring Team members under the direction of the EOF RP Coordinator.

Field monitoring teams are directed to track and evaluate a radioactive plume by monitoring radiation levels and by obtaining and analyzing air samples. Field monitoring surveys and sampling may be performed at pre-identified locations or other geographic locations within the EPZ determined during the event. Samples taken by the offsite monitoring teams will be evaluated further by one of the available laboratory facilities described in Element C.4.

I.2	Methods for assessing contamination of drinking water through liquid release pathways or deposition of airborne materials for NPP sites located on or near bodies of water from which public drinking water is drawn.

This element is not applicable to the licensee emergency plan.

I.3	The capability and responsibility for monitoring the following parameters, which provide input to radiological assessments during an emergency, are described: 1. Status of reactor fuel (e.g., no fuel damage, technical specification activity, clad failure, core melt.). 2. Status of containment integrity. 3. Leakage of radioactive material from plant systems, structures and components. 4. Status of engineered safety features used to mitigate the release of radioactive material to the environment (e.g., filters, containment spray, etc.). 5. Onset and duration of an actual release of radioactive material to the environment, or estimating these parameter for a potential release.

The ERO monitors plant parameters using information provided by plant data transmittal systems to assess the status of reactor fuel using core damage assessment procedures.

The ERO monitors plant data systems to evaluate the status of containment integrity, systems used to mitigate the release of radioactive material to the environment and to identify leakage of radioactive material from plant systems, structures, and components.

Effluent and process monitors are used to determine the onset and duration of an actual or potential release of radioactive material to the environment.

I.4	The methods and responsibility for determining the source term present in reactor coolant, containment atmosphere, and spent fuel pool area atmosphere are described.

Source term present in reactor coolant, containment atmosphere, and spent fuel pool area atmosphere are estimated using effluent, process and area radiation monitor readings, comparison of plant conditions against design basis event scenarios, sample analysis and environmental survey results, and plant parameter indications as inputs into the dose assessment and core damage assessment processes.

I.4.a	The contingency arrangements to obtain and analyze highly radioactive samples from the reactor coolant system, containment atmosphere and sump, and spent fuel pool storage area are described.

Each NextEra site has arrangements to obtain and analyze highly radioactive samples from the reactor coolant system, containment atmosphere and sump, and spent fuel pool.

Site specific arrangements to obtain and analyze highly radioactive samples are described in the site annexes.

I.5	The organizations responsible for FMT activities, and necessary resources, are identified.

NextEra is responsible for NextEra field monitoring team activities.

NextEra field monitoring team activities are coordinated with environmental monitoring efforts performed by ORO field monitoring teams.

I.6	Each organization, where appropriate, provides methods, equipment, and expertise to make timely assessments of the actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways, including development of post-plume PARs for comparison to current Federal guidance.

NextEra sites use an industry recognized dose assessment model to make timely assessments of the actual or potential magnitude and locations of any radiological hazards through gaseous release pathways. Dose assessment results and field monitoring readings assist in evaluating appropriate ECLs based on radiological EALs, and for developing any related PARs.

The actual or potential magnitude of liquid radiological releases with regard to the ECLs are determined by liquid effluent monitors, direct area surveys, or sample analyses.

With regard to the ingestion pathway, field monitoring teams are used to obtain liquid effluent samples from radioactive liquid releases. Sample results are used in conjunction with Offsite Dose Calculation Manual (ODCM) methods to estimate potential ingestion exposure in support of EAL determination. Also, liquid release monitoring activities are coordinated and sample results shared with ORO agency personnel to assist their determination in intermediate phase protective actions.

I.7	The capability to detect and measure radioiodine concentrations in air in the plume exposure pathway EPZ as low as 1E-7 μCi/cc (microcuries per cubic centimeter) under field conditions is described. The sample collection process takes into account the sample flow rate, collection efficiency of the sample media used to collect the sample, duration of the sample, counter efficiency, and background radiation, including interference from the presence of noble gases.

NextEra field monitoring equipment has the capability to detect and measure airborne radioiodine concentrations as low as 1E-7 µCi/cc in the presence of noble gases. Air samples will be taken with portable air sampling equipped with a Silver Zeolite or equivalent cartridge and particulate filter. Interference from the presence of noble gas and background radiation is minimized by ensuring that monitoring teams move to areas of low background prior to analyzing the sample cartridge.

Air sample results can be estimated in the field through the use of portable monitors. The samples can be subsequently analyzed for greater precision by the laboratory facilities described in Element C.4.

I.8	A means is established for relating the various measured parameters (e.g., exposure rates, contamination levels, and air activity levels) to dose or dose rates. Provisions are made for estimating integrated dose from the projected and actual dose rates and for comparing these estimates with current federal guidance. In addition, provisions are established to validate dose projections with field data and compare projections with other organizations also calculating dose projections. The detailed provisions are described in implementing procedures.

NextEra field monitoring teams will track the plume from any radiological release by monitoring radiation levels and by obtaining and analyzing air samples. Field monitoring team environmental survey and air sample results are compared with dose assessment results to validate or adjust projections. Additionally, field monitoring results can be input into the dose assessment model to develop projections at different locations.

I.9	Arrangements to locate and track the airborne radioactive plume are made using available resources, which includes federal, state, and tribal governments, and/or licensee resources. Provisions are made to characterize the plume including taking peak plume measurements. Identification of the plume, includes determining a measurement that is high enough to be reasonably above background radiation readings and sufficient enough to indicate submersion within the plume.

NextEra maintains equipment for the utility field monitoring teams. Methods to monitor a radioactive plume include establishing peak centerline values and immersion areas. Monitoring strategies may include the traversing of plumes when road networks and exposure rate permit. Additionally, local field sampling and monitoring points are specified to support pre-positioning of teams or use in comparison with dose projection results.

Data from the NextEra field monitoring teams is compared to data provided by state field monitoring teams that may be dispatched into the area. Data collected before state field monitoring teams are in the field is made available to state dose assessment personnel.

I.10	Organizations directly responsible for radiological monitoring, analysis, and dose projections describe the capability for coordinating monitoring efforts, tracking and trending data, and sharing analytical results with other organizations performing radiological assessment functions.

NextEra EOF dose assessment personnel coordinate field monitoring team radiological monitoring activities and compare dose projection results with ORO and NRC representatives.

J: Protective Response

A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. ETEs have been developed by applicants and licensees. Licensees shall update the ETEs on a periodic basis. Guidelines for the choice of protective actions during an emergency, consistent with federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

Regulatory References: 10 CFR 50.47(b)(10); 44 CFR 350.5(a)(10);
10 CFR Part 50, Appendix E.IV.2-6, E and I

J.1	The means and time required to alert, notify, and provide a range of protective actions for onsite individuals and individuals who may be in areas controlled by the licensee (including members of the public) during a radiological incident are described.

NextEra maintains procedures to provide for a range of protective actions for all areas controlled by the site. Protective actions have been developed for radiological incidents and to protect personnel during hostile actions directed at the site.

Sitewide notifications and announcements are routinely made using the Public Address (PA) system. Personnel on site are notified of a declared emergency through the PA system.

Visitors within the Protected Area are escorted by badged individuals. The escort is responsible for controlling and directing their assigned visitors regarding actions required by any announcements and alarms.

Security personnel are used, as available, to augment PA announcements and to check OCA areas for remaining individuals.

J.1.a	Provisions are made for evacuation of onsite non-essential personnel at an SAE/General Emergency (GE).

Site evacuation is required following a Site Area Emergency or General Emergency unless delayed due to safety issues. The sounding of an alarm over the public address system occurs for the initiation of site evacuation.

When a site evacuation occurs, ERO and other essential personnel respond to their designated response facilities/areas. Non-essential personnel inside the Protected Area typically exit to the OCA by following normal RP and Security processes and proceed to a designated assembly area. Further evacuation of non-essential personnel inside the OCA occurs as warranted for the particular site.

A process is in place to perform a rapid evacuation of the Protected Area without onsite monitoring and OCA assembly if conditions warrant. Monitoring in this instance is performed at an offsite location.

J.2	Provisions are made and coordinated with appropriate offsite entities for evacuation routes and transportation for onsite individuals to a suitable offsite location. Selection of location considers the potential for inclement weather, high traffic density, and potential radiological conditions. Alternate location(s) and route(s) are identified.

Designated offsite locations for site evacuees, and the process to use them, have been identified through coordination with local emergency management personnel.

The site evacuation process takes into consideration meteorological and radiological data, weather and other travel hazards.

On-site personnel will evacuate the site when directed. Site evacuation routes and evacuation locations are contained in the site annexes.

J.3	Provisions for radiological monitoring and decontamination, if necessary, of personnel evacuated from the NPP site are described.

Personnel evacuating are monitored for contamination, and, if possible and necessary, decontaminated before leaving the site. If conditions do not allow for decontamination of personnel on-site, they will be directed to designated offsite reception center(s) for radiological monitoring and decontamination, if required.

J.4	The capability to account for all individuals inside the NPP Protected Area following declaration of an SAE or GE is described. The names of missing individuals are ascertained within 30 minutes following the emergency declaration and accountability is maintained for the duration of the incident. This capability includes provisions for prompt accountability following events that may preclude completion within 30 minutes (e.g., hostile action).

The emergency alarm, together with the public address system, is used to alert and notify on-site personnel of the need for assembly at a Site Area or General Emergency classification level (or earlier at the discretion of the Emergency Director).

ERO personnel report to their assigned emergency response facility.

Typically, accountability of personnel inside the Protected Area is completed within 30 minutes of event declaration. Following a hostile action event, the personnel accountability process is initiated following containment or cessation of the threat. Missing individual(s) will be identified by Security. Appropriate actions will be taken to locate missing individual(s). When necessary, search and rescue team(s) will be dispatched to locate and, if necessary, rescue missing individual(s).

After initially completed, accountability will be maintained continuously throughout the emergency for personnel inside the Protected Area.

J.5	Provisions are made for personal radiological protection for individuals arriving or remaining onsite during the incident.

Protective equipment and supplies are available to personnel remaining on site or arriving on site during the emergency to minimize the effects of radiological exposures or contamination in accordance with radiation protection procedures. Protective measures include the following:

1. Individual Respiratory Protection

   Respiratory protection equipment is used by qualified personnel when called for by exposure control procedures. The radiological use respiratory protection program is maintained by RP.

   Self-contained breathing apparatus is used in areas that are deficient in oxygen or when fighting fires. Self-contained breathing apparatus are available with other firefighting equipment for use by the site fire brigade.

2. Individual Thyroid Protection

   Efforts are made to utilize respiratory protective equipment to minimize ingestion and/or inhalation of radionuclides and to maintain internal exposure below the limits specified in 10 CFR 20, Appendix B. However, if an emergency involves the accidental or potential ingestion or inhalation of radioactive iodine, Potassium Iodide tablets (KI) are maintained and available for distribution.

   The administration of potassium iodide (KI) to NextEra and vendor personnel may be used to mitigate the consequences of inhalation of radioiodine during an emergency. The process for administration of radioprotective drugs is described in implementing procedures.

3. Protective Clothing

   Protective clothing will be issued when needed to limit personal contamination and minimize the spread of contamination.

J.6	The basis and methodology are established for the development of PARs for the responsible OROs, including evacuation, sheltering, and, if appropriate, radioprotective drug use, for the plume exposure pathway EPZ. Current Federal guidance is used.

NextEra sites have developed PARs, in accordance with agreements made with the state agencies, for the plume exposure pathway EPZ that include evacuation, sheltering, and recommendations for radioprotective Potassium Iodide use based on the following:

- NUREG-0654/FEMA-REP-1, Supplement 3, Guidance for Protective Action Strategies, November 2011
- EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, May 1992
- Guidance for Industry, KI in Radiation Emergencies, Questions and Answers, FDA, December 2002

- Potassium Iodide as a Thyroidal Blocking Agent in Radiation Emergencies, FDA Guidance, November 2011

PARs for the general public will be based on plant conditions and/or offsite dose assessment results.

PARs beyond the 10-mile EPZ will be developed on an "ad hoc basis" from projected or measured dose in excess of EPA PAGs. Because dose projection accuracy is limited by distance, actual field measurements are used to corroborate projections before issuing PARs in areas outside the 10-mile EPZ.

The PAR strategy basis document is referenced in the site annexes.

J.7	A site-specific protective action strategy or decision-making process, informed by the ETE study, is coordinated between the licensee and OROs. Current Federal guidance is used.

NextEra offsite protective action recommendation strategies, informed by the ETE report, have been developed using guidance provided in NUREG-0654/FEMA-REP-1, Supplement 3, Guidance for Protective Action Strategies, in coordination with the state and local agencies.

J.8	The latest ETEs are:

J.8.a	Incorporated either by reference or in their entirety into the emergency plan.

The most recent ETEs are incorporated by reference into this emergency plan. Refer to the site annexes for specific reference to the ETE study.

Updated ETE studies will be submitted to the NRC under 10 CFR 50.4 no later than 365 days after NextEra determines that the criteria for updating the ETE have been met and at least 180 days before using it to form protective action recommendations and providing it to state and county governmental authorities for use in developing offsite protective action strategies.

During the years between decennial censuses NextEra will estimate EPZ permanent resident population changes once a year, but no later than 365 days from the date of the previous estimate, using the most recent U.S. Census Bureau annual resident population estimate and state/county government population data, if available. NextEra will maintain these estimates so that they are available for NRC inspection during the period between decennial censuses and will submit these estimates to the NRC with any updated ETE report.

The criteria that require a full update to the site ETE study is as follows:

1. The availability of the most recent decennial census data from the U.S. Census Bureau;

   OR

2. If at any time during the decennial period, the EPZ permanent resident population increases such that it causes the longest ETE value for the 2-mile zone or 5-mile zone, including all affected emergency response planning areas, or for the entire 10-mile EPZ to increase by 25 percent or 30 minutes, whichever is less, from the currently NRC approved or updated ETE.

J.8.b	Incorporated either by reference or as a summary of the latest ETE analysis into the emergency plan.

This element is not applicable to the licensee emergency plan.

J.9	PARs are provided, in a timely manner, directly to the designated ORO(s) responsible for making protective action decisions (PADs) within the plume exposure pathway EPZ.

Applicable plume exposure pathway EPZ PARs of evacuate and shelter are developed at the General Emergency classification level and provided to the ORO personnel responsible for making protective action decisions.

PARs are communicated using the initial notification form and process. See Section E for a discussion of emergency notification.

J.10	Plans include maps, charts, or other information that demonstrate the following for the plume exposure pathway EPZ:

J.10.a	Evacuation routes, evacuation areas, reception centers in host areas, and shelter areas.

Details on evacuation routes, evacuation areas, reception centers in host areas, and shelter areas are provided in the site ETE report.

J.10.b	Population distribution around the NPP site by evacuation areas.

Details on population distribution around the NextEra sites, by evacuation areas, are provided in the site ETE report.

J.11	A capability for implementing protective actions based on current Federal guidance is established. The process ensures coordinated implementation of PADs with all appropriate jurisdictions. The process for implementing protective actions for the plume exposure pathway EPZ is described and includes the following:

J.11.a	Means for identifying and protecting residents who would have difficulty in implementing protective actions without assistance. This includes those with access and functional needs, transportation-dependent residents, those in special facilities, and those in correctional facilities. These means include notification, support, and assistance in implementing protective actions where appropriate.

This element is not applicable to the licensee emergency plan.

J.11.b	The decision-making methodologies for use of radioprotective drugs and the provisions for administration to the general public, emergency workers, and institutionalized persons within the plume exposure pathway EPZ. This includes the means of determining quantities, maintaining and managing supplies, communicating recommendations, and distributing.

This element is not applicable to the licensee emergency plan.

J.11.c	Means of evacuation informed by the updated ETEs. The evacuation routes and transportation resources to be utilized are described and include projected traffic capacities of evacuation routes and implementation of traffic control schemes during evacuation.

This element is not applicable to the licensee emergency plan.

J.11.d	The locations of pre-identified reception centers beyond the boundaries of the plume exposure pathway EPZ, organizations responsible for managing reception centers, arrangements for handling service animals and pets, and provisions for radiological monitoring/decontamination.

This element is not applicable to the licensee emergency plan.

J.11.e	Means for the initial and ongoing control of access to evacuated areas and organizational responsibilities for such control, including identifying pre-selected control points.

This element is not applicable to the licensee emergency plan.

J.11.f	Identification of and means for dealing with potential impediments to the use of evacuation routes (e.g., seasonal impassability of roads) and contingency measures. The resources available to clear impediments and responsibility for re-routing traffic, as necessary, are described.

This element is not applicable to the licensee emergency plan.

J.11.g	Identification of and means to implement precautionary protective actions (e.g., actions taken at an SAE).

This element is not applicable to the licensee emergency plan.

J.12	Protective actions to be used for the ingestion exposure pathway EPZ are specified, including the methods for protecting the public from consumption of contaminated foodstuffs, and are based on current Federal guidance.

This element is not applicable to the licensee emergency plan.

J.13	The means for registering, monitoring, and decontaminating evacuees, service animals, pets, vehicles, and possessions at reception centers in host areas are described. The personnel and equipment available are capable of monitoring 20 percent of the plume exposure pathway EPZ population, including transients, assigned to each facility within a 12-hour period.

This element is not applicable to the licensee emergency plan.

J.14	General plans for the removal or continued exclusion of individuals from restricted areas are developed. Relocation plans include:

J.14.a	Process for implementing current federal guidance for relocation.

This element is not applicable to the licensee emergency plan.

J.14.b	Means to identify and determine the boundaries of relocation areas, including a buffer zone.

This element is not applicable to the licensee emergency plan.

J.14.c	Prioritization of relocation based on projected dose to an individual and the timeframe for relocation.

This element is not applicable to the licensee emergency plan.

J.14.d	Control of access to and egress from relocation areas and security provisions for evacuated areas.

This element is not applicable to the licensee emergency plan.

J.14.e	Contamination control during relocation.

This element is not applicable to the licensee emergency plan.

J.14.f	Means for coordinating and providing assistance during relocation.

This element is not applicable to the licensee emergency plan.

K: Radiological Exposure Control

Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

Regulatory References: 10 CFR 50.47(b)(11); 44 CFR 350.5(a)(11);
10 CFR Part 50, Appendix E.IV.E

K.1	The radiation protection controls for emergency workers to be implemented during emergencies are described. These controls address the following aspects:

Approval is required if emergency workers are expected to receive dose in excess of 10 CFR 20 occupational dose limits. ALARA practices are utilized during emergencies as much as practical.

K.1.a	Onsite emergency exposure guidelines for emergency workers consistent with their assigned duties and current Federal guidance and the conditions under which the guidelines apply.

Onsite exposure guidelines for emergency workers, consistent with EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, U.S. Environmental Protection Agency, May 1992, Table 2-2, "Guidance on Dose Limits for Workers Performing Emergency Services," have been established as follows:

TEDE Limit (Rem)	Activity
5	All activities during the emergency.
10	Protecting valuable property when lower dose is not practicable.
25	Lifesaving or protection of large populations when lower dose is not practical per EPA-400-R-92-001.
Greater Than 25	Lifesaving or protection of large populations, only if individuals receiving exposure is a volunteer, and fully aware of risks involved.

NOTES

- Emergency exposure limits are exclusive of current occupational exposure.
- Only one emergency exposure is allowed per lifetime.
- Dose to lens of the eye is limited to three times listed value.
- Dose to other organs, including skin and body extremities, is limited to ten times listed value.

K.1.b	The capability to evaluate emergency worker dose (i.e., the sum of the effective dose equivalent and the committed effective dose equivalent) at the time of exposure when direct measurement is not feasible.

Emergency worker exposure is monitored at the time of exposure by the use of electronic dosimeters. If direct measurement of airborne concentrations is not available at time of exposure, workers will be provided respiratory protection, when feasible, and total exposures will be calculated after the fact using follow up survey data and whole body counting equipment.

K.1.c	The capability to monitor and assess the radiation doses received by emergency workers for the duration of the incident.

Personnel dosimeters are issued to and worn by NextEra radiation worker qualified personnel who may be required to work in Radiological Controlled Areas in accordance with radiation protection procedures.

Radiation protection personnel in the OSC and TSC have the responsibility to monitor and assess the radiation doses received by ERO personnel on a 24-hour per day basis throughout a declared event.

Personnel dose records are documented and managed using a computerized system. Should this system not be readily accessible or available, personnel dose is manually recorded.

Dosimeters are available and will be provided to offsite agency responders if they are required to enter a Radiological Controlled Area or are expected to receive a dose in excess of 100 mRem for the event.

K.1.d	The capability to implement onsite contamination control measures.

Radiation safety controls are established 24 hours per day to contain the spread of loose surface radioactive contamination. Contamination control limits are defined in radiation protection procedures. Personnel leaving the contaminated areas are monitored to ensure that they are not radioactively contaminated.

K.1.e	The capability to decontaminate emergency workers, equipment, and vehicles.

Personnel decontamination is performed using normal radiation protection procedures in on-site facilities. Personnel decontamination facility locations are described in the site annexes.

Contamination on personnel will be removed in accordance with established radiation protection procedures.

Equipment will be released for use outside of the contaminated areas only when radioactive contamination is within acceptable limits. All equipment must be checked for contamination before being taken from a known contaminated area. Equipment and material decontamination is performed using normal radiation protection procedures.

K.1.f	Appropriate radiation protection briefings for repair teams that are being dispatched into the plant, and FMTs being sent onsite and offsite, the scope of which is consistent with the expected risk to the team.

Emergency teams, including Field Monitoring Teams, that must enter areas where they might be expected to receive higher than normal doses will be briefed on the task assigned and appropriate protective measures.

K.1.g	The process for NPP site access and dosimetry issuance to personnel from OROs arriving to assist with the onsite response.

The site access process into the protected area for local support organizations responding on site during an emergency is controlled by site security personnel. Non-NextEra emergency workers supporting on-site activities will be issued dosimetry and/or be monitored by radiation protection personnel when responding to areas where a radiation dose may be received.

K.2	Individual(s) who can authorize personnel to receive radiation doses in excess of the occupational dose limits in accordance with the minimum standards set forth in 10 CFR Part 20 or 29 CFR 1910.1096, as applicable to the organization, are identified by title/position. Such authorizations are documented.

Section B.2.a describes the responsibility for authorization of exposures to radiation in excess of 10 CFR 20 limits. Such authorizations are documented as part of the emergency exposure controls process provided in Element K.1.c.

K.2.a	The process for allowing onsite volunteers to receive radiation exposures in the course of carrying out lifesaving and other emergency activities is described.

All personnel dispatched into radiation areas or areas of unknown radiation levels are briefed on the task and environmental conditions and are provided appropriate monitoring and personnel protective equipment.

Refer to Element K.1.a for the description of activities and their exposure thresholds and considerations.

K.2.b	The process for authorizing emergency workers to incur exposures that may result in doses in excess of the current Federal guidance is described.

This element is not applicable to the licensee emergency plan.

K.3	The capability to determine the doses received by emergency workers involved in any commercial NPP radiological incident is described. Each organization makes provisions for distribution of direct-reading dosimeters (DRDs) and permanent record dosimeters (PRDs).

This element is not applicable to the licensee emergency plan.

K.3.a	Provisions to ensure that DRDs are read at designated intervals and dose records are maintained for emergency workers are described.

This element is not applicable to the licensee emergency plan.

K.4	Action levels for determining the need for decontamination are specified and the means for radiological decontamination are established for emergency workers and the general public, as well as equipment, vehicles, and personal possessions. The means for disposal of contaminated waste created by decontamination efforts are also established.

This element is not applicable to the licensee emergency plan.

L: Medical and Public Health Support

Arrangements are made for medical services for contaminated injured individuals.

Regulatory Reference: 10 CFR 50.47(b)(12); 44 CFR 350.5(a)(12); 10 CFR Part 50, Appendix E.IV.E

L.1	Arrangements are established with primary and backup hospitals (one hospital is located outside the plume exposure pathway EPZ) and medical services. These facilities have the capability for evaluation of radiation exposure and uptake. The persons providing these services are adequately trained and prepared to handle contaminated, injured emergency workers and members of the general public.

This element is not applicable to the licensee emergency plan.

L.2	Arrangements for the medical treatment of contaminated injured onsite personnel and those onsite personnel who have received significant radiation exposures and/or significant uptakes of radioactive material are described. These arrangements include the following components:

L.2.a	An onsite first aid capability with adequate medical equipment and supplies.

On-shift first aid personnel will provide first aid to individuals who are injured. Radiation protection personnel will provide contamination control support to potentially contaminated injured personnel.

NextEra maintains first aid supplies, and equipment for the treatment of injured or contaminated/injured persons. Descriptions of equipment and supplies, and radiological monitoring and decontamination equipment and supplies are in site procedures.

L.2.b	Primary and backup offsite medical facilities.

Arrangements have been made with local hospitals for the medical treatment of contaminated injured or over exposed personnel. These facilities and their services are available 24 hours per day.

Offsite medical facilities used to treat contaminated injured personnel are described in the site annexes.

L.2.c	Radiological controls capability, including the isolation of contamination, assessment of contamination levels, radiation exposure monitoring for medical facility staff, collection of contaminated waste, and decontamination of treatment areas.

NextEra personnel are available to assist medical personnel with decontamination, radiation exposure monitoring, and contamination control.

Radiological controls capability, including the isolation of contamination, assessment of contamination levels, radiation exposure monitoring for medical facility staff, collection of contaminated waste, and decontamination of treatment areas are described in hospital procedures.

L.2.d	Provisions to evaluate for radiological contamination either prior to transport to a medical facility or after arrival.

Injured personnel are evaluated for radiological contamination prior to transport to a medical facility per site procedures. If contamination monitoring is not possible due to the medical condition of the individual, contamination monitoring is performed as soon as possible following treatment at the medical facility.

L.2.e	Contact information for facilities capable of treating overexposure to radioactive material.

The Radiation Emergency Assistance Center Training Site (REAC/TS) located at Oak Ridge, Tennessee, will respond to and/or provide advice and assistance to offsite medical facilities in the event of a severe radiation accident.

L.3	Supplemental lists are developed that indicate the location of the closest public, private, and military hospitals and other emergency medical facilities within the state or contiguous states considered capable of providing medical support for any contaminated, injured individual.

This element is not applicable to the licensee emergency plan.

L.4	Each organization arranges for the transportation of contaminated, injured individuals and the means to control contamination while transporting victims of radiological incidents to medical support facilities and the decontamination of transport vehicle following use.

Injured personnel are evaluated for radiological contamination and packaged to control contamination prior to transport to a medical facility per radiation protection department procedures. NextEra personnel will assist with decontamination of transport vehicles if necessary.

Transportation agreements for contaminated injured personnel are described in site annexes.

M: Recovery, Reentry, and Post-Accident Operations

General plans for recovery and reentry are developed.

Regulatory Reference: 10 CFR 50.47(b)(13); 44 CFR 350.5(a)(13); 10 CFR Part 50, Appendix E.IV.H

M.1	General recovery, reentry, and return plans for radiological incidents are developed, as appropriate. These plans address reoccupancy, as appropriate. The plans should include:

M.1.a	Provisions for allowing reentry into areas controlled by the licensee. Reentry planning includes evaluation of the controls necessary for reentry under post-incident conditions.

Reentry can occur during the plume or post-plume phase and refers to the temporary movement of people into an area of actual or potential hazard. Personnel who have been evacuated or relocated from a restricted area may be allowed to reenter under controlled conditions to perform additional emergency response activities.

Reentry into the OCA will be based on site conditions. During or following a HAB incident, reentry criteria take into consideration site security and threat conditions.

M.1.b	Provisions for reentry into restricted areas, including exposure and contamination control, as appropriate. A method for coordinating and implementing decisions regarding temporary reentry into restricted areas is addressed.

This element is not applicable to the licensee emergency plan.

M.2	Individuals who will comprise the licensee's recovery organization are identified by title/ position. The recovery organization includes technical personnel with responsibilities to develop, evaluate, and direct recovery and reentry operations.

The recovery activities would be managed much like a normal outage, except that certain activities unique to the post-accident situation may be controlled by the recovery organization. The recovery organization would function as a matrix management organization to coordinate activities with the normal company organization. This organization may be located at the EOF or the site, as appropriate.

The primary positions in the recovery organization are described as follows:

- Recovery Manager – Overall management of recovery activities. High level coordination with offsite agencies.
- Onsite Recovery Coordinator – Directs the onsite recovery activities.
- Offsite Recovery Coordinator – Directs interface with offsite agencies during the recovery.
- Radiological Assessment Coordinator (if needed) – Coordinates radiological and environmental assessment with offsite agencies. Coordinates offsite radwaste management and decontamination activities.

- Spokesperson – Directs the public information program during the recovery phase.

M.3	The process for initiating recovery actions is described and includes the criteria for terminating the emergency.

Steps will be taken to terminate from the event, either directly or following a transition period (prior to entering a state of recovery operations). Usually, the Unusual Event and Alert classification levels will be directly terminated (no entry into recovery).

Items that must be considered before terminating the emergency condition to either a normal or a recovery organization are as follows:

- Emergency Action Level criteria
- Releases of radioactive materials to the environment
- In-plant radiation levels
- Plant stable and long term core cooling available
- Containment integrity
- Functionality and integrity of plant systems, facilities, power supplies, equipment, and instrumentation
- Fire, flood, earthquake or similar hazardous emergency conditions
- Security issues
- Site access not limited for personnel and support services

Decisions to relax protective actions for the public will be made by the appropriate state authorities.

When transition from an emergency to a recovery phase is necessary, the Emergency Director will designate a Recovery Manager and develop a recovery organization.

The Emergency Director will inform the ERO, OROs, and NRC upon exiting the state of emergency and either returning to normal organizational control or entering recovery.

M.4	The process for initiating recovery actions is described and includes provisions to ensure continuity during transfer of responsibility between phases. The chain of command is established.

This element is not applicable to the licensee emergency plan.

M.5	The framework for relaxing protective actions and allowing for return are described. Prioritization is given to restoring access to vital services and facilities.

This element is not applicable to the licensee emergency plan.

M.6	The organization(s) responsible for developing and implementing cleanup operations offsite is identified.

This element is not applicable to the licensee emergency plan.

M.7	Provisions for developing and modifying sampling plans are established. Provisions for laboratory analysis of samples are included in the plan.

The recovery organization will coordinate NextEra environmental sampling activities with the state agencies. Refer to Element C.4 for a description of laboratory capabilities.

M.8	A method for periodically conducting radiological assessments of public exposure is established.

This element is not applicable to the licensee emergency plan.

N: Exercises and Drills

Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.

Regulatory References: 10 CFR 50.47(b)(14); 44 CFR 350.5(a)(14);
10 CFR Part 50, Appendix E.IV.F

N.1	**Exercises and drills are conducted, observed, and critiqued/evaluated as set forth in NRC and FEMA regulations and guidance.**

1. Exercise: An exercise is an event that tests the integrated capability and a major portion of the elements of the emergency plans and organizations.
   - Over the period of the exercise cycle, exercises will test the adequacy of timing and content of implementing procedures and methods, test emergency equipment and communications networks, test the public alert and notification system, and ensure that emergency organization personnel are familiar with their duties.
   - Exercises must provide the opportunity for the ERO to demonstrate proficiency in the key skills necessary to implement the principal functional areas (see N.4) of emergency response.
   - State and local agencies within the plume exposure pathway EPZ are provided the opportunity to participate by invitation as described in Element N.2.a.
2. Drill: A drill is aimed at testing, developing and maintaining skills in one or more emergency plan functions.
   - Drill types may be operational or discussion-based events (e.g., single ERF or tabletop drills). Drills may be a component of an exercise.
   - During drills; activation of all of the ERFs is not required, supervised instruction is permitted, participants may be given the opportunity to resolve problems (success paths), and focus may be primarily on onsite training objectives. Drills may include evaluation of specific performance objectives or be conducted for non-evaluated training only.

The ERO (not necessarily each ERO member) shall be provided the opportunity to develop and maintain key emergency response skills within the scope of their duties in drills and exercises during each exercise cycle.

Over the course of an eight-year cycle all unique initiating conditions in the EAL scheme (with the exception of judgment ICs) are made available for the demonstration of event classification within drills or exercises.

N.1.a	The process to critique/evaluate exercises and drills is described.

Critiques of each drill and exercise will be held following each event to evaluate areas and identify issues. The critique is performed following the conclusion of a drill or exercise using preselected drill and exercise performance objectives.

Provisions are made for federal and ORO representatives to observe and participate in drill and exercise critiques when present.

A written report is prepared following a critique to document whether the objectives were successfully demonstrated.

A remedial exercise is only required if the emergency plan is not satisfactorily tested during the biennial exercise such that NRC, in consultation with FEMA, cannot (1) find reasonable assurance that adequate protective measures would be taken during a radiological emergency, or (2) determine that the ERO has maintained key skills specific to emergency response.

N.1.b	The process used to track findings and associated corrective actions identified by drill and exercise critiques/evaluations, including their assignment and completion, is described.

Failed performance objectives and other programmatic weaknesses are entered into the corrective action program (CAP).

N.1.c	A drill or exercise starts between 6:00 p.m. and 4:00 a.m. at least once every eight-year exercise cycle.

Each NextEra site will conduct at least one off-hours drill or exercise within an eight-year exercise cycle.

An off-hours drill or exercise is established as any time of day on a weekday holiday, or any time of day on a weekend day, or between the hours of 6:00 p.m. and 4:00 a.m. on a normal workday.

The off-hours drill requirement may be satisfied by an actual event provided it meets the above off-hours criteria and the objectives are evaluated and documented in a critique report for the augmentation of the ERO, the transfer of responsibilities, and facility activation.

N.1.d	A drill or exercise is unannounced at least once every eight-year exercise cycle.

Each NextEra site will conduct at least one unannounced drill or exercise within an eight-year cycle.

The unannounced drill requirement may be satisfied by an actual event provided objectives are evaluated and documented in a critique report for the augmentation of the ERO, the transfer of responsibilities, and facility activation.

N.2	Exercises are designed to enable the response organizations' demonstration of the key skills and capabilities necessary to implement the emergency plan. The following two types of exercises are conducted at the frequency noted:

N.2.a	**Plume Exposure Pathway Exercises** Plume exposure pathway exercises are conducted biennially. These exercises include mobilization of licensee and state, local, and tribal government personnel and resources and implementation of emergency plans to demonstrate response capabilities within the plume exposure pathway EPZ.

Each NextEra site will conduct a plume exposure pathway exercise biennially. Specifically, the plume exposure pathway exercise is developed to provide the ERO with the opportunity to demonstrate proficiency in the principal functional areas of emergency response:

- Management and coordination of emergency response
- Accident assessment
- Event classification
- Notification of the OROs
- Assessment of the onsite and offsite impact of radiological release
- PAR development (required only in exercises that include a GE)
- Protective action decision-making (onsite protective actions)
- Plant system repair and mitigative action implementation

OROs will be invited to participate in plume exposure pathway exercises. If an ORO chooses not to participate, their participation is not required and it should be documented that they were given the opportunity to participate.

Biennial plume exposure pathway exercise scenarios are submitted to the NRC under 10 CFR 50.4 at least 60 days before they are held.

N.2.b	**Ingestion Exposure Pathway Exercises** Ingestion exposure pathway exercises are conducted at least once every eight years. These exercises include mobilization of state, local, and tribal government personnel and resources and implementation of emergency plans to demonstrate response capabilities to a release of radioactive materials requiring post-plume phase protective actions within the ingestion exposure pathway EPZ.

NextEra will assist in development and participate as requested in an ingestion exposure pathway exercise to support FEMA evaluation of ORO emergency plan response activities in this area.

The scope, objectives and schedule will be coordinated with appropriate federal emergency organizations and OROs for exercises in which they participate.

N.3	**Exercise Scenario Elements** During each eight-year exercise cycle, biennial, evaluated exercise scenario content is varied to provide the opportunity to demonstrate the key skills and capabilities necessary to respond to the following scenario elements:

N.3.a	**Hostile Action-Based (HAB)** Hostile action directed at the NPP site. This scenario element may be combined with either a radiological release scenario or a no/minimal radiological release scenario, but a no/minimal radiological release scenario should not be included in consecutive HAB exercises at an NPP site.

Each NextEra site will conduct at least one HAB scenario in an exercise within an eight-year cycle.

The HAB scenario will include either a radiological release scenario or no/minimal radiological release scenario, but HAB scenarios combined with a no/minimal radiological release scenario will not be used in consecutive HAB exercises.

N.3.b	**Rapid Escalation** An initial classification of, or rapid escalation to, an SAE or GE.

Each NextEra site will conduct at least one rapid escalation scenario in an exercise within an eight-year cycle.

The rapid escalation scenario will begin with an initial declaration of, or rapid escalation to, the Site Area Emergency classification level while event response is performed from the Control Room.

N.3.c	**No/Minimal Release of Radioactive Materials** No release or an unplanned minimal release of radioactive material which does not require public protective actions. This scenario element is used only once during each eight-year exercise cycle.

Each NextEra site will conduct at least one no/minimal radiological release scenario that does not require PARs in an exercise within an eight-year cycle.

N.3.c.1	The licensee is required to demonstrate the ability to respond to a no/minimal radiological release scenario. State, local, and tribal government response organizations have the option, and are encouraged, to participate jointly in this demonstration. If the offsite organizations elect not to participate in the licensee's required minimal or no release exercise, the OROs will still be obligated to meet the exercise requirements as specified in 44 CFR 350.9.

OROs located within the plume exposure pathway EPZ are invited to participate in exercises with no/minimal radiological release scenarios.

NextEra will support offsite agencies in meeting FEMA demonstration requirements when they elect to not participate in a required no/minimal release scenario that is included in an exercise.

N.3.c.2	When planning for a joint no/minimal radiological release exercise, affected state, local, and tribal jurisdictions, the licensee, and FEMA will identify offsite capabilities that may still need to be evaluated and agree upon appropriate alternative evaluation methods to satisfy FEMA's biennial criteria requirements. Alternative evaluation methods that could be considered during the extent of play negotiations include expansion of the exercise scenario, out of sequence activities, plan reviews, staff assistance visits or other means as described in FEMA guidance.

FEMA will determine whether a no/minimal radiological release scenario is acceptable for use in a full or partial participation biennial exercise.

N.3.d	**Resource Integration** Integration of offsite resources with onsite response.

Each NextEra site will conduct at least one scenario that integrates offsite resources provided by local support organizations with onsite response in an exercise within an eight-year cycle.

Demonstration of resource integration includes briefings, offsite response to the site, and coordination of worker protection, as appropriate to the scenario.

N.3.e	**10 CFR 50.155(b)(2) Strategies** Demonstration of the use of equipment, procedures, and strategies developed in compliance with 10 CFR 50.155(b)(2).

Each NextEra site will conduct at least one scenario requiring demonstration of the ability to transition between procedures and select the strategy(ies) for preventing or mitigating fuel damage and limiting radiological releases, within an eight-year cycle.

The MBDBE exercise scenario will be based in one of the site specific strategies used to mitigate spent fuel pool damage scenarios or one of the 7 strategies for PWRs used to mitigate reactor accidents and maintain containment.

The MBDBE exercise may be conducted separately from the main exercise timeline and sequence of events. This includes the (simulated) deployment and use of equipment associated with these strategies. At a minimum, TSC and OSC ERO staff will participate in this portion of the exercise. Participation of Control Room, EOF, JIC ERO, and offsite officials may be simulated.

Methods to accomplish this demonstration are dependent upon the nature of the postulated initiating event, the plant response/accident sequence, and the ability of responders to select and implement mitigation/management strategies. These methods involve conducting any of the following:

- A demonstration of the transition from a controlling AOP or EOP into the Extensive Damage Mitigation Guidelines (EDMGs), FLEX support guidelines (FSGs), or Severe Accident Management Guidelines (SAMGs).
- A demonstration of the use of EDMGs.
- A demonstration of the use of FSGs.
- A demonstration of the use of SAMGs.

N.4	Drills are designed to enable an organization's demonstration and maintenance of key skills and capabilities necessary to fulfill functional roles. Drills include, but are not limited to, the following at their noted frequencies:

N.4.a	**Emergency Medical Drills** Emergency medical drills are conducted annually. These drills involve a simulated, contaminated individual and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility).

Each NextEra site will conduct an onsite simulated medical drill once per calendar year.

The scope of the emergency medical drill will include a simulated on-site injured and contaminated individual and medical/ first aid treatment, including contamination control.

~~Emergency Medical Drill offsite participation and periodicity for support Hospital and Ambulance services are performed in accordance with the 42 CFR 482.15 regulations and are not included in the scope of the station medical drills.~~

N.4.b	**Medical Services Drills** Medical services drills are conducted annually at each medical facility designated in the emergency plan. These drills involve a simulated, contaminated emergency worker and/or member of the general public and contain provisions for participation by support services agencies (i.e., ambulance and offsite medical treatment facility).

This element is not applicable to the licensee emergency plan.

N.4.c	**Laboratory Drills** Laboratory drills are conducted biennially at each laboratory designated in the emergency plan. These drills involve demonstration of handling, documenting, provisions for record keeping, and analyzing air, soil, and food samples, as well as quality control and quality assurance processes. These drills also involve an assessment of the laboratory's capacity to handle daily and weekly samples and the volume of samples that can be processed daily or weekly.

This element is not applicable to the licensee emergency plan.

N.4.d	**Environmental Monitoring Drills** Environmental monitoring drills are conducted annually. These drills include direct radiation measurements in the environment, collection and analysis of all sample media (e.g., water, vegetation, soil, and air), and provisions for record keeping.

Each NextEra site will conduct an environmental monitoring drill once per calendar year.

The scope of the environmental monitoring drill will include performance objectives for direct radiation measurements in the environment, collection and analysis of sample media (e.g., water, vegetation, soil, and air), communications, and record keeping.

N.4.e	**Ingestion Pathway and Post-Plume Phase Drills** Ingestion pathway and post-plume phase drills are conducted biennially. These drills involve sample plan development, analysis of lab results from samples, assessment of the impact on food and agricultural products, protective decisions for relocation, and food/crop embargos.

This element is not applicable to the licensee emergency plan.

N.4.f	**Communications Drills** Communications amongst and between emergency response organizations, including those at the state, local, and Federal level, the FMTs, and nuclear facility within both the plume and ingestion exposure pathway EPZs, are tested at the frequencies determined in evaluation criterion F.3. Communications drills include the aspect of understanding the content of messages and can be done in conjunction with the testing described in evaluation criterion F.3.

Each NextEra site will conduct communications drills once per calendar year.

Communications tests described in Element F.3 can be performed as drills provided they include the aspect of understanding the content of messages.

N.4.g	**Post-Accident Sampling Drills** Post-accident sampling drills are conducted annually. These drills address capabilities including analysis of liquid and containment atmosphere samples with simulated elevated radiation levels. This criterion is not applicable if the NPP unit(s) does (do) not have licensing basis requirements for post-accident sampling.

Refer to site annexes for the Post-Accident Sampling Drill requirements.

N.4.h	**Off-Hours Report-In Drills** Off-hours report-in drills are conducted biennially and are unannounced.

Each NextEra site will conduct an off-hours unannounced ERO report-in drill at least once within an eight-year cycle.

The scope of the off-hours unannounced ERO report-in drill will require actual response to the assigned facility.

The Off-Hours Report-In Drill requirement may be satisfied by an actual event provided objectives are evaluated and documented in a critique report.

N.4.i	**Off-Hours Call-In Drills** Off-hours call-in drills are conducted quarterly, such that each ERO member's normally expected response time is assessed at least biennially based on call-in drill responses or an alternate means for determining response time. Some drills are unannounced.

The NextEra ERO notification is an all-call process. Each NextEra site will conduct an off-hours unannounced ERO call-in drill biennially to verify each minimum staffing ERO position meets the required Table B-1 response time.

The scope of the off-hours unannounced ERO call-in drill will require collection of the ERO notification system report which documents response within the required time.

Completion of an Element N.4.h off-hours unannounced ERO report-in drill satisfies the requirements of the off-hours unannounced ERO call-in drill in this element.

The Off-Hours Call-In Drill requirement may be satisfied by an actual event provided the objectives are evaluated and documented in a critique report.

N.4.j	**Onsite Personnel Protective Action Drills** Onsite personnel protective action drills are conducted during every eight-year exercise cycle. These drills demonstrate the NPP site's ability to implement and coordinate protective actions for onsite personnel during hostile action.

Each NextEra site will conduct a protective action drill within an eight-year cycle.

The scope of the protective action drill will demonstrate the ability to implement and coordinate protective actions for onsite personnel during a hostile action using one or more of the following:

- Warning personnel in the OCA outside the protected area
- Evacuation of personnel from target buildings, including security personnel
- Site evacuation by opening (while continuing to defend) security gates (demonstrated through discussion/table-top)
- Dispersal of licensed operators
- Sheltering of personnel in structures away from potential site targets
- Arrangements for accounting for personnel after the attack

N.4.k	**Aircraft Threat/Attack Response Drills** Aircraft threat/attack response drills are conducted during every eight-year exercise cycle. These drills demonstrate the use of procedures and protective measures developed for responding to hostile action involving an aircraft threat or attack.

Each NextEra site will conduct an aircraft threat/attack response drill at least once within an eight-year cycle.

This drill may be combined with the beyond design basis demonstration in Element N.3.e.

N.4.l	**Minimum Staffing Drills** An ERO minimum staffing (no participation of non-minimum augmenting ERO personnel) drill is conducted at least once during every eight-year exercise cycle

Each NextEra site will conduct a minimum staffing drill at least once within an eight-year cycle.

A minimum staffing response drill requires facility activation, full transfer of responsibilities from the Control Room, and demonstration of event assessment and response activities.

N.4.m	**On-Shift Response Drills** An ERO on-shift response (90-minute ERO augmentation responders no sooner than 90 minutes) drill is conducted at least once during every eight-year exercise cycle

Each NextEra site will conduct an ERO on-shift response drill at least once within an eight-year cycle.

An on-shift response drill requires demonstration of classification, notification and PAR functions with minimum shift staffing and 60-minute ERO responders (no support from augmenting 90-minute ERO personnel no sooner than 90 minutes after event declaration) using an Onshift Staffing Analysis event modified to support the objectives.

O: Radiological Emergency Response Training

Radiological emergency response training is provided to those who may be called on to assist in an emergency.

Regulatory References: 10 CFR 50.47(b)(15); 44 CFR 350.5(a)(15); 10 CFR Part 50, Appendix E.IV.F

O.1	**Each organization ensures the training of emergency responders and other appropriate individuals with an operational role is described in the emergency plan. Initial training and at least annual retraining are provided.**

Initial and continuing training is conducted to ensure ERO personnel are properly qualified to their specific position. Categories of ERO personnel requiring training include:

1. Emergency Directors (includes the aspect of classification, notification and PARs)
2. Accident Assessment
3. Radiation Protection and Monitoring
   a. ERO RPT position is qualified to ANSI technician standards.
   b. ERO RP-Operator (RP-Ops) position is task qualified to perform the following:
      - Provide RP coverage for accessing known radiological environments (which includes respirator qualifications)
      - Control dosimetry and RCA access
      - Provide in-plant surveys

      The following tasks are included in the training:

      - Operate portable radiological survey instruments
      - Perform radiation and contamination surveys
      - Collect and evaluate radiological air samples
      - Post low level radiological hazards
      - Control access to high radiation areas
      - Monitor personnel contamination
      - Control radioactive material within an RCA
      - Control HEPA vacuums and ventilation equipment
      - Perform low risk radiological job coverage

c. ERO Field Monitoring Team Technicians receive initial training for the tasks they will be expected to perform during an emergency. The following general topics will be included in the training:

- Equipment and equipment checks
- Communications
- Plume tracking techniques
- Personnel monitoring
- Emergency exposure criteria
- Locations and use of radiological emergency equipment

4. Repair and Damage Control Teams

a. ~~Lead OSC Supervisor position is trained to perform RP supervisory tasks.~~

b. Operations, maintenance, chemistry and radiation protection personnel who would be assigned to repair and damage control teams are trained as part of their normal job-specific duties to respond to both normal and abnormal plant conditions and work under direction of an ERO supervisor in the OSC.

5. Security

a. Security personnel receive emergency plan training as part of their normal job specific training.

b. Security personnel assigned a specific ERO position receive training on emergency plan related tasks.

6. Fire Brigade – Refer to the site fire protection program.

7. First Aid – Personnel assigned as first aid responders maintain qualifications equivalent to Red Cross Standard First Aid techniques.

O.1.a	Site-specific emergency response training is developed and conducted for those offsite organizations that may be called upon to provide onsite assistance in the event of an emergency.

NextEra offers emergency response training annually to local support organizations. Training includes basic radiation protection, the notification process for their organization, and their organization's expected role.

The offered training for local support organizations who will enter the site also includes the general site layout, site access procedures, and the identity (by position and title) of the onsite individual who will control their support activities.

O.2	The ERO training program consists of learning objectives that are used to develop and maintain key skills. This includes a systematic analysis of jobs and tasks to be performed from which learning objectives are derived.

The ERO training program is developed and evaluated based on position-specific responsibilities/tasks using Systems Approach to Training (SAT) principles, when applicable.

O.2.a	The ERO training program is reviewed at least annually and revised as necessary.

Changes to the training program are identified from trainee feedback and by critique items captured during drills and incorporated per the principles of the SAT process.

O.2.b	Training sessions that provide performance opportunities to develop, maintain, or demonstrate key skills are critiqued in order to identify weak or deficient areas that need correction.

All individuals participating in the ERO training program are given the opportunity to provide feedback of training sessions. Any weak or deficient areas identified and corrected.

P: Responsibility for the Planning Effort

Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.

Regulatory References: 10 CFR 50.47(b)(16); 44 CFR 350.5(a)(16); 10 CFR Part 50, Appendix E.IV.B and G

P.1	The training program, including initial training and periodic retraining, of individuals responsible for the planning effort is described.

Initial EP program training for new EP staff members is performed and documented.

Continuing training for EP staff members is performed periodically through job related opportunities (such as courses, workshops, information exchange meetings with other licensees, conferences held by industry and government agencies, etc.) to maintain current knowledge of the overall planning effort or to enhance working knowledge of plant operations.

P.2	The individual with the overall authority and responsibility for radiological emergency response planning is identified by title/position.

The Chief Nuclear Officer has the overall authority and responsibility for the NextEra Common Emergency Plan.

P.3	The individual(s) with the responsibility for the development, maintenance, review, updating, and distribution of emergency plans, as well as the coordination of these plans with other response organizations, is identified by title/position.

The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations.

P.4	The process for reviewing annually, and updating as necessary, the emergency plan, implementing procedures, maps, charts, and agreements is described. The process includes a method for recording changes made to the documents and, when appropriate, how those changes are retained.

The formal emergency plan (as defined in the introduction section) and the emergency plan implementing procedures (as defined in Section P.7) will be reviewed on an annual basis and updated if necessary. Any changes to regulations, issues identified by drills and exercises, assessments and audits, or other updates will be evaluated and incorporated into the emergency plan if warranted.

Letters of Agreement will be reviewed and verified on an annual basis, and updated if warranted.

Changes will be processed in accordance with 10 CFR 50.54(q) requirements and NextEra document control/records management procedures.

P.5	Provisions for distributing the emergency plan and implementing procedures to all organizations and appropriate individuals with responsibility for implementation of the plan/procedures is described.

Revised copies of the emergency plan are posted and distributed in accordance with NextEra records management system procedures.

Changes to the emergency plan are submitted to the NRC in accordance with 10 CFR 50.4.

P.6	A listing of annexes, appendices, and supporting plans and their originating agency is included in the emergency plan.

Refer to Introduction Section for a listing of emergency plan extension documents (documents that are considered part of the emergency plan but are maintained separately).

Emergency plans developed by other agencies that support the NextEra Common Emergency Plan include the following:

- Department of Homeland Security National Response Framework
- U.S. Nuclear Regulatory Commission Incident Response Plan

Plans for organizations that support individual sites are listed in the site annexes.

P.7	An appendix containing a listing by title of the procedures required to maintain and implement the emergency plan is included. The listing includes the section(s) of the emergency plan to be implemented by each procedure.

Table P.7-1 provides a listing, by title, of the common response and maintenance procedures required to implement the emergency plan, and the section(s) of the emergency plan to be implemented by each procedure.

A listing, by title, of the site-specific response and maintenance procedures required to implement the emergency plan is provided in the site annexes.

P.8	A table of contents and a cross-reference index to each of the NUREG-0654/FEMA-REP-1, Rev. 2 evaluation criteria are included. The evaluation criteria that do not apply are identified.

The NextEra emergency plan contains a specific table of contents. The emergency plan paragraphs are numbered corresponding to the NUREG-0654/FEMA-REP-1 R2 evaluation criteria. Evaluation criteria which do not apply to utilities are listed and identified.

P.9	Provisions for addressing the requirements of 10 CFR 50.54(t) are described.

Emergency preparedness program elements are reviewed by persons that have no direct responsibility for the implementation of the emergency preparedness program, in accordance with 10 CFR 50.54(t).

P.10	The administrative process for the periodic review and updating of contact information identified in the emergency plan and implementing procedures is described.

The NextEra emergency communications directory contains select contact numbers for ORO and support organizations identified in the emergency plan and implementing procedures. The ERO call-out system contains comprehensive ERO contact information.

NextEra ERO contact information is verified semi-annually and updated as needed.

Facility and support contact information in the emergency communications directory is verified annually and updated as needed.

P.11	The process for entering EP program-related issues that could reduce the effectiveness of the emergency plan into the site-wide corrective action program is described.

The NextEra corrective action program is used to capture all events that do not meet program regulations, requirements, standards, or are otherwise conditions adverse to quality.

P.12	The process to evaluate changes in plant configuration for their impact on the effectiveness of the emergency plan is described.

Changes in plant configuration are evaluated for their impact on the effectiveness of the emergency plan through the plant modification or license compliance review processes specified in change procedures and, if required, the 10 CFR 50.54(q) change evaluation process.

Table P.7-1: Emergency Plan Implementing Procedures

Document ID	Document title	Plan Sections Implemented
	[To be developed following E-Plan approval]	

Appendix 1 Definitions

Accident: any unforeseen, or unintentional occurrence or mishap resulting in, or potentially resulting in, physical injury or injury due to radiation exposure or excessive exposure to radioactive materials.

Activated: an emergency response facility is declared activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions.

Annual: For drills and exercise periodicity, annual is once per calendar year. For training and qualification periodicity and work products, annual is every 12 months not to exceed 15 months.

Concept of Operations: delineation of an organization's roles and responsibilities and how the organization will function to accomplish those responsibilities.

Dosimeter: an instrument used to measure and record radiation doses or dose rates.

Emergency Operations Center (EOC): a facility that is the primary base of emergency operations for an ORO in a radiological incident.

Emergency Planning Zone (EPZ): a geographic area surrounding a commercial NPP for which emergency planning is needed to ensure that prompt and effective actions can be taken by OROs to protect public health and safety in the event of a radiological incident. The plume exposure pathway EPZ is approximately 10 miles in radius, while the ingestion exposure pathway EPZ has a radius of approximately 50 miles.

Emergency Response Data System (ERDS): a direct near real-time electronic data link between the licensee's onsite computer system and the NRC Operations Center that provides for the automated transmission of a limited data set of selected plant parameters.

Emergency Response Organization (ERO): the personnel assigned to perform tasks and activities associated with implementation of a licensee's emergency plan for coping with radiological incidents.

Evacuation Time Estimate (ETE): a calculation of the time it would take to evacuate the public within the plume exposure pathway EPZ under emergency conditions.

Evaluation: the process of observing drill or exercise performance to identify strengths and opportunities for improvement in an entity's emergency preparedness and response capabilities.

Field Monitoring Team (FMT): a group used to detect and monitor radiation in the environment.

Ingestion Exposure Pathway: the principal exposure from this pathway would be from ingestion of contaminated water or foods, such as milk or fresh vegetables.

Ingestion Exposure Pathway Emergency Planning Zone: a geographic area, approximately 50 miles in radius surrounding a commercial NPP.

Appendix 1 Definitions

Letter of Agreement (LOA): a document executed between two or more parties outlining specific arrangements relating to the accomplishment of an action. Letters of agreement may cover personnel, equipment, or other types of emergency support, and may take the form of letters, contracts, purchase orders, or other procurement mechanisms.

Memorandum of Understanding (MOU): a document which details the respective authorities and responsibilities of the signatory organizations for specified radiological emergency response planning, preparedness, or response.

Offsite Response Organization (ORO): state, tribal, or local governmental organization that is responsible for carrying out emergency response functions during a radiological emergency.

Offsite: the area outside the Protected Area.

Onsite: the area inside the Protected Area.

Owner Controlled Area (OCA): That portion of company property surrounding and including the station which is subject to limited access and control as deemed appropriate.

Planning Standard (PS): one of the 16 emergency preparedness planning standards established in 10 CFR 50.47(b) that the emergency plan must meet and which are supported by the corresponding sections of 10 CFR 50 Appendix E.

Plume Exposure Pathway: a term describing the means by which whole body radiation exposure occurs as a result of immersion in a gaseous release of radioactive material. The principal exposure sources from this pathway are: (a) whole body external exposure to gamma radiation from the plume and from deposited materials, and (b) inhalation exposure from the passing radioactive plume. The duration of principal potential exposures could range in length from 30 minutes to days.

Plume Exposure Pathway Emergency Planning Zone: a geographic area approximately 10 miles in radius surrounding a commercial NPP.

Post-Plume Phase: includes response activities that occur after a release has been terminated. Also known as the "Environmental Phase".

Potassium Iodide (KI): a prophylactic compound containing a stable (i.e., non-radioactive) form of iodine that can be used effectively to block the uptake of radioactive iodine by the thyroid gland in a human being.

Protected Area: the area (within the Owner Controlled Area) occupied by the nuclear unit(s) and associated equipment and facilities enclosed within the security perimeter fence. The area within which accountability of personnel is maintained in an emergency when required.

Protective Action Guide (PAG): The projected dose to an individual, resulting from a radiological incident at which a specific protective action to reduce or avoid that dose is warranted.

Appendix 1 Definitions

Protective Action Recommendation (PAR): a formal advisement from a NPP licensee to state and/or county government officials, or from state officials to other offsite officials, concerning emergency measures that should be taken to protect the public from exposure to radiation.

Radioprotective Drug: a chemical compound or substance serving to protect or aid in protecting against the injurious effects of radiation.

Reasonable Assurance: a determination that ORO and utility plans and preparedness are adequate to protect public health and safety in the emergency planning areas of commercial NPPs.

Reception Center: a pre-designated facility located outside the plume exposure pathway EPZ at which the evacuated public can register; receive radiation monitoring and decontamination; receive assistance in contacting others; receive directions to congregate care centers; reunite with others; and receive general information. It generally refers to a facility where monitoring, decontamination, and registration of evacuees are conducted. A reception center is also referred to as a registration center or public registration and decontamination center.

Site Boundary: the line beyond which the land or property is not owned or controlled by the licensee.

Thyroid Committed Dose Equivalent (CDE): the dose to the thyroid that will be received from an intake of radioactive material by an individual during the 50-year period following the intake (10 CFR 20.1003).

Total Effective Dose Equivalent (TEDE): the sum of the deep dose equivalent (for external exposures) and committed effective dose equivalent (for internal exposures).

Transient Population: persons who do not permanently reside in the plume exposure pathway EPZ, but may be present during an emergency.

Appendix 2 Abbreviations and Acronyms

AOP	Abnormal Operating Procedures
ANSI	American Nuclear Standards Institute
CFR	Code of Federal Regulations
CR	Control Room
DLR	Dosimeter of Legal Record (synonymous with TLD)
DRD	Direct-reading Dosimeter
EAL	Emergency Action Level
EAS	Emergency Alert System
ECL	Emergency Classification Level
ENS	Emergency Notification System
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EP	Emergency Preparedness
EPA	Environmental Protection Agency
EPZ	Emergency Planning Zone
ERDS	Emergency Response Data System
ERF	Emergency Response Facility
ERO	Emergency Response Organization
ETE	Evacuation Time Estimate
FEMA	Federal Emergency Management Agency
FLEX	Diverse and Flexible Coping Strategies
FMT	Field Monitoring Team
GE	General Emergency
HAB	Hostile Action-Based
HPN	Health Physics Network
I&C	Instrumentation and Control
ICP	Incident Command Post
IT	Information Technology
JIC	Joint Information Center
JIS	Joint Information System
KI	Potassium Iodide
LLEA	Local Law Enforcement Agency
LOA	Letter of Agreement
MOU	Memorandum of Understanding
NEI	Nuclear Energy Institute
NPP	Nuclear Power Plant
NRC	Nuclear Regulatory Commission
OCA	Owner Controlled Area
ORO	Offsite Response Organization

Appendix 2 Abbreviations and Acronyms

OSC	Operations Support Center
PAD	Protective Action Decision
PAG	Protective Action Guide
PAR	Protective Action Recommendation
HAB	Hostile Action-Based
REP	Radiological Emergency Preparedness
RP-Ops	Radiation Protection - Operator
RWP	Radiation Work Permit
SAE	Site Area Emergency
TEDE	Total Effective Dose Equivalent
TLD	Thermoluminescent Dosimeter (synonymous with DLR)
TSC	Technical Support Center
UE	Unusual Event

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

1. The applicant's emergency plans shall contain, but not necessarily be limited to, information needed to demonstrate compliance with the elements set forth below, i.e., organization for coping with radiological emergencies, assessment actions, activation of emergency organization, notification procedures, emergency facilities and equipment, training, maintaining emergency preparedness, recovery, and onsite protective actions during hostile action.

Regulatory Criteria	E-Plan
2. This nuclear power reactor license applicant shall also provide an analysis of the time required to evacuate various sectors and distances within the plume exposure pathway EPZ for transient and permanent populations, using the most recent U.S. Census Bureau data as of the date the applicant submits its application to the NRC.	J.8
3. Nuclear power reactor licensees shall use NRC approved evacuation time estimates (ETEs) and updates to the ETEs in the formulation of protective action recommendations and shall provide the ETEs and ETE updates to State and local governmental authorities for use in developing offsite protective action strategies.	J.8
and shall provide the ETEs and ETE updates to State and local governmental authorities for use in developing offsite protective action strategies.	J.7
4. Within 365 days of the later of the date of the availability of the most recent decennial census data from the U.S. Census Bureau or December 23, 2011, nuclear power reactor licensees shall develop an ETE analysis using this decennial data and submit it under § 50.4 to the NRC. These licensees shall submit this ETE analysis to the NRC at least 180 days before using it to form protective action recommendations and providing it to state and local governmental authorities for use in developing offsite protective action strategies.	J.8.a
5. During the years between decennial censuses, nuclear power reactor licensees shall estimate EPZ permanent resident population changes once a year, but no later than 365 days from the date of the previous estimate, using the most recent U.S. Census Bureau annual resident population estimate and state/local government population data, if available. These licensees shall maintain these estimates so that they are available for NRC inspection during the period between decennial censuses and shall submit these estimates to the NRC with any updated ETE analysis.	J.8.a
6. If at any time during the decennial period, the EPZ permanent resident population increases such that it causes the longest ETE value for the 2-mile zone or 5-mile zone, including all affected Emergency Response Planning Areas, or for the entire 10-mile EPZ to increase by 25 percent or 30 minutes, whichever is less, from the nuclear power reactor licensee's currently NRC approved or updated ETE, the licensee shall update the ETE analysis to reflect the impact of that population increase.	J.8.a

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

Regulatory Criteria	E-Plan
The licensee shall submit the updated ETE analysis to the NRC under § 50.4 no later than 365 days after the licensee's determination that the criteria for updating the ETE have been met and at least 180 days before using it to form protective action recommendations and providing it to state and local governmental authorities for use in developing offsite protective action strategies.	J.8.a
7. After an applicant for a combined license under part 52 of this chapter receives its license, the licensee shall conduct at least one review of any changes in the population of its EPZ at least 365 days prior to its scheduled fuel load. The licensee shall estimate EPZ permanent resident population changes using the most recent U.S. Census Bureau annual resident population estimate and state/local government population data, if available. If the EPZ permanent resident population increases such that it causes the longest ETE value for the 2-mile zone or 5-mile zone, including all affected Emergency Response Planning Areas, or for the entire 10-mile EPZ, to increase by 25 percent or 30 minutes, whichever is less, from the licensee's currently approved ETE, the licensee shall update the ETE analysis to reflect the impact of that population increase. The licensee shall submit the updated ETE analysis to the NRC for review under § 50.4 of this chapter no later than 365 days before the licensee's scheduled fuel load.	N/A

10 CFR 50 Appendix E.IV.A – Organization

The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization and the means for notification of such individuals in the event of an emergency. Specifically, the following shall be included:

Regulatory Criteria	E-Plan
1. A description of the normal plant operating organization.	B.1.a
2. A description of the onsite ERO with a detailed discussion of:	
a. Authorities, responsibilities, and duties of the individual(s) who will take charge during an emergency;	B.1.a B.2 B.2.a
b. Plant staff emergency assignments;	B.1.a
c. Authorities, responsibilities, and duties of an onsite emergency coordinator who shall be in charge of the exchange of information with offsite authorities responsible for coordinating and implementing offsite emergency measures.	B.1.a B.2 B.2.a
3. A description, by position and function to be performed, of the licensee's headquarters personnel who will be sent to the plant site to augment the onsite emergency organization.	N/A

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

Regulatory Criteria	E-Plan
4. Identification, by position and function to be performed, of persons within the licensee organization who will be responsible for making offsite dose projections,	B.1.a
and a description of how these projections will be made	I.6
and the results transmitted to state and local authorities, NRC, and other appropriate governmental entities.	E.3 I.10
5. Identification, by position and function to be performed, of other employees of the licensee with special qualifications for coping with emergency conditions that may arise.	B.1.a
Other persons with special qualifications, such as consultants, who are not employees of the licensee and who may be called upon for assistance for emergencies shall also be identified. The special qualifications of these persons shall be described.	B.5
6. A description of the local offsite services to be provided in support of the licensee's emergency organization.	A.1.a (5)
7. By June 23, 2014, identification of, and a description of the assistance expected from, appropriate state, local, and federal agencies with responsibilities for coping with emergencies, including hostile action at the site. For purposes of this appendix, "hostile action" is defined as an act directed toward a nuclear power plant or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force.	A.4
8. Identification of the state and/or local officials responsible for planning for, ordering, and controlling appropriate protective actions, including evacuations when necessary.	A.1.a.3
9. By December 24, 2012, for nuclear power reactor licensees, a detailed analysis demonstrating that on-shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan.	B.1.a

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

10 CFR 50 Appendix E.IV.B – Assessment Actions

Regulatory Criteria	E-Plan
1. The means to be used for determining the magnitude of, and for continually assessing the impact of, the release of radioactive materials shall be described, including emergency action levels that are to be used as criteria for determining the need for notification and participation of local and state agencies, the Commission, and other federal agencies, and the emergency action levels that are to be used for determining when and what type of protective measures should be considered within and outside the site boundary to protect health and safety.	I.4 I.4.a I.6
The emergency action levels shall be based on in-plant conditions and instrumentation in addition to onsite and offsite monitoring. By June 20, 2012, for nuclear power reactor licensees, these action levels must include hostile action that may adversely affect the nuclear power plant.	D.1.a
The initial emergency action levels shall be discussed and agreed on by the applicant or licensee and state and local governmental authorities, and approved by the NRC.	D.1.b
Thereafter, emergency action levels shall be reviewed with the state and local governmental authorities on an annual basis.	D.1.b
2. A licensee desiring to change its entire emergency action level scheme shall submit an application for an amendment to its license and receive NRC approval before implementing the change.	D.1.a
Licensees shall follow the change process in § 50.54(q) for all other emergency action level changes.	P.4

10 CFR 50, Appendix E.IV.C – Activation of Emergency Organization

Regulatory Criteria	E-Plan
1. The entire spectrum of emergency conditions that involve the alerting or activating of progressively larger segments of the total emergency organization shall be described.	D.1 D.3
The communication steps to be taken to alert or activate emergency personnel under each class of emergency shall be described.	E.1.1
Emergency action levels (based not only on onsite and offsite radiation monitoring information but also on readings from a number of sensors that indicate a potential emergency, such as the pressure in containment and the response of the Emergency Core Cooling System) for notification of offsite agencies shall be described.	D.1
The existence, but not the details, of a message authentication scheme shall be noted for such agencies.	E.1.a

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

Regulatory Criteria	E-Plan
The emergency classes defined shall include: (1) Notification of unusual events, (2) alert, (3) site area emergency, and (4) general emergency. These classes are further discussed in NUREG–0654/FEMA–REP–1.	D.1
2. By June 20, 2012, nuclear power reactor licensees shall establish and maintain the capability to assess, classify, and declare an emergency condition within 15 minutes after the availability of indications to plant operators that an emergency action level has been exceeded and shall promptly declare the emergency condition as soon as possible following identification of the appropriate emergency classification level.	D.2
Licensees shall not construe these criteria as a grace period to attempt to restore plant conditions to avoid declaring an emergency action due to an emergency action level that has been exceeded.	Site EAL TBD
Licensees shall not construe these criteria as preventing implementation of response actions deemed by the licensee to be necessary to protect public health and safety provided that any delay in declaration does not deny the state and local authorities the opportunity to implement measures necessary to protect the public health and safety.	Site EAL TBD

10 CFR 50, Appendix E.IV.D – Notification Procedures

Regulatory Criteria	E-Plan
1. Administrative and physical means for notifying local, state, and federal officials and agencies and agreements reached with these officials and agencies for the prompt notification of the public and for public evacuation or other protective measures, should they become necessary, shall be described. This description shall include identification of the appropriate officials, by title and agency, of the state and local government agencies within the EPZs.	E.2
2. Provisions shall be described for yearly dissemination to the public within the plume exposure pathway EPZ of basic emergency planning information, such as the methods and times required for public notification and the protective actions planned if an accident occurs, general information as to the nature and effects of radiation, and a listing of local broadcast stations that will be used for dissemination of information during an emergency.	G.1
Signs or other measures shall also be used to disseminate to any transient population within the plume exposure pathway EPZ appropriate information that would be helpful if an accident occurs.	G.1
3. A licensee shall have the capability to notify responsible state and local governmental agencies within 15 minutes after declaring an emergency.	E.1.b

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

Regulatory Criteria	E-Plan
The licensee shall demonstrate that the appropriate governmental authorities have the capability to make a public alerting and notification decision promptly on being informed by the licensee of an emergency condition.	E.2
Prior to initial operation greater than 5 percent of rated thermal power of the first reactor at a site, each nuclear power reactor licensee shall demonstrate that administrative and physical means have been established for alerting and providing prompt instructions to the public within the plume exposure pathway EPZ.	N/A
The design objective of the prompt public alert and notification system shall be to have the capability to essentially complete the initial alerting and initiate notification of the public within the plume exposure pathway EPZ within about 15 minutes. The use of this alerting and notification capability will range from immediate alerting and notification of the public (within 15 minutes of the time that state and local officials are notified that a situation exists requiring urgent action) to the more likely events where there is substantial time available for the appropriate governmental authorities to make a judgment whether or not to activate the public alert and notification system.	E.2
The alerting and notification capability shall additionally include administrative and physical means for a backup method of public alerting and notification capable of being used in the event the primary method of alerting and notification is unavailable during an emergency to alert or notify all or portions of the plume exposure pathway EPZ population. The backup method shall have the capability to alert and notify the public within the plume exposure pathway EPZ, but does not need to meet the 15-minute design objective for the primary prompt public alert and notification system.	E.2
When there is a decision to activate the alert and notification system, the appropriate governmental authorities will determine whether to activate the entire alert and notification system simultaneously or in a graduated or staged manner. The responsibility for activating such a public alert and notification system shall remain with the appropriate governmental authorities.	N/A

10 CFR 50, Appendix E.IV.E – Emergency Facilities and Equipment

Adequate provisions shall be made and described for emergency facilities and equipment, including:

Regulatory Criteria	E-Plan
1. Equipment at the site for personnel monitoring;	K.1.b K.1.c
2. Equipment for determining the magnitude of and for continuously assessing the impact of the release of radioactive materials to the environment;	I.6 I.7 I.8 H.7

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

Regulatory Criteria	E-Plan
3. Facilities and supplies at the site for decontamination of onsite individuals;	J.3 K.1.e
4. Facilities and medical supplies at the site for appropriate emergency first aid treatment;	L.2.a
5. Arrangements for medical service providers qualified to handle radiological emergencies onsite;	L.2.b
6. Arrangements for transportation of contaminated injured individuals from the site to specifically identified treatment facilities outside the site boundary;	L.4
7. Arrangements for treatment of individuals injured in support of licensed activities on the site at treatment facilities outside the site boundary;	L.2.b
8.a (i) A licensee onsite technical support center and an emergency operations facility from which effective direction can be given and effective control can be exercised during an emergency;	H.1 H.3
8.a (ii) For nuclear power reactor licensees, a licensee onsite operational support center;	H.2
8.b For a nuclear power reactor licensee's EOF required by paragraph 8.a of this section, either a facility located between 10 miles and 25 miles of the nuclear power reactor site(s), or a primary facility located less than 10 miles from the nuclear power reactor site(s) and a backup facility located between 10 miles and 25 miles of the nuclear power reactor site(s). An EOF may serve more than one nuclear power reactor site. A licensee desiring to locate an EOF more than 25 miles from a nuclear power reactor site shall request prior Commission approval by submitting an application for an amendment to its license.	H.3
For an EOF located more than 25 miles from a nuclear power reactor site, provisions must be made for locating NRC and offsite responders closer to the nuclear power reactor site so that NRC and offsite responders can interact face-to-face with emergency response personnel entering and leaving the nuclear power reactor site. Provisions for locating NRC and offsite responders closer to a nuclear power reactor site that is more than 25 miles from the EOF must include the following:	H.3.a
(1) Space for members of an NRC site team and federal, state, and local responders;	C.5
(2) Additional space for conducting briefings with emergency response personnel;	C.5
(3) Communication with other licensee and offsite emergency response facilities;	C.5

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

Regulatory Criteria	E-Plan
(4) Access to plant data and radiological information; and	C.5
(5) Access to copying equipment and office supplies;	C.5
8.c By June 20, 2012, for a nuclear power reactor licensee's EOF required by paragraph 8.a of this section, a facility having the following capabilities:	
(1) The capability for obtaining and displaying plant data and radiological information for each reactor at a nuclear power reactor site and for each nuclear power reactor site that the facility serves;	H.3
(2) The capability to analyze plant technical information and provide technical briefings on event conditions and prognosis to licensee and offsite response organizations for each reactor at a nuclear power reactor site and for each nuclear power reactor site that the facility serves; and	H.3
(3) The capability to support response to events occurring simultaneously at more than one nuclear power reactor site if the emergency operations facility serves more than one site; and	H.3
8.d For nuclear power reactor licensees, an alternative facility (or facilities) that would be accessible even if the site is under threat of or experiencing hostile action, to function as a staging area for augmentation of emergency response staff and collectively having the following characteristics:	H.4
• the capability for communication with the EOF, Control Room, and plant security;	H.4
• the capability to perform offsite notifications;	H.4
• and the capability for engineering assessment activities, including damage control team planning and preparation, for use when onsite emergency facilities cannot be safely accessed during hostile action.	H.3.b H.4
The requirements in this paragraph 8.d must be implemented no later than December 23, 2014, with the exception of the capability for staging emergency response organization personnel at the alternative facility (or facilities) and the capability for communications with the emergency operations facility, Control Room, and plant security, which must be implemented no later than June 20, 2012.	N/A
8.e A licensee shall not be subject to the requirements of paragraph 8.b of this section for an existing EOF approved as of December 23, 2011.	N/A

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

Regulatory Criteria	E-Plan
9. At least one onsite and one offsite communications system; each system shall have a backup power source.	F.1.a
All communication plans shall have arrangements for emergencies, including titles and alternates for those in charge at both ends of the communication links and the primary and backup means of communication. Where consistent with the function of the governmental agency, these arrangements will include:	E.1
a. Provision for communications with contiguous state/local governments within the plume exposure pathway EPZ.	E.1 F.1.a
Such communications shall be tested monthly.	F.3
b. Provision for communications with federal emergency response organizations.	E.1 F.1.a
Such communications systems shall be tested annually.	F.3
c. Provision for communications among the nuclear power reactor control room, the onsite TSC, and the EOF; and among the nuclear facility, the principal state and local emergency operations centers, and the field assessment teams.	F.1
Such communications systems shall be tested annually.	F.3
d. Provisions for communications by the licensee with NRC Headquarters and the appropriate NRC Regional Office Operations Center from the nuclear power reactor control room, the onsite TSC, and the EOF.	E.1 F.1
Such communications shall be tested monthly.	F.3

10 CFR 50, Appendix E.IV.F – Training

Regulatory Criteria	E-Plan
1. The program to provide for:	
(a) The training of employees and exercising, by periodic drills, of emergency plans to ensure that employees of the licensee are familiar with their specific emergency response duties, and	N.4 O.1
(b) The participation in the training and drills by other persons whose assistance may be needed in the event of a radiological emergency shall be described.	N.4.a O.1.a
This shall include a description of specialized initial training and periodic retraining programs to be provided to each of the following categories of emergency personnel:	O.1

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

Regulatory Criteria	E-Plan
i. Directors and/or coordinators of the plant emergency organization;	O.1 (1)
ii. Personnel responsible for accident assessment, including control room shift personnel;	O.1 (2)
iii. Radiological monitoring teams;	O.1 (3)
iv. Fire control teams (fire brigades);	O.1 (6)
v. Repair and damage control teams;	O.1 (4)
vi. First aid and rescue teams;	O.1 (7)
vii. Medical support personnel;	O.1 (6) O.1.a
viii. Licensee's headquarters support personnel;	N/A
ix. Security personnel.	O.1 (5)
In addition, a radiological orientation training program shall be made available to local services personnel; e.g., local emergency services/Civil Defense, local law enforcement personnel, local news media persons.	O.1.a G.5
2. The plan shall describe provisions for the conduct of emergency preparedness exercises as follows: Exercises shall test the adequacy of timing and content of implementing procedures and methods, test emergency equipment and communications networks, test the public alert and notification system, and ensure that emergency organization personnel are familiar with their duties.	N.1
2.a A full participation exercise which tests as much of the licensee, state, and local emergency plans as is reasonably achievable without mandatory public participation shall be conducted for each site at which a power reactor is located.	N.2.a
Nuclear power reactor licensees shall submit exercise scenarios under § 50.4 at least 60 days before use in a full participation exercise required by this paragraph 2.a.	N.2.a

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

Regulatory Criteria	E-Plan
(i) For an operating license issued under this part, this exercise must be conducted within 2 years before the issuance of the first operating license for full power (one authorizing operation above 5 percent of rated thermal power) of the first reactor and shall include participation by each state and local government within the plume exposure pathway EPZ and each state within the ingestion exposure pathway EPZ. If the full participation exercise is conducted more than 1 year prior to issuance of an operating licensee for full power, an exercise which tests the licensee's onsite emergency plans must be conducted within one year before issuance of an operating license for full power. This exercise need not have state or local government participation.	N/A
(ii) For a combined license issued under part 52 of this chapter, this exercise must be conducted within two years of the scheduled date for initial loading of fuel. If the first full participation exercise is conducted more than one year before the scheduled date for initial loading of fuel, an exercise which tests the licensee's onsite emergency plans must be conducted within one year before the scheduled date for initial loading of fuel. This exercise need not have state or local government participation. If FEMA identifies one or more deficiencies in the state of offsite emergency preparedness as the result of the first full participation exercise, or if the Commission finds that the state of emergency preparedness does not provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency, the provisions of § 50.54(gg) apply.	N/A
(iii) For a combined license issued under part 52 of this chapter, if the applicant currently has an operating reactor at the site, an exercise, either full or partial participation, shall be conducted for each subsequent reactor constructed on the site. This exercise may be incorporated in the exercise requirements of Sections IV.F.2.b. and c. in this appendix. If FEMA identifies one or more deficiencies in the state of offsite emergency preparedness as the result of this exercise for the new reactor, or if the Commission finds that the state of emergency preparedness does not provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency, the provisions of § 50.54(gg) apply.	N/A
2.b Each licensee at each site shall conduct a subsequent exercise of its onsite emergency plan every 2 years.	N.2.a
Nuclear power reactor licensees shall submit exercise scenarios under § 50.4 at least 60 days before use in an exercise required by this paragraph 2.b.	N.2.a
The exercise may be included in the full participation biennial exercise required by paragraph 2.c. of this section.	N.2.a

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

Regulatory Criteria	E-Plan
In addition, the licensee shall take actions necessary to ensure that adequate emergency response capabilities are maintained during the interval between biennial exercises by conducting drills, including at least one drill involving a combination of some of the principal functional areas of the licensee's onsite emergency response capabilities. The principal functional areas of emergency response include activities such as management and coordination of emergency response, accident assessment, event classification, notification of offsite authorities, assessment of the onsite and offsite impact of radiological releases, protective action recommendation development, protective action decision making, plant system repair and mitigative action implementation. During these drills, activation of all of the licensee's emergency response facilities (TSC, OSC, and the EOF) would not be necessary, licensees would have the opportunity to consider accident management strategies, supervised instruction would be permitted, operating staff in all participating facilities would have the opportunity to resolve problems (success paths) rather than have controllers intervene, and the drills may focus on the onsite exercise training objectives.	N.4
2.c Offsite plans for each site shall be exercised biennially with full participation by each offsite authority having a role under the radiological response plan. Where the offsite authority has a role under a radiological response plan for more than one site, it shall fully participate in one exercise every two years and shall, at least, partially participate in other offsite plan exercises in this period.	N.2.a
If two different licensees each have licensed facilities located either on the same site or on adjacent, contiguous sites, and share most of the elements defining co-located licensees, then each licensee shall:	N/A
(1) Conduct an exercise biennially of its onsite emergency plan;	N/A
(2) Participate quadrennially in an offsite biennial full or partial participation exercise;	N/A
(3) Conduct emergency preparedness activities and interactions in the years between its participation in the offsite full or partial participation exercise with offsite authorities, to test and maintain interface among the affected state and local authorities and the licensee. Co-located licensees shall also participate in emergency preparedness activities and interaction with offsite authorities for the period between exercises;	N/A
(4) Conduct a hostile action exercise of its onsite emergency plan in each exercise cycle; and	N/A
(5) Participate in an offsite biennial full or partial participation hostile action exercise in alternating exercise cycles.	N/A

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

Regulatory Criteria	E-Plan
2.d Each state with responsibility for nuclear power reactor emergency preparedness should fully participate in the ingestion pathway portion of exercises at least once every exercise cycle. In states with more than one nuclear power reactor plume exposure pathway EPZ, the state should rotate this participation from site to site.	N/A
Each state with responsibility for nuclear power reactor emergency preparedness should fully participate in a hostile action exercise at least once every cycle and should fully participate in one hostile action exercise by December 31, 2015. States with more than one nuclear power reactor plume exposure pathway EPZ should rotate this participation from site to site.	N/A
2.e Licensees shall enable any state or local government located within the plume exposure pathway EPZ to participate in the licensee's drills when requested by such State or local government.	N.1
2.f Remedial exercises will be required if the emergency plan is not satisfactorily tested during the biennial exercise, such that NRC, in consultation with FEMA, cannot (1) find reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency or (2) determine that the Emergency Response Organization (ERO) has maintained key skills specific to emergency response. The extent of state and local participation in remedial exercises must be sufficient to show that appropriate corrective measures have been taken regarding the elements of the plan not properly tested in the previous exercises.	N.1.a
2.g All exercises, drills, and training that provide performance opportunities to develop, maintain, or demonstrate key skills must provide for formal critiques in order to identify weak or deficient areas that need correction.	N.1
Any weaknesses or deficiencies that are identified in a critique of exercises, drills, or training must be corrected.	N.1.b
2.h The participation of state and local governments in an emergency exercise is not required to the extent that the applicant has identified those governments as refusing to participate further in emergency planning activities, pursuant to § 50.47(c)(1). In such cases, an exercise shall be held with the applicant or licensee and such governmental entities as elect to participate in the emergency planning process.	N.2.a
2.i Licensees shall use drill and exercise scenarios that provide reasonable assurance that anticipatory responses will not result from preconditioning of participants. Such scenarios for nuclear power reactor licensees must include a wide spectrum of radiological releases and events, including hostile action. Exercise and drill scenarios as appropriate must emphasize coordination among onsite and offsite response organizations.	N.3 N.4

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

Regulatory Criteria	E-Plan
2.j(i) The exercises conducted under paragraph 2 of this section by nuclear power reactor licensees must provide the opportunity for the ERO to demonstrate proficiency in the key skills necessary to implement the principal functional areas of emergency response identified in paragraph 2.b of this section.	N.1 N.2.a
j(ii) Each exercise must provide the opportunity for the ERO to demonstrate key skills specific to emergency response duties in the control room, TSC, OSC, EOF, and JIC.	N.1
j(iii) In each 8-calendar-year exercise cycle, nuclear power reactor licensees shall vary the content of scenarios during exercises conducted under paragraph 2 of this section to provide the opportunity for the ERO to demonstrate proficiency in the key skills necessary to respond to the following scenario elements:	N.3
(1) hostile action directed at the plant site,	N.3.a
(2) No radiological release or an unplanned minimal radiological release that does not require public protective actions;	N.3.c
(3) An initial classification of or rapid escalation to a Site Area Emergency or General Emergency;	N.3.b
(4) Implementation of strategies, procedures, and guidance developed under §50.155(b)(2); and	N.3.e
(5) Integration of offsite resources with onsite response.	N.3.d
j(iv) The licensee shall maintain a record of exercises conducted during each 8-year exercise cycle that documents the content of scenarios used to comply with the requirements of section IV.F.2.j of this appendix.	N.3
j(v) Each licensee shall conduct a hostile action exercise for each of its sites no later than December 31, 2015.	N/A
j(vi) The first 8-year exercise cycle for a site will begin in the calendar year in which the first hostile action exercise is conducted. For a site licensed under 10 CFR part 52, the first 8-year exercise cycle begins in the calendar year of the initial exercise required by section IV.F.2.a of this appendix.	N/A

10 CFR 50, Appendix E.IV.G – Maintaining Emergency Preparedness

Regulatory Criteria	E-Plan
Provisions to be employed to ensure that the emergency plan, its implementing procedures, and emergency equipment and supplies are maintained up to date shall be described.	P.4 P.9 P.10 P.11 P.12

Appendix 3 10 CFR 50 Appendix E.IV Cross-Reference

10 CFR 50, Appendix E Section IV.H – Recovery

Regulatory Criteria	E-Plan
Criteria to be used to determine when, following an accident, reentry of the facility would be appropriate or when operation could be resumed shall be described.	M.1

10 CFR 50, Appendix E.IV.I – Onsite Protective Actions During Hostile Action

Regulatory Criteria	E-Plan
By June 20, 2012, for nuclear power reactor licensees, a range of protective actions to protect onsite personnel during hostile action must be developed to ensure the continued ability of the licensee to safely shut down the reactor and perform the functions of the licensee's emergency plan.	J.1

ENCLOSURE 3

EP-PBN-110, PBN Emergency Plan Annex

NEXTera ENERGY	**NUCLEAR FLEET** **PROGRAM DESCRIPTION** NON-SAFETY RELATED **INFORMATION USE**	Program No. **EP-PBN-110** Revision No. **0**

Title:

PBN EMERGENCY PLAN ANNEX

Responsible Department: REGULATORY AFFAIRS

Special Considerations:

Revision	Approved By	Approval Date		
0			TYPE	
			DATE	
			DOCT	PROGRAM
			DOCN	EP-PBN-110
			SYS	
			STATUS	DRAFT
			REV	0
			# OF PAGES	2121212121

Table of Contents

INTRODUCTION

This Point Beach Nuclear (PBN) Emergency Plan Annex supplements the NextEra Common Emergency Plan by providing site specific information unique to the station. It is subject to the same change and audit requirements as the NextEra Common Emergency Plan.

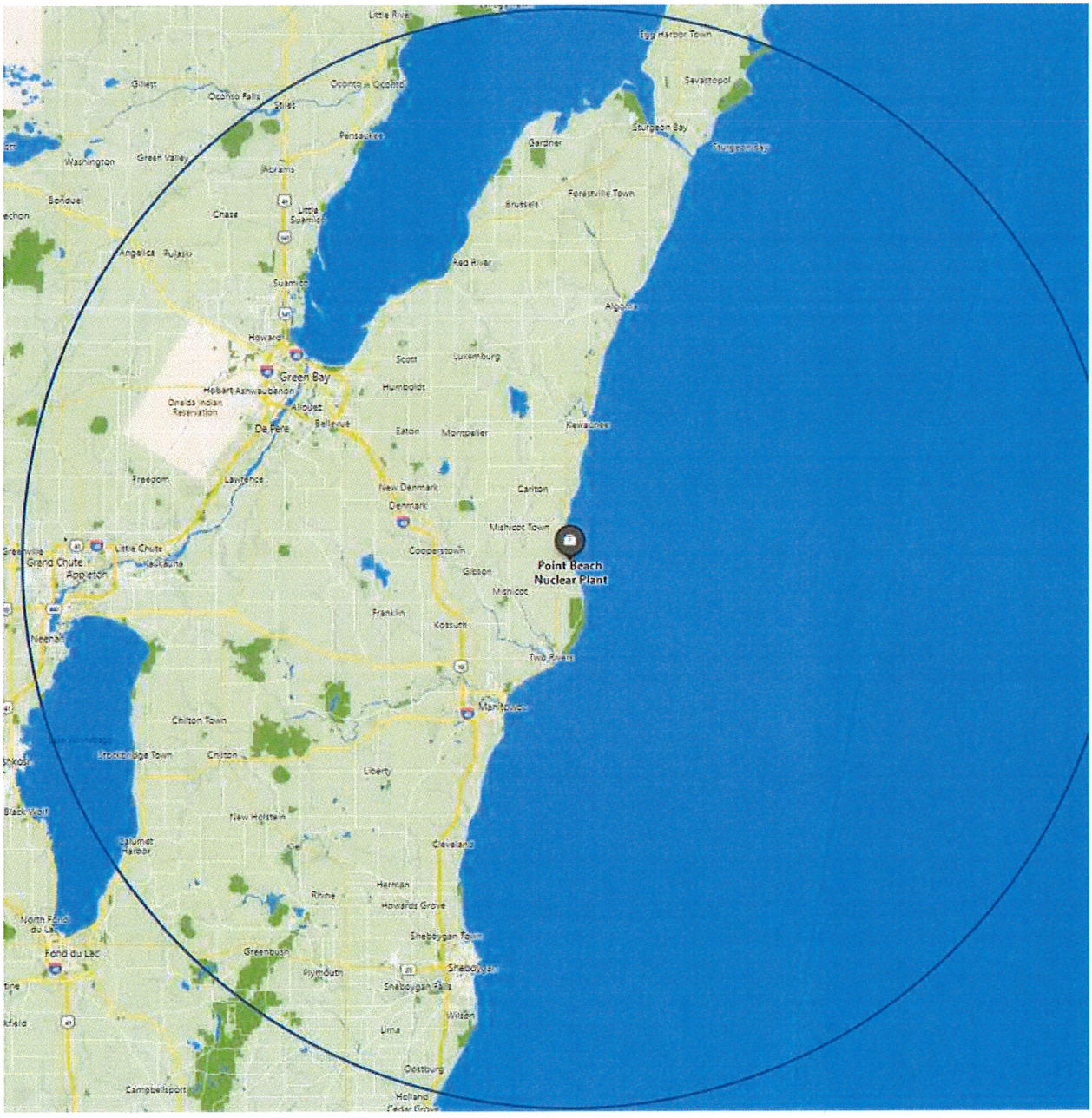
The PBN is a two unit pressurized water nuclear power plant located on a 1,260 acre site in the town of Two Creeks, Wisconsin. The plant is owned and operated by NextEra Energy Point Beach, LLC, an indirect, wholly owned subsidiary of NextEra Energy, Inc.

This document matches the structure of the NextEra Common Emergency Plan in following the format of NUREG-0654. It only contains the guidance elements that have site specific information therefore the numbering may not always be sequential.

Emergency Planning for the PBN station is performed within the following two Emergency Planning Zones (EPZ):

- Plume Exposure Pathway EPZ – The PBN Plume Exposure EPZ approximates a 10-mile radius around the plant site and is described and illustrated in the station's Evacuation Time Estimate Study report.

- Ingestion Pathway EPZ – The PBN Ingestion Pathway EPZ approximates a 50-mile radius around the plant site as illustrated below.



A: Assignment of Responsibility

Primary responsibilities for emergency response by the nuclear facility licensee, and by State and local organizations within the EPZs have been assigned, the emergency responsibilities of the various supporting organization have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

Regulatory References: 10 CFR 50.47(b)(1); 44 CFR 350.5(a)(1);
10 CFR Part 50, Appendix E.IV.A

A.1.a	The organizations having an operational role specify their concept of operations and relationship to the total effort.

3. Offsite Response Organization (OROs)

The principle state agencies having planning and implementation responsibilities for emergencies for PBN are:

a. Wisconsin Department of Military Affairs, WEM

The Administrator of WEM, Department of Military Affairs, has been designated by the Governor of the State of Wisconsin as the state officer to assume the primary responsibility and authority for radiological emergency response planning.

b. Wisconsin Department of Health Services, Radiation Protection Section

Is responsible for preventing exposure to ionizing radiation in amounts which are detrimental to health according to nationally accepted standards.

c. Wisconsin Department of Transportation, Division of State Patrol

Is responsible for directing vehicular and pedestrian movement out of and around the area of the incident, controlling access into the area and providing security at the site.

d. Wisconsin Department of Natural Resources, Division of Enforcement

Provides support to state and local law enforcement agencies and courier service if necessary.

e. Wisconsin Department of Transportation, Division of Highways

Is responsible, when so ordered by the Administrator of WEM, for implementing the Emergency Highway Traffic Regulation Plan when, as a result of a radiological incident a large area is cordoned off by the law enforcement services and vehicular traffic is directed to other roads.

f. Wisconsin Department of Agriculture, Trade and Consumer Protection

Selected department personnel receive training in ingestion sampling procedures. May ban the sale of foods which have harmful levels of radioactivity and advise on the use, sale, or disposal of animal feeds containing harmful levels of radioactive contamination.

The counties with emergency service departments and other agencies interrelated to these local governments within the 10-mile EPZ (plume exposure pathway) of PBN are:

- Manitowoc County
- Kewaunee County

Under the provisions of the Wisconsin Statutes 22.16 and the Manitowoc and Kewaunee County Emergency Government Ordinances, authorities of both counties have the responsibility and authority to coordinate offsite emergency activities in the event of a radiological incident. Each county has prepared a County Emergency Operations Plan to carry out this responsibility which is applicable to emergencies at PBN.

The Manitowoc and Kewaunee County Emergency Organization will provide or assist the emergency response activities by the following:

a. Provide notification to county and support agencies and local area residents that an incident has occurred at PBN, if necessary.

b. Provide liaison and communication capabilities with the plant facility and appropriate federal, state and local organizations.

c. Assist in providing release of accurate public information concerning the offsite consequences of the emergency through all available media. In addition, advise and instruct area residents on what protective actions should be taken.

d. Assist in providing for medical treatment, health and sanitation services, and mass care for members of the general public.

e. Assist in the evacuation of affected offsite locations, if such an action should be required.

Refer to County Emergency Operations Plans for details on county concept of operations.

The counties within the 50-mile EPZ (ingestion exposure pathway) of PBN are:

- Manitowoc County
- Brown County
- Door County
- Oconto County
- Sheboygan County
- Winnebago County
- Kewaunee County
- Calumet County
- Fond Du Lac County
- Outagamie County
- Shawano County

A.4	Written agreements with the support organizations having an emergency response role within the EPZs are included. The agreements describe the concept of operations, emergency measures to be provided, mutually acceptable criteria for their implementation, and arrangements for exchange of information.

Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by PBN with the following organizations:

- Aurora Health Care – Manitowoc County (Physicians)
- Aurora Medical Center – Manitowoc County (Hospital)
- Bechtel Power Corporation
- Brandt Buses, Inc.
- City Of Two Rivers (Ambulance/Fire)
- City Of Two Rivers Fire Department (Building)
- Dominion Energy Kewaunee Inc. And NextEra Energy Point Beach, LLC (Mutual Assistance)
- Kewaunee County Emergency Management
- Kewaunee County Sheriff's Department
- Manitowoc County Highway Commission (Emergency Snow Removal)
- Manitowoc County Emergency Management
- Manitowoc County Sheriff's Department
- Mishicot Area Ambulance Service
- Two Creeks Volunteer Fire Department
- Town Of Two Creeks (Town Hall)
- University Of Wisconsin Hospital & Clinics
- Westinghouse Electric Company

B: Onsite Emergency Organization

On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and the interfaces among various onsite response activities and offsite support and response activities are specified.

Regulatory References: 10 CFR 50.47(b)(2); 44 CFR 350.5(a)(2);
10 CFR Part 50, Appendix E.IV.A

B.1.a	The site-specific emergency response organization (ERO) is developed. Note that while other site programs, such as operations, fire response, rescue and first aid, and security, may be controlled via other licensing documents, it is only when these personnel are assigned EP functions that they become part of this regulatory standard. Consideration is given to ensure that EP functions are not assigned to individuals who may have difficulties performing their EP function(s) simultaneously with their other assigned (non-EP) duties. Appendix E to 10 CFR Part 50 requires licensees to perform an on-shift staffing analysis to ensure on-shift staff can support the EP functions assigned, as well as other assigned duties.

The PBN on-shift staffing analysis report has been developed in accordance with 10 CFR 50 Appendix E.IV.A.9 and NEI 10-05.

The PBN TSC and OSC are co-located facilities, therefore the Radiation Protection Supervisor (OSC) is not a required minimum ERO staff position.

Refer to EP-PBN-112, PBN On-Shift Staffing Analysis.

B.5	The external organizations, including contractors, that may be requested to provide technical assistance to and augmentation of the ERO, as applicable, are specified.

2. Other External Non-NextEra Support Organizations

   A. Westinghouse (the NSSS vendor for PBN): Upon request, Westinghouse will provide emergency technical assistance, including equipment and/or services, in support of PBN in the unlikely event of an emergency.

   B. Bechtel Power Corporation (the architect-engineer for PBN): Upon request, Bechtel will provide technical assistance to PBN.

C: Emergency Response Support and Resources

Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate state and local staff at the licensee's EOF have been made, and other organizations capable of augmenting the planned response have been identified.

Regulatory References: 10 CFR 50.47(b)(3); 44 CFR 350.5(a)(3); 10 CFR Part 50, Appendix E, Sec. IV.E

C.4	Radiological laboratories, their general capabilities, and expected availability to provide radiological monitoring analysis services that can be used in an emergency are described. Plans to augment the identified radiological laboratories are described.

The station's main chemistry laboratory and a back-up chemistry laboratory located in the TSC Building are equipped for chemical & radiological analyses.

The Wisconsin State Laboratory of Hygiene (WSLH) offers a wide range of radiological testing services. These services include testing environmental samples from nuclear power facilities.

D: Emergency Classification System

A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.

Regulatory References: 10 CFR 50.47(b)(4); 44 CFR 350.5(a)(4);
10 CFR Part 50 Appendix E.IV.B and C

D.1	A standard emergency classification and action level scheme is established and maintained. The scheme provides detailed EALs for each of the four ECLs in Section IV.C.1 of Appendix E to 10 CFR Part 50.

The PBN Emergency Action Level (EAL) scheme is documented in EP-PBN-111, PBN EAL Technical Basis Manual.

E: Notification Methods and Procedures

Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and follow up messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.

Regulatory References: 10 CFR 50.47(b)(5); 44 CFR 350.5(a)(5);
10 CFR Part 50 Appendix E.IV.A, C, D and E

E.1	The mutually agreeable process for direct and prompt notification of response organizations, aligned with the emergency classification and action level scheme, is described.

2. ORO Notification

The following state and county 24/7 warning points are notified of a declared emergency at PBN:

- State of Wisconsin
- Manitowoc County
- Kewaunee County

E.2	The alert and notification systems (ANSs) used to alert and notify the general public within the plume exposure pathway EPZ and methods of activation are described. This description includes the administrative and physical means, the time required for notifying and providing prompt instructions to the public within the plume exposure pathway EPZ, and the organizations or titles/positions responsible for activating the system.

Primary Alert and Notification System (ANS): IPAWS-WEA and IPAWS-EAS.

Backup ANS: Route Alerting.

Manitowoc County is responsible for activation of primary and backup ANS.

Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-PBN-115, PBN Alert and Notification System Design Report.

~~Manitowoc County is responsible for activation of IPAWS and ensuring the operability of the system.~~

F: Emergency Communications

Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

Regulatory References: 10 CFR 50.47(b)(6); 44 CFR 350.5(a)(6);
10 CFR Part 50, Appendix E.IV.E

F.1	**Each principal response organization establishes redundant means of communication and addresses the following provisions:**

F.1.a	**Continuous capability for notification to, and activation of, the emergency response network, including a minimum of two independent communication links.**

An Internet Protocol Telephone (IPT) system is the primary system for about a thousand phones at Point Beach, including those in the Control Room, TSC and OSC. It also provides backup phones in the EOF and JIC. Redundant call manager servers use the local computer network to route calls. External phone calls are routed to the public telephone network over the wide area network to the corporate exchange in Florida or over a direct connection to the local exchange in Mishicot. These paths are redundant. Uninterruptable Power Supplies protect phone system and network components from short duration power interruptions.

A separate Internet Protocol Telephone (IPT) system provides telephone service to the EOF and JIC. It routes telephone calls through the Wide Area Network (WAN) connection and through two PRI communications lines to the local service provider.

Telephone lines to outside exchanges include Mishicot, Wisconsin exchange lines; there are Mishicot exchange lines in the TSC and in the Control Room. Also, the Control Room, TSC and EOF have Federal Telecommunications System (FTS) circuits used for the emergency notification system (ENS), the health physics network (HPN), and the counterpart links as defined by the NRC.

F.2	**Systems for coordinated communication methods for applicable fixed and mobile medical support facilities are described.**

PBN uses the 911 emergency dispatch system to call out medical support facilities. The 911 dispatcher communicates with fixed and mobile facilities as necessary to coordinate response.

H: Emergency Facilities and Equipment

Adequate emergency facilities and equipment to support the emergency response are provided and maintained.

Regulatory References: 10 CFR 50.47(b)(8); 44 CFR 350.5(a)(8);
10 CFR Part 50, Appendix E.IV.E

H.1	A TSC is established, using current Federal guidance, from which NPP conditions are evaluated and mitigative actions are developed.

Site specific TSC details:

- The Technical Support Center (TSC) is located on Elevation 8' of the Admin Building ~~within 5 minutes walking distance of the Control Room.~~
- ~~The facility has the capability to supply and display technical information for use by technical and designated management personnel in support of reactor operations and Control Room functions during emergency and recovery operations.~~ The TSC has its own emergency ventilation system.
- If the TSC is unavailable, the Control Room is the designated backup TSC for radiological emergencies; otherwise, NSB Second floor or EOF may be used.

H.2	An OSC is established, using current Federal guidance, from which repair team activities are planned and teams are dispatched to implement actions.

The Operations Support Center (OSC) located on Elevation 8' of the Admin Building near to Technical Support Center (TSC).

In the event the OSC must be evacuated, the NSB 2nd floor if the primary relocation area or if radiological conditions prevent its, responsibility for reentry teams will be provided from the Control Room.

H.3	An EOF is established, using current Federal guidance, as the primary base of emergency operations for the licensee during a radiological incident. The EOF facilitates the management and coordination of the overall emergency response, including the sharing of information with Federal, state, local, and tribal government authorities.

The Emergency Operations Facility (EOF) is located at 3060 Voyager Drive, Green Bay, WI., approximately 24 miles northwest of the plant.

~~The EOF provides working areas for Federal, State and local response personnel. Including conference areas with white boards, separate briefing/debriefing areas, telephones, ERO telephone contact lists, access to the internet, necessary office supplies and photocopier access, and access to plant radiological information.~~

H.4	An alternative facility (or facilities) is established, using currently provided and/or endorsed guidance, which would be accessible even if the NPP site is under threat of or experiencing hostile action.

The Two Rivers Fire Department (TRFD) is designated as an Alternative Facility which is to be used as a staging area. The TRFD is located at 2122 Monroe Street, Two Rivers, WI.

H.5	A JIC is established, and its location is identified, to coordinate communication from Federal, state, local, and tribal government authorities and licensee personnel with the public and media.

The Point Beach Near-Site JIC is located with the EOF at 3060 Voyager Drive, Green Bay, WI.

I: Accident Assessment

Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

Regulatory References: 10 CFR 50.47(b)(9); 44 CFR 350.5(a)(9);
10 CFR Part 50, Appendix E.IV. A, B and E

I.4.a	The contingency arrangements to obtain and analyze highly radioactive samples from the reactor coolant system, containment atmosphere and sump, and spent fuel pool storage area are described.

Changes have been made to reflect the NRC approved License Amendment Request received from the NRC via letter dated 09/12/22. The NRC issued Amendment Nos. 270 and 272 (Facility Operating Licenses DPR-24 and DPR-27). The amendments delete TS Section 5.5.3, "Post Accident Sampling System (PASS)," and thereby eliminate the requirements to have and Maintain the Post-Accident Sampling System at PBN.

Chemistry procedures describe post-accident contingency plans for obtaining Reactor Coolant, and Residual Heat Removal, Containment Sump, and Fuel Pool samples. Procedures are in place to assess core damage under accident conditions.

J: Protective Response

A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. **Evacuation** time estimates have been developed by applicants and licensees. Licensees shall update the evacuation time estimates on a periodic basis. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

Regulatory References: 10 CFR 50.47(b)(10); 44 CFR 350.5(a)(10);
10 CFR Part 50, Appendix E.IV.E and I

J.2	Provisions are made and coordinated with appropriate offsite entities for evacuation routes and transportation for onsite individuals to a suitable offsite location. Selection of location considers the potential for inclement weather, high traffic density, and potential radiological conditions. Alternate location(s) and route(s) are identified.

The South access road (Nuclear Road) and the North access road (E Tapawingo Road) may be used to depart from the site, and evacuation from the 10-mile EPZ will be by way of evacuation routes identified in the ETE. (See Figure J.2-1, PBN Site Evacuation Routes.)

Evacuated personnel may be required to assemble at the Two Creeks Town Hall or Two Rivers Fire Department depending on environmental conditions.

J.6	The basis and methodology are established for the development of PARs for the responsible OROs, including evacuation, sheltering, and, if appropriate, radioprotective drug use, for the plume exposure pathway EPZ. Current Federal guidance is used.

The PBN site specific PAR basis is documented in EP-PBN-114, PBN Protective Action Recommendation (PAR) Technical Basis Manual.

J.8	The latest ETEs are:

J.8.a	Incorporated either by reference or in their entirety into the emergency plan.

The PBN site specific ETE report is documented in EP-PBN-113, PBN Evacuation Time Estimate Study.

Figure J.2-1: PBN Site Evacuation Routes

K: Radiological Exposure Control

Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

Regulatory References: 10 CFR 50.47(b)(11), 10 CFR Part 50, Appendix E.IV.E

K.1	The radiation protection controls for emergency workers to be implemented during emergencies are described. These controls address the following aspects:

K.1.e	The capability to decontaminate emergency workers, equipment, and vehicles.

Facilities and supplies for decontaminating personnel are available at the RP station and OSC.

L: Medical and Public Health Support

Arrangements are made for medical services for contaminated injured individuals.

Regulatory Reference: 10 CFR 50.47(b)(12); 10 CFR Part 50, Appendix E.IV.E

L.2	Arrangements for the medical treatment of contaminated injured onsite personnel and those onsite personnel who have received significant radiation exposures and/or significant uptakes of radioactive material are described. These arrangements include the following components:

L.2.b	Primary and backup offsite medical facilities.

The primary and backup offsite medical facilities to treat contaminated, injured personnel from PBN are:

Primary – The Aurora Medical Center – Manitowoc County will provide medical assistance to PBN personnel. The Aurora Medical Center maintains a facility equipped to provide first aid, emergency medical stabilization treatment, and decontamination for ill or injured personnel from plant. It is available 24 hours a day, and is equipped with a sink, decontamination supplies, protective clothing, signs, and other necessary equipment.

Backup – University Hospital and Clinics in Madison, Wisconsin, may be utilized if the treatment required extend beyond the capabilities of the Aurora Medical Center. The University Hospital provides instruction and training on handling radiological accident patients.

L.4	Each organization arranges for the transportation of contaminated, injured individuals and the means to control contamination while transporting victims of radiological incidents to medical support facilities and the decontamination of transport vehicle following use.

Mishicot Ambulance Service is the primary provider for the transportation of contaminated, injured individuals. The City of Two Rivers may provide backup ambulance service to transport injured persons from PBN. Each service has the means to control contamination while transporting victims.

N: Exercises and Drills

Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.

Regulatory References: 10 CFR 50.47(b)(14); 44 CFR 350.5(a)(14);
10 CFR Part 50, Appendix E.IV.F

N.4.g	**Post-Accident Sampling Drills** Post-accident sampling drills are conducted annually. These drills address capabilities including analysis of liquid and containment atmosphere samples with simulated elevated radiation levels. This criterion is not applicable if the NPP unit(s) does (do) not have licensing basis requirements for post-accident sampling.

Not applicable: PBN has received NRC approval for the elimination of post-accident sample system (PASS) requirements from technical specifications. In accordance with their site specific NRC safety evaluation, contingency plans have been developed for obtaining and analyzing highly radioactive samples; however, these contingency plans do not have to be carried out in emergency plan drills or exercises.

Refer to site annex element I.4.a for reference to the PASS elimination safety evaluation.

P: Responsibility for the Planning Effort

Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.

Regulatory References: 10 CFR 50.47(b)(16); 10 CFR Part 50, Appendix E.IV.B and G

P.6	A listing of annexes, appendices, and supporting plans and their originating agency is included in the emergency plan.

The primary external emergency plans specific to the support of PBN include the following:

- Wisconsin Emergency Response Plan
- Manitowoc County Emergency Operations Plan
- Kewaunee County Emergency Operations Plan

P.7	An appendix containing a listing by title of the procedures required to maintain and implement the emergency plan is included. The listing includes the section(s) of the emergency plan to be implemented by each procedure.

Table P.7-1 provides a listing of the PBN site-specific procedures required to maintain and implement the emergency plan, and the section(s) of the emergency plan implemented by each procedure.

Table P.7-1: PBN Emergency Plan Response and Administrative Procedures

Document ID	Document Title	Plan Sections Implemented
	[To be developed following E-Plan Approval]	

ENCLOSURE 4

EP-PSL-120, PSL Emergency Plan Annex

NEXTera ENERGY	NUCLEAR FLEET **PROGRAM DESCRIPTION** NON-SAFETY RELATED **INFORMATION USE**	Program No. **EP-PSL-120** Revision No. **0**

Title:

PSL EMERGENCY PLAN ANNEX

Responsible Department: REGULATORY AFFAIRS

Special Considerations:

Revision	Approved By	Approval Date
0		

TYPE	
DATE	
DOCT	PROGRAM
DOCN	EP-PSL-120
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STATUS	DRAFT
REV	0
# OF PAGES	2121212122

Table of Contents

INTRODUCTION

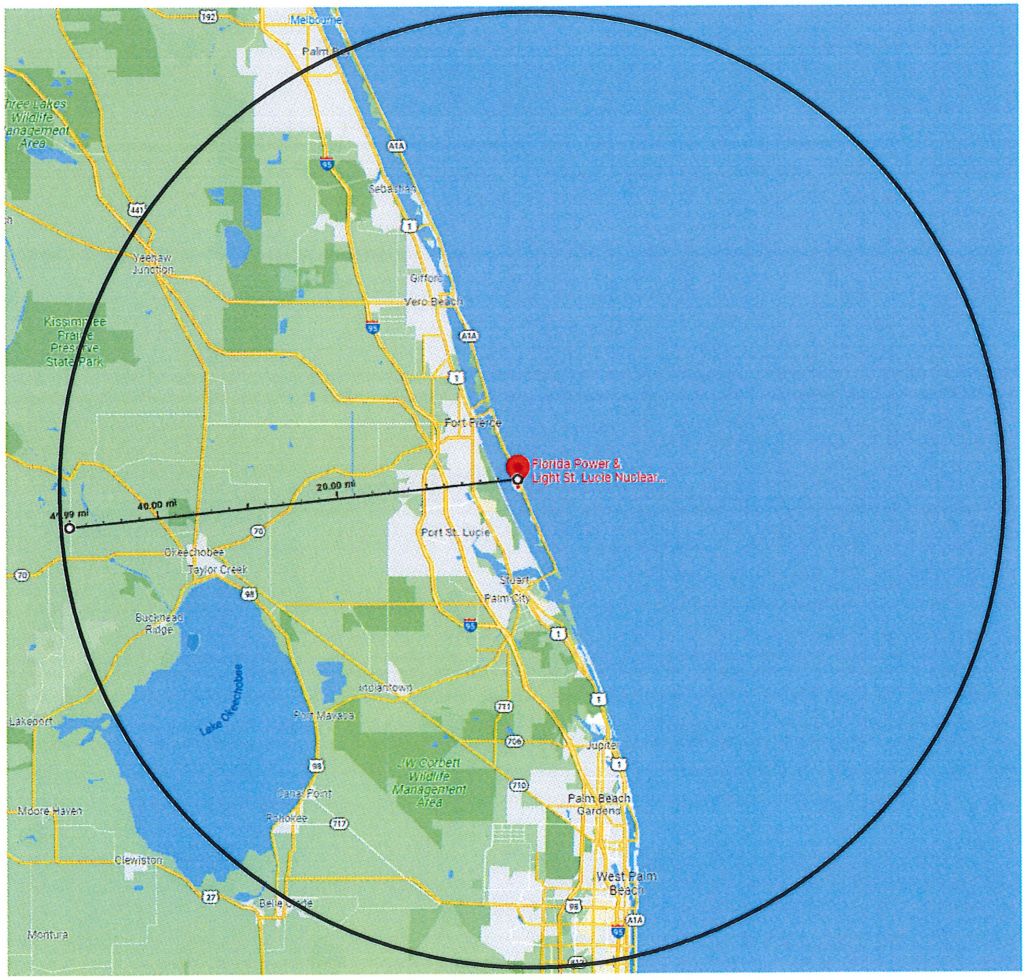
This St. Lucie Plant (PSL) Emergency Plan Annex supplements the NextEra Common Emergency Plan by providing site specific information unique to the station for coping with radiological emergencies at PSL, a facility with two commercial power reactors, Units 1 and 2 located in St. Lucie County, Florida. It is subject to the same change and audit requirements as the NextEra Common Emergency Plan.

This document matches the structure of the NextEra Common Emergency Plan in following the format of NUREG-0654. It only contains the guidance elements that have site specific information therefore the numbering may not always be sequential.

Emergency Planning for the PSL station is performed within the following two Emergency Planning Zones (EPZ):

- Plume Exposure Pathway EPZ – The PSL Plume Exposure EPZ approximates a 10-mile radius around the plant site and is described and illustrated in the station's Evacuation Time Estimate Study report.

- Ingestion Pathway EPZ – The PSL Ingestion Pathway EPZ approximates a 50-mile radius around the plant site as illustrated below.



A: Assignment of Responsibility

Primary responsibilities for emergency response by the nuclear facility licensee, and by State and local organizations within the EPZs have been assigned, the emergency responsibilities of the various supporting organization have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

Regulatory References: 10 CFR 50.47(b)(1); 44 CFR 350.5(a)(1);
10 CFR Part 50, Appendix E.IV.A

A.1.a	The organizations having an operational role specify their concept of operations and relationship to the total effort.

3. Offsite Response Organizations (ORO)

A) State Response Organizations

The principle state agencies having planning and implementation responsibilities for emergencies for PSL are:

State of Florida Division of Emergency Management

The Division of Emergency Management (DEM) is the state agency authorized to receive initial notification from Florida Power & Light Company (FPL). The State Watch Office (SWO) is responsible for alerting the state and county emergency response agencies to all notifications from FPL. Specific discussion on transportation of state emergency response personnel to the vicinity of the plant is discussed in Chapter 8 of the State Plan. This emergency response is conducted in accordance with the State Plan prepared by the DEM, in coordination with other State and County emergency response agencies.

The DEM's defined responsibilities include:

1) Overall responsibility for coordinating the development and implementation of state and county emergency responseplans.

2) Command and control of State emergency response resources.

3) Notification of state and county response agencies.

4) Coordination among state, federal (i.e., FEMA, EPA, DOE), and local agencies.

State of Florida Department of Health

The Department of Health is the state agency authorized to provide the DEM with technical support and expertise in public health matters.

Department of Health defined responsibilities include:

1) Emergency medical services, public health, and sanitation.

2) Economic and social services (through the FH Bureau of Radiation Control (BRC)).

3) Radiological monitoring, off-site.

4) Off-site radiological exposure control and protective response recommendations for plume and ingestion pathway counties.

Department of Highway Safety and Motor Vehicles, Division of Florida Highway Patrol

The Florida Highway Patrol, through the coordination of the Department of Law Enforcement, provides the following services.

1) Traffic control

2) Communications (support)

3) Law enforcement coordination

4) Upon request, assist in the transportation of samples for analysis when immediate analysis is necessary

5) Within their authority, evaluate and exclude individuals from designated public areas.

These services will be provided in accordance with the State Plan (Chapter 2).

B) County Response Organizations

The county and municipal governments (within the counties) with emergency service departments and other agencies interrelated to these local governments within the 10-mile EPZ (plume exposure pathway) of PSL are:

- St. Lucie County
- Martin County

The county and municipal governments (within the counties) with emergency service departments and other agencies interrelated to these local governments within the 50-mile EPZ (ingestion exposure pathway) of PSL are:

- Indian River County
- Brevard County
- Palm Beach County
- Osceola County
- Okeechobee County
- Highlands County
- Glades County

The responsibility for hosting evacuees rests on Palm Beach, Indian River, and Brevard Counties.

Boards of County Commissioners will take proper and responsible action to protect life, health, safety, property, and the environment from the consequences of nuclear power accidents. During radiological emergencies, resources and personnel of St. Lucie, Martin, Indian River, Palm Beach, and Brevard Counties will be reserved and available for use by County Commissioners. Decision to implement protective action recommendations will be made jointly by the Chairpersons, Boards of County Commissioners (of the affected counties), and the Governor or State Director, Division of Emergency Management. All County personnel and resources will be under the control of the County Commissioners. Federal and State resources will also be available to the Counties.

A.4	Written agreements with the support organizations having an emergency response role within the EPZs are included. The agreements describe the concept of operations, emergency measures to be provided, mutually acceptable criteria for their implementation, and arrangements for exchange of information.

Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by PSL with the following organizations:

- Westinghouse Electric (ABB/CE)
- AECOM
- Institute of Nuclear Power Operations (INPO)
- U.S. Coast Guard
- Florida Highway Patrol
- St. Lucie County Sheriff's Department
- St. Lucie County Fire District
- City of Ft. Pierce - Police Department
- City of Ft. Pierce - City Manager
- Martin County Sheriff's Department
- AREVA NP Inc. (Framatome Technologies)
- U.S. Department of Energy (Savannah River Operations)
- U.S. Department of Energy (REAC/TS)
- Lawnwood Regional Medical Center
- Cleveland Clinic Martin Health
- Bechtel Power Corporation
- Martin County Fire Rescue
- Martin County Department of Emergency Services

B: Onsite Emergency Organization

On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and the interfaces among various onsite response activities and offsite support and response activities are specified.

Regulatory References: 10 CFR 50.47(b)(2); 44 CFR 350.5(a)(2);
10 CFR Part 50, Appendix E.IV.A

B.1.a	The site-specific emergency response organization (ERO) is developed. Note that while other site programs, such as operations, fire response, rescue and first aid, and security, may be controlled via other licensing documents, it is only when these personnel are assigned EP functions that they become part of this regulatory standard. Consideration is given to ensure that EP functions are not assigned to individuals who may have difficulties performing their EP function(s) simultaneously with their other assigned (non-EP) duties. Appendix E to 10 CFR Part 50 requires licensees to perform an on-shift staffing analysis to ensure on-shift staff can support the EP functions assigned, as well as other assigned duties.

The PSL on-shift staffing analysis report has been developed in accordance with 10 CFR 50 Appendix E.IV.A.9 and NEI 10-05.

Refer to EP-PSL-122, PSL On-Shift Staffing Analysis.

B.5	The external organizations, including contractors, that may be requested to provide technical assistance to and augmentation of the ERO, as applicable, are specified.

2. Other External Non-NextEra Support Organizations

   A. Westinghouse: ABB/Combustion Engineering (CE), now Westinghouse Electric, is the Nuclear Steam Supply System vendor for PSL. Upon request, Westinghouse Electric can supply emergency technical services and resources as provided by the Purchase Order listed in Appendix E.

   B. AECOM (previously URS and Washington Group): AECOM is the Architect/Engineer for PSL. Upon request, AECOM can supply emergency services.

C: Emergency Response Support and Resources

Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate state and local staff at the licensee's EOF have been made, and other organizations capable of augmenting the planned response have been identified.

Regulatory References: 10 CFR 50.47(b)(3); 44 CFR 350.5(a)(3);
10 CFR Part 50, Appendix E, Sec. IV.E

C.4	Radiological laboratories, their general capabilities, and expected availability to provide radiological monitoring analysis services that can be used in an emergency are described. Plans to augment the identified radiological laboratories are described.

Florida Power & Light Company has primary and backup radiological laboratory facilities on-site. A hot lab backup will be provided by portable equipment described in procedures. Environmental sampling will be augmented by the State's Radiological monitoring team and the Mobile Emergency Radiological Laboratory (MERL) within approximately three hours of activation. A Florida DOH-BRC representative dispatched to the EOF will coordinate all State off-site field monitoring data and sample media. If required, the laboratory facilities at FPL's Turkey Point Plant can be used; appropriate arrangements will be made on an as-needed basis.

D: Emergency Classification System

A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.

Regulatory References: 10 CFR 50.47(b)(4); 44 CFR 350.5(a)(4);
10 CFR Part 50 Appendix E.IV.B and C

D.1	A standard emergency classification and action level scheme is established and maintained. The scheme provides detailed EALs for each of the four ECLs in Section IV.C.1 of Appendix E to 10 CFR Part 50.

The PSL EAL scheme is documented in EP-PSL-121, PSL Emergency Action Level Technical Basis Manual.

E: Notification Methods and Procedures

Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and follow up messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.

Regulatory References: 10 CFR 50.47(b)(5); 44 CFR 350.5(a)(5);
10 CFR Part 50 Appendix E.IV.A, C, D and E

E.1	The mutually agreeable process for direct and prompt notification of response organizations, aligned with the emergency classification and action level scheme, is described.

2. State and Local Event Notification

The site-specific state and county entities (24/7 warning points) notified of a declared emergency at PSL are as follows:

- State of Florida (State Watch Office)
- St. Lucie County
- Martin County
- Department of Health Bureau of Radiation Control (via SWO)

E.2	The alert and notification systems (ANSs) used to alert and notify the general public within the plume exposure pathway EPZ and methods of activation are described. This description includes the administrative and physical means, the time required for notifying and providing prompt instructions to the public within the plume exposure pathway EPZ, and the organizations or titles/positions responsible for activating the system.

Primary Alert and Notification System (ANS): Siren system.

Backup ANS: Route Alerting.

St. Lucie and Martin County Public Safety/Emergency Management are responsible for activation of primary and backup ANS.

Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-PSL-125, PSL Alert and Notification System Design Report.

F: Emergency Communications

Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

Regulatory References: 10 CFR 50.47(b)(6); 44 CFR 350.5(a)(6);
10 CFR Part 50, Appendix E.IV.E

F.1	**Each principal response organization establishes redundant means of communication and addresses the following provisions:**

F.1.a	**Continuous capability for notification to, and activation of, the emergency response network, including a minimum of two independent communication links.**

Each Control Room contains the necessary communications equipment for notifying on-site personnel and off-site authorities in the event of an accident. This includes the Hot Ring Down (HRD) telephone to the State Watch Office (SWO), EMnet (Satellite Communications System), Emergency Notification System (ENS) to the NRC Operations Center (in Maryland), commercial telephones, Florida Power & Light Company radio system, public address system, portable radio sets (walkie-talkies), and a radio paging system. These systems are used as defined by procedure to accomplish the necessary notifications and communications.

The Technical Support Center has an emergency communications network similar to the Control Rooms. The TSC also has the NRC Emergency Telecommunications System (ETS).

The OSC is maintained in the Outage Control Center on the second floor of the South Service Building. Telephone communications are maintained between the OSC and the Technical Support Center.

The Emergency Operations Facility has an emergency communications network including but not limited to, commercial (Bell) telephone lines, Hot Ring Down (HRD) phone, NRC ENS, NRC HPN, NRC counterpart links, EMnet (Satellite Communications System), and various Florida Power & Light Co. maintained radio systems.

F.2	**Systems for coordinated communication methods for applicable fixed and mobile medical support facilities are described.**

When injured personnel are transported to an off-site medical facility by county ambulance, radio contact, as well as telemetry, is normally maintained between the facility and the ambulance. In accordance with procedures, telephone notification is made by the Plant to the medical facility concerning the pending arrival of an injured person(s).

H: Emergency Facilities and Equipment

Adequate emergency facilities and equipment to support the emergency response are provided and maintained.

Regulatory References: 10 CFR 50.47(b)(8); 44 CFR 350.5(a)(8); 10 CFR Part 50, Appendix E.IV.E

H.1	A TSC is established, using current Federal guidance, from which NPP conditions are evaluated and mitigative actions are developed.

~~The company maintains an on-site Technical Support Center to provide the Control Room with in-depth diagnostic and engineering assistance without adding to congestion within the Control Room. The TSC interfaces with the EOF regarding those diagnostic and engineering decisions. This assistance can help determine the operational decisions that would be appropriate to best control and mitigate the consequences of the emergency.~~

Site specific TSC details:

- The TSC is on the 62-foot elevation of the Unit 1 Reactor Auxiliary Building (RAB).
- The TSC is located adjacent to the Unit 1 Control Room and is enclosed in the same habitability envelope. ~~The TSC has emergency communications equipment, pre-calculated emergency data, pertinent reports, plans, procedures and drawings available for use.~~
- Should the Unit 1 Control Room envelope require evacuation, alternate locations for the TSC have been identified as follows:
-
  - South Service Building
  - Nuclear Training Center

H.2	An OSC is established, using current Federal guidance, from which repair team activities are planned and teams are dispatched to implement actions.

The OSC is maintained in the Outage Control Center on the second floor of the South Service Building.

In the event that the OSC becomes uninhabitable, the Emergency Coordinator will designate an alternate location in accordance with procedures.

H.3	An EOF is established, using current Federal guidance, as the primary base of emergency operations for the licensee during a radiological incident. The EOF facilitates the management and coordination of the overall emergency response, including the sharing of information with Federal, state, local, and tribal government authorities.

The Emergency Operations Facility is located at the intersection of State Route 712 (Midway Road) and I-95 approximately 10 ½ miles west of PSL. ~~The EOF has sufficient space to accommodate the Florida Power & Light Company response organization and designated representatives of the federal, state, and local authorities. Alternate temporary locations for the Emergency Operations Facility may be designated by the Recovery Manager if a natural disaster or other (non-radiological) external event significantly affects the operational capability of the facility.~~

H.4	An alternative facility (or facilities) is established, using currently provided and/or endorsed guidance, which would be accessible even if the NPP site is under threat of or experiencing hostile action.

The EOF serves as an alternative facility for the Technical Support Center and the Operations Support Center in a hostile action event at the station.

H.5	A JIC is established, and its location is identified, to coordinate communication from Federal, state, local, and tribal government authorities and licensee personnel with the public and media.

A Joint Information Center (JIC) is provided to allow the news media access to information from the Emergency Operations Facility. The JIC is co-located with the EOF (Midway Road/I-95 intersection).

When activated during and event, the near-site JIC is staffed by site personnel. The near site JIC is designed to facilitate representatives from county, state and federal agencies, as well as members of the media.

I: Accident Assessment

Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

Regulatory References: 10 CFR 50.47(b)(9); 44 CFR 350.5(a)(9);
10 CFR Part 50, Appendix E.IV.A, B, and E

I.4.a	The contingency arrangements to obtain and analyze highly radioactive samples from the reactor coolant system, containment atmosphere and sump, and spent fuel pool storage area are described.

Changes have been made to reflect the NRC approved License Amendment Request received from the NRC. The NRC issued Plant License Amendment L-2000-131, Relief from Technical Specification and NUREG - 0737 Requirements for Post-Accident Sampling System. Approved amendments: Unit 1 #174, Unit 2 #114 and thereby eliminated the requirements to have and maintain the Post-Accident Sampling System at PSL.

A chemistry procedure describes post-accident contingency plans for obtaining high activity samples. Procedures are in place to assess core damage under accident conditions.

J: Protective Response

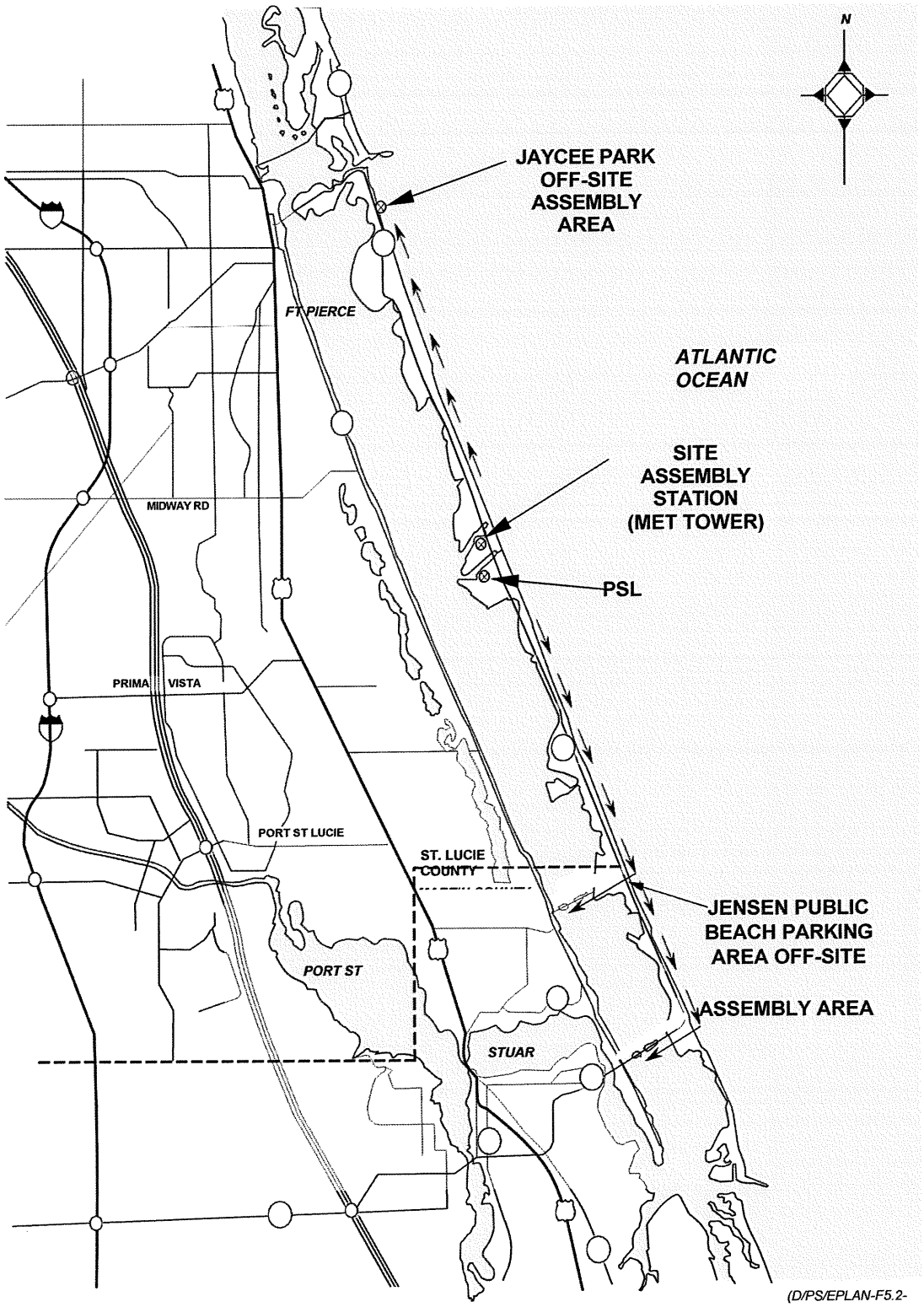
A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. **Evacuation** time estimates have been developed by applicants and licensees. Licensees shall update the evacuation time estimates on a periodic basis. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

Regulatory References: 10 CFR 50.47(b)(10); 44 CFR 350.5(a)(10);
10 CFR Part 50, Appendix E.IV.E and I

J.2	Provisions are made and coordinated with appropriate offsite entities for evacuation routes and transportation for onsite individuals to a suitable offsite location. Selection of location considers the potential for inclement weather, high traffic density, and potential radiological conditions. Alternate location(s) and route(s) are identified.

When an evacuation is ordered, all non-essential personnel shall exit the PA via their normal gate unless otherwise directed by the EC. Non-essential personnel shall travel from the plant site following the designated evacuation route. Figure J.2-1 shows the evacuation route(s) for personnel. It is expected that the primary evacuation route will not be affected by adverse weather or traffic conditions. If a release is in progress and the potential exists for contamination of evacuees, they will be directed to an off-site assembly area. The primary assembly area for evacuated personnel is the Jaycee Public Park on Highway A1A, located approximately 7 ½ miles north of the plant on the road to Ft. Pierce. The alternate assembly area, south of the plant, is Jensen Public Beach Parking Area. All personnel will be requested to remain at the assembly area until instructed otherwise.

Figure J.2-1: PSL Site Evacuation Routes



J.6	The basis and methodology are established for the development of PARs for the responsible OROs, including evacuation, sheltering, and, if appropriate, radioprotective drug use, for the plume exposure pathway EPZ. Current Federal guidance is used.

The PSL site specific basis adaptation of NUREG-0654 Supplement 3 PARs is documented in in EP-PSL-124, PSL Protective Action Recommendation Technical Basis Manual.

J.8	The latest ETEs are:

J.8.a	Incorporated either by reference or in their entirety into the emergency plan.

The PSL site specific ETE report is documented in EP-PSL-123, PSL Evacuation Time Estimate Study.

K: Radiological Exposure Control

Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

Regulatory References: 10 CFR 50.47(b)(11), 10 CFR Part 50, Appendix E.IV.E

K.1	The radiation protection controls for emergency workers to be implemented during emergencies are described. These controls address the following aspects:

K.1.e	The capability to decontaminate emergency workers, equipment, and vehicles.

Personnel decontamination facilities are available in three locations. Their use will be governed by the nature of the incident.

1. Site Hot Locker Rooms – Showers and sinks available for the decontamination of personnel with no (or minor) injuries. One is located in the Auxiliary Building for each unit.

2. Site Decontamination Facility – The Site Assembly Station personnel decontamination capabilities consist of utilizing various types of decontamination agents, such as waterless cleaners and decontamination foams. A quantity of cloth material is available for use with these decontamination agents. Contamination monitoring is performed through the use of count rate instruments with beta sensitive probes. Extra clothing for personnel whose personal clothing has been contaminated is available in the form of disposable garments. Decontamination of vehicles will be handled following the accident. Methods for decontamination and monitoring are described in plant procedures.

3. Offsite Medical Centers – Lawnwood Regional Medical Center and Cleveland Clinic Martin Health are available for medical treatment and decontamination of contaminated injured individuals.
   - Lawnwood Regional Medical Center is located approximately 8 miles Northwest of PSL in Ft. Pierce, FL.
   - Cleveland Clinic Martin Health is located approximately 10 1/4 miles South of PSL in Stuart, FL.

L: Medical and Public Health Support

Arrangements are made for medical services for contaminated injured individuals.

Regulatory Reference: 10 CFR 50.47(b)(12); 10 CFR Part 50, Appendix E.IV.E

L.2	Arrangements for the medical treatment of contaminated injured onsite personnel and those onsite personnel who have received significant radiation exposures and/or significant uptakes of radioactive material are described. These arrangements include the following components:

L.2.b	Primary and backup offsite medical facilities.

The two offsite medical facilities to treat contaminated, injured personnel from PSL are:

1. Lawnwood Regional Medical Center in Ft. Pierce, Fl. The Lawnwood Regional maintains a facility equipped to provide first aid, emergency medical stabilization treatment, and decontamination for ill or injured personnel from plant. It is available 24 hours a day, and is equipped with a sink, decontamination supplies, protective clothing, signs, and other necessary equipment.

2. Cleveland Clinic Martin Health in Stuart, Fl. may be utilized if the treatment required extend beyond the capabilities of the Lawnwood Regional Medical Center.

L.4	Each organization arranges for the transportation of contaminated, injured individuals and the means to control contamination while transporting victims of radiological incidents to medical support facilities and the decontamination of transport vehicle following use.

St. Lucie County Fire District Rescue service, company, or private vehicle will provide transportation of personnel with injuries whether or not the injury is associated with radiation or contamination. The fire district rescue service is preferred, but in the case of injuries which require urgent transportation or external exposure without contamination, other transportation may be used.

N: Exercises and Drills

Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.

Regulatory References: 10 CFR 50.47(b)(14); 44 CFR 350.5(a)(14);
10 CFR Part 50, Appendix E.IV.F

N.4.g	**Post-Accident Sampling Drills** Post-accident sampling drills are conducted annually. These drills address capabilities including analysis of liquid and containment atmosphere samples with simulated elevated radiation levels. This criterion is not applicable if the NPP unit(s) does (do) not have licensing basis requirements for post-accident sampling.

Not applicable. PSL has received NRC approval for the elimination of post-accident sample system (PASS) requirements from technical specifications. In accordance with their site specific NRC safety evaluation, contingency plans have been developed for obtaining and analyzing highly radioactive samples; however, these contingency plans do not have to be carried out in emergency plan drills or exercises.

Refer to element I.4.a for reference to the PASS elimination safety evaluation.

P: Responsibility for the Planning Effort

Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.

Regulatory References: 10 CFR 50.47(b)(16); 10 CFR Part 50, Appendix E.IV.D and G

P.6	A listing of annexes, appendices, and supporting plans and their originating agency is included in the emergency plan.

External emergency plans specific to the support of PSL include the following:

- Florida Emergency Response Plan
- St. Lucie County Emergency Operations Plan
- Martin County Radiological Emergency Preparedness Plan

P.7	An appendix containing a listing by title of the procedures required to maintain and implement the emergency plan is included. The listing includes the section(s) of the emergency plan to be implemented by each procedure.

Table P.7-1 provides a listing of the PSL site-specific procedures required to maintain and implement the emergency plan, and the section(s) of the emergency plan implemented by each procedure.

Table P.7-1: PSL Emergency Plan Response and Administrative Procedures

Document ID	Document Title	Plan Sections Implemented[1]
	[To be developed following E-Plan approval]	

ENCLOSURE 5

EP-PTN-130, PTN Emergency Plan Annex

NEXTera ENERGY	NUCLEAR FLEET **PROGRAM DESCRIPTION** NON-SAFETY RELATED **INFORMATION USE**	Program No. **EP-PTN-130** Revision No. **0**

Title:

PTN EMERGENCY PLAN ANNEX

Responsible Department: REGULATORY AFFAIRS

Special Considerations:

Revision	Approved By	Approval Date
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DOCT	PROGRAM
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SYS	
STATUS	DRAFT
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# OF PAGES	28

Table of Contents

INTRODUCTION

This Turkey Point Nuclear Plant (PTN) Emergency Plan Annex supplements the NextEra Common Emergency Plan by providing site specific information unique to the station. It is subject to the same change and audit requirements as the NextEra Common Emergency Plan.

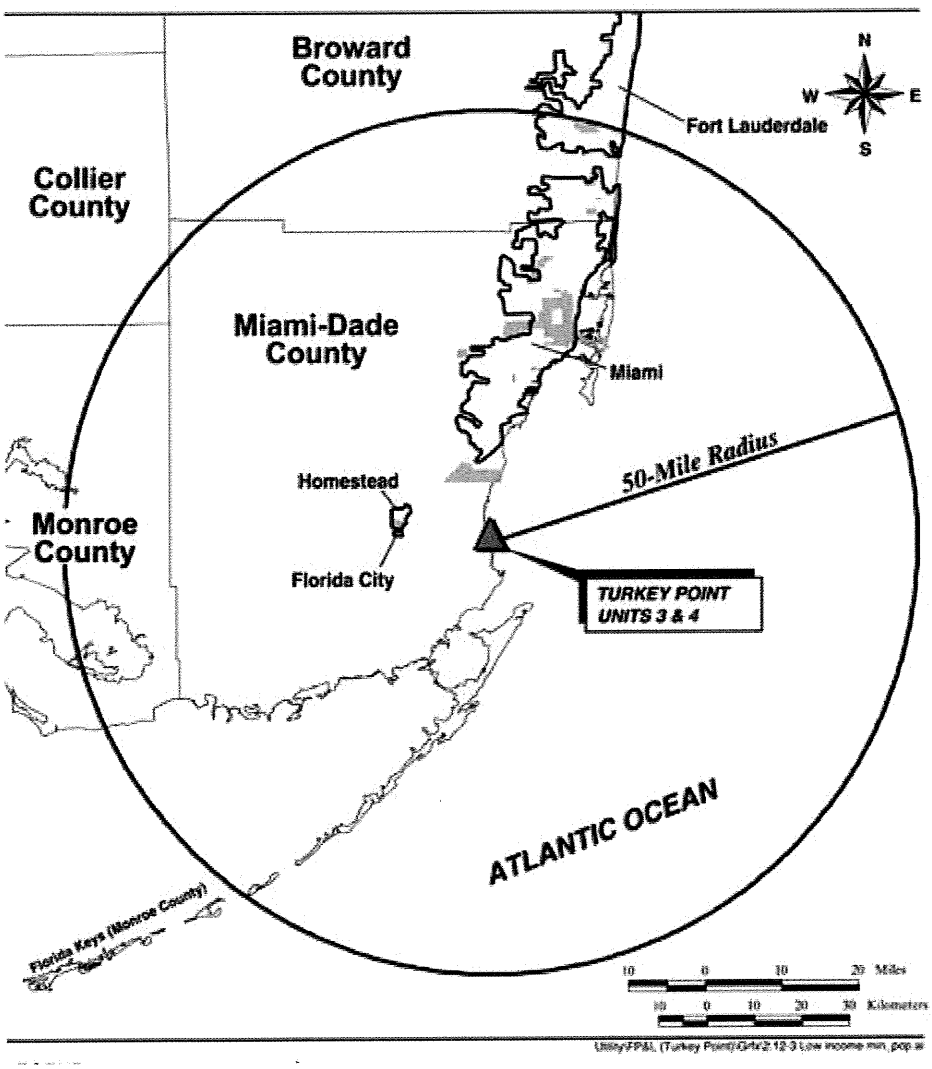
PTN includes two 802 MWe Westinghouse pressurized water reactors (Units 3 and 4) located on a 3,300-acre site two miles east of Homestead, Florida, United States, next to Biscayne National Park located about 25 miles (40 km) south of Miami, Florida near the southernmost edge of Miami-Dade County.

This document matches the structure of the NextEra Common Emergency Plan in following the format of NUREG-0654. It only contains the guidance elements that have site specific information therefore the numbering may not always be sequential.

Emergency Planning for the PTN station is performed within the following two Emergency Planning Zones (EPZ):

- Plume Exposure Pathway EPZ – The PTN Plume Exposure EPZ approximates a 10-mile radius around the plant site and is described and illustrated in the station's Evacuation Time Estimate Study report.
- Ingestion Pathway EPZ – The PTN Ingestion Pathway EPZ approximates a 50-mile radius around the plant site as illustrated below.

Figure 1-1 Plume Exposure Pathway Emergency Planning Zone



A: Assignment of Responsibility

Primary responsibilities for emergency response by the nuclear facility licensee, and by State and local organizations within the EPZs have been assigned, the emergency responsibilities of the various supporting organization have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

Regulatory References: 10 CFR 50.47(b)(1); 44 CFR 350.5(a)(1);
10 CFR Part 50, Appendix E.IV.A

A.1.a	The organizations having an operational role specify their concept of operations and relationship to the total effort.

3. Offsite Response Organization (ORO)

A. State Response Organizations

The principle state agencies having planning and implementation responsibilities for emergencies for PTN are:

State of Florida Division of Emergency Management (DEM)

DEM is the state agency authorized to receive initial notification from Florida Power & Light Company and is responsible for mobilizing the state and local emergency response agencies. Specific discussion on transportation of state emergency response personnel to the vicinity of the plant is discussed in the state plan. This emergency response is conducted in accordance with the Florida Radiological Emergency Management Plan for Nuclear Power Plants, prepared by the DEM in coordination with other emergency response agencies. The DEM's responsibilities include:

1) Overall responsibility for coordinating the development and implementation of State and County emergency response plans
2) Command and control of State emergency response resources
3) Notification of State and County response agencies
4) Coordination among State, Federal (i.e., FEMA, EPA, DOE) and Local agencies

The DEM can request support, as necessary, from other state agencies as defined in the State Plan.

Florida Health (FH)

FH is the state agency authorized to provide technical support and expertise in Public Health matters. The FH defined responsibilities include:

1) Emergency medical services, public health, and sanitation
2) Economic and social services

Through the FH Bureau of Radiation Control (BRC):

3) Radiological monitoring off site

4) Off-site radiological exposure control and protective response recommendations for off-site areas

Division of Florida Highway Patrol, Department of Highway Safety and Motor Vehicles

The Florida Highway Patrol, through the coordination of the Department of Law Enforcement, provides the following services:

1) Traffic control

2) Communications (support)

3) Law enforcement coordination

4) Upon request, assist in the transportation of samples for analysis when immediate analysis is necessary.

5) Within their authority, evacuate and exclude individuals from designated public areas.

These services will be provided in accordance with the State Plan.

B. County Response Organizations

The counties within the 50-mile EPZ (ingestion exposure pathway) of PTN are:

- Broward County
- Collier County
- Miami-Dade County
- Monroe County

The Miami-Dade County and Monroe County Plans are a part of the State Plan. The State Plan includes the Miami-Dade and Monroe Counties' Radiological Emergency Organizations. The State Plan also includes host plans for Miami-Dade County and Monroe County, respectively.

The local organizations are described in the State Plan. Counties may have responsibilities with respect to plume exposure risk response, hosting of evacuees, and ingestion pathway protection. Miami-Dade and Monroe Counties have responsibilities with respect to risk, hosting and ingestion pathway. Collier and Broward Counties have responsibility for ingestion pathway.

The State Plan addresses short term actions required in the plume exposure pathway EPZ. The State Plan also addresses the ingestion pathway EPZ. State agencies take the lead in controlling ingestion pathway response. The State Plan also establishes procedures to protect citizens of Miami-Dade and Monroe Counties and visitors to these counties from the effect of an accident at PTN.

The Miami-Dade Mayor and the Monroe County Mayor will take proper and responsible action to protect life, health, safety, property, and the environment from the consequences of nuclear power plant accidents. During radiological emergencies, resources, and personnel of Miami-Dade and Monroe Counties will be reserved and available for use by the County Mayors.

The decision to implement protective action recommendations will be made jointly by the Miami-Dade County Mayor (or designee), Monroe County Mayor (or designee) and either the Governor or authorized representative (State Director, Division of Emergency Management). If time does not permit State involvement in initial decision making, the decision to take protective actions may be made by the Miami-Dade County Mayor and Monroe County Mayor, or their designated alternates. All county personnel and resources will be under the control of the County Mayors. Federal and State resources will also be available to the counties.

Alerting, warning, and evacuation of populations will be in accordance with procedures prescribed in the State Plan. The State Plan also describes hosting responsibilities, including shelter location and operation, and evacuee registration, monitoring, and decontamination.

Responsibility for direction and control rests with the Miami-Dade County Mayor and Monroe County Mayor, unless a disaster declaration under provisions of Florida Statues, Chapter 252 is in effect. If a disaster has been declared, responsibility for direction and control rests with the Governor or authorized representative.

The Miami-Dade County Office of Emergency Management reports to the Miami-Dade County Mayor, and the Monroe County Emergency Management Department to the Monroe County Mayor. This is also true for other county resources, including the County Manager, Sheriffs' Offices, Engineers' Offices, fire departments, public health offices, school boards, and other county organizations.

The Monroe County Mayor (or designee) and Miami-Dade County Mayor (or designee) have responsibility for overall emergency response planning. County Emergency Response Directors are responsible for actual plan development and updating. Miami-Dade County and Monroe County each have an Emergency Operations Center.

Miami-Dade County Office of Emergency Management (OEM) and Monroe County OEM

The county emergency response directors (Monroe and Miami-Dade County) and DEM receive initial notification from PTN simultaneously via electronic transmittal of the notification form and verbal verification of receipt by telephone, or individually from DEM via other alternate communications for all four classes of emergency. They have overall responsibility for initiating any necessary off-site protective actions (including evacuation of off-site areas) based upon available information from the PTN Emergency Director and FHBRC. In addition to overall responsibility, the Emergency Response Directors have responsibility for the following functions:

1) Direction and control of County emergency resources
2) Protective response for off-site areas including warning and evacuation

3) Communications
4) Public information
5) Off-site radiological exposure control
6) Coordination of arrangements for shelter and feeding of evacuees

Through established mutual aid agreements in Fire, Law Enforcement, and Emergency Management, Miami-Dade and Monroe county can supplement resources for responding to a nuclear power plant event (including hostile action based events).

Miami-Dade County Public Safety Department and Monroe County Sheriff

At the request of the respective Emergency Response Directors, the Miami-Dade County Public Safety Department or the Monroe County Sheriff can provide the following support services:

1) Law enforcement (including hostile action based events)
2) Warning and evacuation (implementation)
3) Traffic control
4) Communications (support)
5) Rescue (support)

Other Local Agencies

As defined in the county plans, the Emergency Response Directors can request support as necessary from the following:

1) Department of Fire and Rescue
2) Department of Public Health
3) Public Works/General Services Administration
4) Metro Transit Agency (Miami-Dade County)
5) American Red Cross

A.4	Written agreements with the support organizations having an emergency response role within the EPZs are included. The agreements describe the concept of operations, emergency measures to be provided, mutually acceptable criteria for their implementation, and arrangements for exchange of information.

Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by PTN with the following organizations:

- Baptist Hospital of Miami, FL
- Bechtel Power Corporation
- Florida Highway Patrol
- Framatome
- Institute for Nuclear Power Operations
- Mercy Hospital
- Miami-Dade Fire Rescue Department (NRC Commitment. See 2007-19851 Action ID: 8)
- Miami-Dade Police Department
- Monroe County Sheriff's Department
- PTN Security Group
- United E&C
- US Coast Guard
- US Department of Energy (Savannah River Operations)
- US Department of Energy (Oakridge Operations, REAC/TS)

B: Onsite Emergency Organization

On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and the interfaces among various onsite response activities and offsite support and response activities are specified.

Regulatory References: 10 CFR 50.47(b)(2); 44 CFR 350.5(a)(2);
10 CFR Part 50, Appendix E.IV.A

B.1.a	The site-specific emergency response organization (ERO) is developed. Note that while other site programs, such as operations, fire response, rescue and first aid, and security, may be controlled via other licensing documents, it is only when these personnel are assigned EP functions that they become part of this regulatory standard. Consideration is given to ensure that EP functions are not assigned to individuals who may have difficulties performing their EP function(s) simultaneously with their other assigned (non-EP) duties. Appendix E to 10 CFR Part 50 requires licensees to perform an on-shift staffing analysis to ensure on-shift staff can support the EP functions assigned, as well as other assigned duties.

The PTN on-shift staffing analysis report has been developed in accordance with 10 CFR 50 Appendix E.IV.A.9 and NEI 10-05.

Refer to EP-PTN-132, On-Shift Staffing Analysis.

B.5	The external organizations, including contractors, that may be requested to provide technical assistance to and augmentation of the ERO, as applicable, are specified.

2. Other External Non-NextEra Support Organizations

   A. Bechtel Power Corporation: Bechtel was the Architect/Engineer for the building and early operation of PTN. Upon request, Bechtel can supply emergency technical services and resources.

   B. Framatome: Framatome is a nuclear services company that can provide engineering and technical support.

   C. United E&C: United E&C is an Architectural/Engineering organization in the nuclear industry. Upon request, they can supply emergency technical services.

C: Emergency Response Support and Resources

Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate state and local staff at the licensee's EOF have been made, and other organizations capable of augmenting the planned response have been identified.

Regulatory References: 10 CFR 50.47(b)(3); 44 CFR 350.5(a)(3);
10 CFR Part 50, Appendix E.IV.E

C.4	Radiological laboratories, their general capabilities, and expected availability to provide radiological monitoring analysis services that can be used in an emergency are described. Plans to augment the identified radiological laboratories are described.

The plant's on-site radiological laboratory serves as the primary facility with backup provided by the Radiation Protection counting room facilities.

If required, the laboratory facilities at FPL's St. Lucie Plant can be used.

Environmental sampling will be augmented by the State's Mobile Emergency Radiological Laboratory (MERL) within approximately 6 hours of notification. Analysis of off-site environmental samples will be performed at the MERL. A FH - BRC representative dispatched to the EOF will coordinate all State off-site field monitoring data and sample media.

D: Emergency Classification System

A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.

Regulatory References: 10 CFR 50.47(b)(4); 44 CFR 350.5(a)(4);
10 CFR Part 50 Appendix E.IV.B and C

D.1	A standard emergency classification and action level scheme is established and maintained. The scheme provides detailed EALs for each of the four ECLs in Section IV.C.1 of Appendix E to 10 CFR Part 50.

The PTN EAL scheme is documented in EP-PTN-131, EAL Technical Basis Manual.

E: Notification Methods and Procedures

Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and follow up messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.

Regulatory References: 10 CFR 50.47(b)(5); 44 CFR 350.5(a)(5);
10 CFR Part 50 Appendix E.IV.A, C, D and E

E.1	The mutually agreeable process for direct and prompt notification of response organizations, aligned with the emergency classification and action level scheme, is described.

2. ORO Event Notification

The site-specific state and county entities (24/7 warning points) notified of a declared emergency at PTN are as follows:

- State of Florida Division of Emergency Management
- Miami-Dade County Emergency Response Directors
- Monroe County Emergency Response Directors

E.2	The alert and notification systems (ANSs) used to alert and notify the general public within the plume exposure pathway EPZ and methods of activation are described. This description includes the administrative and physical means, the time required for notifying and providing prompt instructions to the public within the plume exposure pathway EPZ, and the organizations or titles/positions responsible for activating the system.

Primary Alert and Notification System (ANS): Siren system.

Backup ANS: Miami-Dade and Monroe Counties route alerting.

Miami-Dade County is responsible for activation of primary ANS.

Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-PTN-135, Alert and Notification System Design Report.

F: Emergency Communications

Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

Regulatory References: 10 CFR 50.47(b)(6); 44 CFR 350.5(a)(6);
10 CFR Part 50, Appendix E.IV.E

F.1	Each principal response organization establishes redundant means of communication and addresses the following provisions:

F.1.a	Continuous capability for notification to, and activation of, the emergency response network, including a minimum of two independent communication links.

This communications network used for PTN emergency response incorporates all telephones, the public address system, and fixed and mobile radio systems employed for routine plant operation and other normal company business. In addition, the communication systems of state and county agencies and other organizations with which the company has emergency assistance agreements will be used to implement emergency response activities.

There are numerous commercial telephone system links connected to the plant for normal dial telephone service. This system represents the primary system for routine communication with areas outside the plant.

1. Portable Satellite Telephones

   Various portable satellite telephones are available to supplement the fixed communication equipment in the plant. These telephones are lightweight battery operated units which may be easily carried by personnel on the plant site and function during an extended loss of AC power event.

2. ~~Emergency~~ Satellite Communication~~s~~ ~~System (EMNET)~~

   ~~EMNET is an Emergency~~ Satellite Communication~~s~~ ~~System which~~ is available in the Control Room, the Technical Support Center and the Emergency Operations Facility.

3. ~~State~~ Hot Ring Down Telephone

   The ~~State~~ Hot Ring Down telephone is installed in the Control Room, TSC, and EOF. This system uses Voice Over Internet Protocol (VOIP) and a satellite backup. The phone is activated through a digital pushbutton. ~~dedicated commercial telephone lines and is activated through predesignated three-digit access "telephone numbers".~~ Commercial and ~~S~~satellite telephones serve as backups.

4. NRC FTS Federal Telephone System

Portions of this system are used to contact the NRC, such as the ENS and HPN. These phone links are described below:

- Emergency Notification System (ENS) - The ENS is used for initial notification by the licensee, as well as ongoing information on plant systems, status and parameters. The ENS is installed in each Control Room, TSC and EOF.
- Health Physics Network (HPN) - The HPN is used for communication with the licensee on radiological conditions (in-plant and off-site) and meteorological conditions, as well as their assessment of trends and needs for protective measures on site and off site. The HPN is located in the TSC and EOF.
- Emergency Response Data System (ERDS) - The ERDS is a direct near real-time electronic data link between the plant's on-site computer system and the NRC Operations Center. The ERDS provides for the automated transmission of a limited data set of selected plant parameters.

5. Portable Radio Transceiver Sets

Various portable radio transceivers (walkie-talkies) are available to supplement the fixed communications equipment in the plant. These radios are lightweight battery operated units which may be easily carried by personnel to any location on the plant site. Some of these portable radios are capable of communicating with the FM radio transceiver over a range of several miles.

6. Company Radio System

The Company radio system consists of a variety of fixed base radio equipment. The System Operations Power Coordinator's office, trouble dispatcher offices, service centers, power plants and mobile service vehicles are equipped with one or more of these radio systems.

In the event of interruption of the on-site electric service to the base radio stations, back up power is available to the equipment.

Transceivers are located in the Control Building Elevator vestibule. The operating set and battery back up units for these radios are located in the Unit 3 and 4 Control Room, TSC, and other on-site locations. These radios will provide backup communications between the Turkey Point Plant, Systems Operations Office, EOF, and Juno Beach Office.

7. Plant Page System

The plant page system, with speakers strategically located throughout the site, provides for the transmission of warning and instructions in event of an emergency. The system is powered from a preferred 120V AC circuit. An alternate power supply is provided. The plant page system uses noise canceling dynamic microphone type handsets located throughout the plant. The system includes one paging channel and one party line channel.

The plant page system at Units 3 and 4 is completely independent of the system at Unit 5. Notification by phone to the Unit 5 Control Room (by the Unit 3 and 4 Control Room) enables fossil plant employees to be advised of actions to take as a result of events occurring at the nuclear site.

8. Motor Maintenance Circuit

This is a communications circuit, separate from the plant page system, but using 120V AC power from the plant page system power supply source. The circuit consists of various outlets throughout the plant, near major equipment both inside and outside the containment and at the fuel handling areas, into which a headset with a microphone can be plugged, to enable communication to be carried on while leaving the operator's hands free. Outlets for this circuit are also provided in the Control Room of Units 3 and 4 so that communications between the Control Room and outlying stations can be established.

F.2	**Systems for coordinated communication methods for applicable fixed and mobile medical support facilities are described.**

Communications to local medical facilities is via private telephone lines. Radio communications are possible through the county communications centers to their respective ambulance and hospital facilities.

H: Emergency Facilities and Equipment

Adequate emergency facilities and equipment to support the emergency response are provided and maintained.

Regulatory References: 10 CFR 50.47(b)(8); 44 CFR 350.5(a)(8);
10 CFR Part 50, Appendix E.IV.E

H.1	A TSC is established, using current Federal guidance, from which NPP conditions are evaluated and mitigative actions are developed.

Site specific TSC details:

- The Technical Support Center is located on the second floor of the Nuclear Support Building inside the protected area.
- The TSC has its own emergency ventilation system.
- If the TSC is unavailable, the Control Room is the designated backup TSC for radiological emergencies. Otherwise, the OSC, Training Building or EOF may be used.

~~The Technical Support Center is located in a separate building inside the protected area near the Circulating Water Inlet Bay.~~

The Technical Support Center is located in a separate building inside the protected area near the Circulating Water Inlet Bay.

~~The Technical Support Center (TSC) contains equipment for monitoring airborne contamination and direct radiation. The TSC also contains protective clothing and respiratory protection devices. Pertinent records and drawings are available in the TSC.~~

~~The TSC has an emergency communications network including commercial telephone lines to the Control Room, OSC, EOF, Corporate Headquarters, and the ENS dedicated phone line to the NRC Operations Center (in Maryland) and the NRC Region II Office (in Atlanta, GA).~~

H.2	An OSC is established, using current Federal guidance, from which repair team activities are planned and teams are dispatched to implement actions.

The Operations Support Center (OSC) is located on the second floor of the Nuclear Support Building inside the protected area.~~maintained in the Maintenance Building~~. Open line telephone communications are maintained between the OSC and the TSC.

In the event that the OSC becomes uninhabitable, the Emergency Director will designate an alternate location in accordance with procedures.

H.3	An EOF is established, using current Federal guidance, as the primary base of emergency operations for the licensee during a radiological incident. The EOF facilitates the management and coordination of the overall emergency response, including the sharing of information with Federal, state, local, and tribal government authorities.

The Emergency Operations Facility (EOF) is located at the FPL building (10705 Quail Roost Dr, Cutler Bay, FL) approximately 13 miles north of the Turkey Point site~~General Office Building (9250 W. Flagler in Miami), approximately 25 miles north of the site~~.

H.4	An alternative facility (or facilities) is established, using currently provided and/or endorsed guidance, which would be accessible even if the NPP site is under threat of or experiencing hostile action.

The EOF serves as the alternative facility for the TSC and OSC in a hostile action event at the station. The EOF is equipped with offsite and onsite communication, command and control, and technical information to support a plant response from offsite.

A near site incident command post will be established in coordination with Miami-Dade Law Enforcement, and Fire and EMS to facilitate actions onsite.

H.5	A JIC is established, and its location is identified, to coordinate communication from Federal, state, local, and tribal government authorities and licensee personnel with the public and media.

The Joint Information Center (JIC) and the EOF are located in the same building (see Element H.3).

I: Accident Assessment

Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

Regulatory References: 10 CFR 50.47(b)(9); 44 CFR 350.5(a)(9);
10 CFR Part 50, Appendix E.IV.A, B and E

I.4.a	The contingency arrangements to obtain and analyze highly radioactive samples from the reactor coolant system, containment atmosphere and sump, and spent fuel pool storage area are described.

Changes have been made to reflect the NRC approved License Amendment Request received from the NRC via letter dated 02/13/01. The NRC issued Amendment Nos. 211 and 205 (Facility Operating Licenses DPR-31 and DPR-41). The amendments delete TS Section 6.8.4.d, "Post Accident Sampling," and thereby eliminate the requirements to have and Maintain the Post-Accident Sampling System at PTN.

Chemistry procedures describe post-accident contingency plans for obtaining Reactor Coolant, and Residual Heat Removal, and Containment Sump samples. Procedures are in place to assess core damage under accident conditions.

J: Protective Response

A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. **Evacuation** time estimates have been developed by applicants and licensees. Licensees shall update the evacuation time estimates on a periodic basis. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

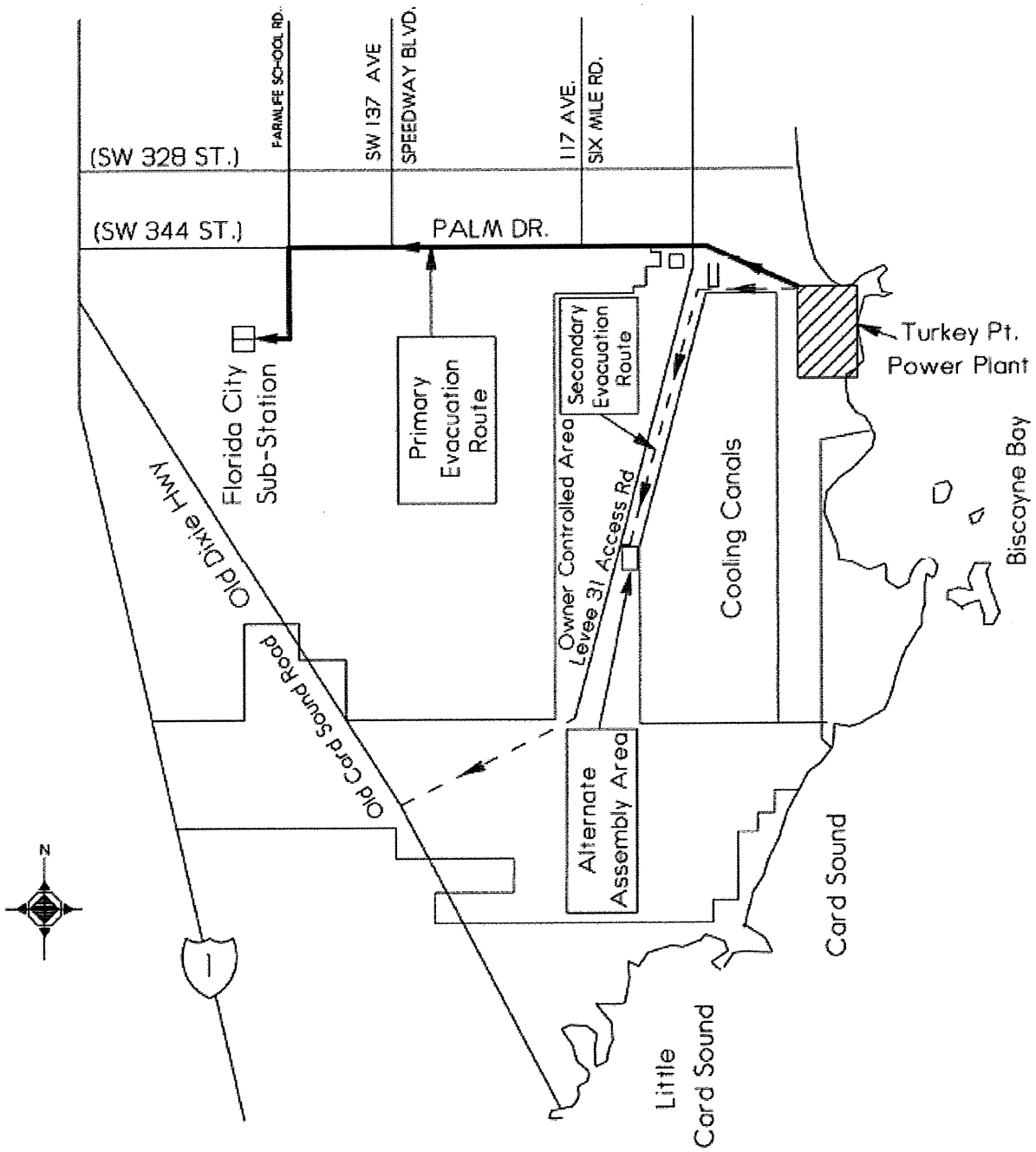
Regulatory References: 10 CFR 50.47(b)(10); 44 CFR 350.5(a)(10);
10 CFR Part 50, Appendix E.IV.E and I

J.2	Provisions are made and coordinated with appropriate offsite entities for evacuation routes and transportation for onsite individuals to a suitable offsite location. Selection of location considers the potential for inclement weather, high traffic density, and potential radiological conditions. Alternate location(s) and route(s) are identified.

The primary site evacuation route is used to evacuate personnel from the Owner Controlled Area. This route uses the plant access road west to Palm Drive, continuing west on Palm Drive approximately 7 miles to Farm Life School Road, turning south on Farm Life School Road, traveling approximately 100 yards, then turning west to the Florida City Substation.

The alternate site evacuation route is used to evacuate personnel when radiological conditions prohibit the use of the primary site evacuation route. This route uses the road north of the main discharge canal from the plant (Lake Warren), continuing west past contractor entrance road through the access gates of the cooling canals continuing past the north end of the cooling canals, turning south along the west perimeter road of the canals for approximately 4 miles to the Alternate Assembly Area, turning west to the Levee 31 Access Road then south to Card Sound Road.

Figure J.2-1: PTN Site Evacuation Routes



J.6	The basis and methodology are established for the development of PARs for the responsible OROs, including evacuation, sheltering, and, if appropriate, radioprotective drug use, for the plume exposure pathway EPZ. Current Federal guidance is used.

The PTN site specific PAR basis is documented in EP-PTN-134, Protective Action Recommendation Technical Basis Manual.

J.8	The latest ETEs are:

J.8.a	Incorporated either by reference or in their entirety into the emergency plan.

The PTN site specific ETE report is documented in EP-PTN-133, Evacuation Time Estimate Study.

K: Radiological Exposure Control

Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

Regulatory References: 10 CFR 50.47(b)(11); 44 CFR 350.5(a)(11); 10 CFR Part 50, Appendix E.IV.E

K.1	The radiation protection controls for emergency workers to be implemented during emergencies are described. These controls address the following aspects:

K.1.e	The capability to decontaminate emergency workers, equipment, and vehicles.

Personnel decontamination facilities are available in four locations. Their use will be governed by the nature of the incident.

- FPL Dress Out Building - Showers and sinks available for the decontamination of personnel with no (or minor) injuries.
- Baptist Hospital of Miami - Decontamination shower and contaminated injury treatment room. For interim use to treat severely injured personnel. Located approximately 30 miles north of PTN.
- Mercy Hospital - Contaminated Injury Treatment Room. For interim use to treat severely injured personnel. Located approximately 30 miles north of PTN.
- Decontamination Facility - The Florida City Substation has personnel decontamination capabilities available.

Vehicles will be decontaminated with the use of Miami-Dade County Fire Department equipment.

Extra clothing for personnel whose personal clothing has become contaminated is available in the form of disposable garments.

Contamination monitoring is performed through the use of count rate instruments with Beta-gamma sensitive probes.

Methods for decontamination and monitoring are described in plant procedures. Contamination monitors and procedures are adequate for assessing potentially contaminated wounds either on site or at the decontamination facility.

L: Medical and Public Health Support

Arrangements are made for medical services for contaminated injured individuals.

Regulatory Reference: 10 CFR 50.47(b)(12); 44 CFR 350.5(a)(12); 10 CFR Part 50, Appendix E.IV.E

L.2	Arrangements for the medical treatment of contaminated injured onsite personnel and those onsite personnel who have received significant radiation exposures and/or significant uptakes of radioactive material are described. These arrangements include the following components:

L.2.b	Primary and backup offsite medical facilities.

The offsite medical facilities to treat contaminated, injured personnel from PTN are:

1. Sheridan Emergency Physician Services of South Dade

   Sheridan Emergency Physician Services of South Dade, located at Baptist Hospital of Miami, provides for the immediate availability of fully equipped medical facilities with a staff of physicians and nurses skilled in the treatment of personal injury accompanied by radioactive contamination. This facility is available on a 24-hour basis.

   The patient receiving area is equipped for patient decontamination and the performance of emergency medical procedures for life saving purposes. Additional emergency medical facilities in the hospital include the emergency room and an intensive care unit available for the treatment of decontaminated radiation accident casualties or persons who have received only internal radiation exposures.

   Sheridan Emergency Physician Services of South Dade, will provide for hospital treatment, medical examinations, and laboratory services for those employees and other persons designated by Florida Power & Light who have been involved in a radiation incident.

2. Mercy Hospital

   Mercy Hospital of Miami, also provides for the immediate availability of medical facilities and trained hospital staff in the treatment of personal injury accompanied by radioactive contamination. Medical services are available on a 24-hour basis.

   The patient receiving area is equipped for patient decontamination and the performance of

   emergency medical procedures for life saving purposes. Additional emergency medical facilities in the hospital include the emergency room and an intensive care unit available for the treatment of decontaminated radiation accident casualties or persons who have received only internal radiation exposures.

   Mercy Hospital will provide for hospital treatment, medical examinations, and laboratory services for those employees and other persons designated by Florida Power & Light who have been involved in a radiation incident.

3. Backup Facilities

When primary facilities are considered inappropriate because of the nature or severity of the injury sustained, then the injured person may be referred to a regional facility for hospitalization. Medical records, including bio-assay records, will be maintained permanently and copies furnished to Florida Power & Light.

L.4	Each organization arranges for the transportation of contaminated, injured individuals and the means to control contamination while transporting victims of radiological incidents to medical support facilities and the decontamination of transport vehicle following use.

Normal county ambulance service, company vehicle, or private vehicle will provide transportation for injured personnel.

In case of a life-threatening situation, the Shift Manager will determine the mode of transportation. The US Coast Guard and Miami-Dade Fire Rescue can provide 24-hour helicopter transportation in a life-threatening situation to a designated hospital on an as available basis.

N: Exercises and Drills

Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.

Regulatory References: 10 CFR 50.47(b)(14); 44 CFR 350.5(a)(14);
10 CFR Part 50, Appendix E.IV.F

N.4.g	**Post-Accident Sampling Drills** Post-accident sampling drills are conducted annually. These drills address capabilities including analysis of liquid and containment atmosphere samples with simulated elevated radiation levels. This criterion is not applicable if the NPP unit(s) does (do) not have licensing basis requirements for post-accident sampling.

Not applicable. PTN has received NRC approval for the elimination of post-accident sample system (PASS) requirements from technical specifications. In accordance with their site specific NRC safety evaluation, contingency plans have been developed for obtaining and analyzing highly radioactive samples; however, these contingency plans do not have to be carried out in emergency plan drills or exercises.

Refer to Element I.4.a for reference to the PASS elimination safety evaluation.

P: Responsibility for the Planning Effort

Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.

Regulatory References: 10 CFR 50.47(b)(16); 44 CFR 350.5(a)(16); 10 CFR Part 50, Appendix E.IV.B and G

P.6	A listing of annexes, appendices, and supporting plans and their originating agency is included in the emergency plan.

Emergency plans developed by other agencies that support the PTN emergency plan include the following:

- State of Florida Radiological Emergency Management Plan is the external emergency plans specific to the support of PTN. County Emergency Plans are contained in the State Emergency Plan.

P.7	An appendix containing a listing by title of the procedures required to maintain and implement the emergency plan is included. The listing includes the section(s) of the emergency plan to be implemented by each procedure.

Table P.7-1 provides a listing of the PTN site-specific procedures required to maintain and implement the emergency plan, and the section(s) of the emergency plan implemented by each procedure.

Table P.7-1: PTN Emergency Plan Response and Administrative Procedures

Document ID	Document title	Plan Sections Implemented
	[To be developed following E-Plan approval]	

ENCLOSURE 6

EP-SBK-140, SBK Emergency Plan Annex

NEXTera ENERGY	NUCLEAR FLEET **PROGRAM DESCRIPTION** NON-SAFETY RELATED **INFORMATION USE**	Program No. **EP-SBK-140** Revision No. **0**

Title:

SBK EMERGENCY PLAN ANNEX

Responsible Department: REGULATORY AFFAIRS

Special Considerations:

Revision	Approved By	Approval Date
0		

TYPE	
DATE	
DOCT	PROGRAM
DOCN	EP-SBK-140
SYS	
STATUS	DRAFT
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# OF PAGES	2726

Table of Contents

INTRODUCTION

This Seabrook Station (SBK) Emergency Plan Annex supplements the NextEra Common Emergency Plan by providing site specific information unique to the station. It is subject to the same change and audit requirements as the NextEra Common Emergency Plan.

Seabrook Station is situated on a 900 acre tract of land on the western shore of Hampton Harbor in Rockingham County, near the northern boundary of the Town of Seabrook, New Hampshire. The site is located approximately eight miles southeast of the Exeter, New Hampshire, five miles northeast of Amesbury, Massachusetts, and two miles west of the Hampton Harbor Inlet. The site is bordered on the east by an extensive saltwater marsh and is located on a point of land called "the Rocks," between two small tidal estuaries; the Brown's River and the Hunt's Island Creek. The City of Portsmouth is located approximately eleven miles north of the site while the Boston, Massachusetts metropolitan area is located approximately forty miles south-southwest of the site.

Seabrook Station consists of a four-loop pressurized water reactor. The Station exclusion area can generally be described as a circle of 3000 foot radius. All the area within the site boundary is controlled by NextEra Energy Seabrook, LLC.

This document matches the structure of the NextEra Common Emergency Plan in following the format of NUREG-0654. It only contains the guidance elements that have site specific information therefore the numbering may not always be sequential.

Emergency Planning for the Seabrook Station is performed within the following two Emergency Planning Zones (EPZ):

- Plume Exposure Pathway EPZ – The Seabrook Station Plume Exposure EPZ approximates a 10-mile radius around the plant site and is described and illustrated in the station's Evacuation Time Estimate Study report.

- Ingestion Pathway EPZ – The Seabrook Station Ingestion Pathway EPZ approximates a 50-mile radius around the plant site as illustrated below.

A: Assignment of Responsibility

Primary responsibilities for emergency response by the nuclear facility licensee, and by State and local organizations within the EPZs have been assigned, the emergency responsibilities of the various supporting organization have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

Regulatory References: 10 CFR 50.47(b)(1); 44 CFR 350.5(a)(1);
10 CFR Part 50, Appendix E.IV.A

A.1.a	The organizations having an operational role specify their concept of operations and relationship to the total effort.

3. Offsite Response Organizations (OROs)

Seabrook Station is responsible for determining and conveying specific accident information, dose assessment information and protective action recommendations to the State of New Hampshire and Commonwealth of Massachusetts. It is the responsibility the States to evaluate this information, and then determine and implement appropriate protective actions in accordance with their plans and procedures. The local governments will provide the resources needed to implement these actions. Should local resources be exhausted or additional resources needed to accomplish actions in a timely manner, state governments will provide any additional support needed.

a. The State of New Hampshire

The State of New Hampshire supports response activities of the Seabrook site in accordance with the following table:

Key
P = Primary
S = Support

AGENCY / RESPONSIBILITY	Command and Control	Notification Procedures	Emergency Communications	Public Alert	Public Information	Emergency Facilities	Accident Assessment	Protective Response	Radiation Exposure Control	Transportation	Reception Centers	Mass Care Facilities	Medical Services	Social Services	Traffic and Access Control	Law Enforcement Support	Rescue Support	Recovery and Reentry	Training	Exercise and Drills	Program Maintenance	Coord. With Other States
Governors' Office	P				P			P										P				P
NH Division of Homeland Security and Emer. Management	S	S	P	P	S	P	S	S	S	P	S	S						S	P	P	P	S
Public Health (DPHS)		S				S	P	S	P	S	S		P					S	S	S	S	S
State Police		P	S	P				S							P	P						S
Transportation								S		S					S							
Pupil Transportation Safety								S		S		S										
Division of Human Services								S			P	S		P								
National Guard				S				S	S	S					S	S	S					
Civil Air Patrol			S					S														

Key
P = Primary
S = Support

AGENCY / RESPONSIBILITY	Command and Control	Notification Procedures	Emergency Communications	Public Alert	Public Information	Emergency Facilities	Accident Assessment	Protective Response	Radiation Exposure Control	Transportation	Reception Centers	Mass Care Facilities	Medical Services	Social Services	Traffic and Access Control	Law Enforcement Support	Rescue Support	Recovery and Reentry	Training	Exercise and Drills	Program Maintenance	Coord. With Other States
Resources & Economic Development				S											S							
Department of Agriculture				S			S	S										S				
Environmental Services				S			S	S										S				
Marine Patrol				S																		
Fish and Game Department			S	S											S							
U.S. Coast Guard				S											S							
Federal Aviation Admin.				S											S							
Red Cross								S				P		S								
Education		S				S		S				S										
Public Utilities Commission							S															
Emergency Medical Services								S					S				P					

b. Commonwealth of Massachusetts

The Commonwealth of Massachusetts supports response activities of the Seabrook site in accordance with the following table:

Key
P = Primary
S = Support

AGENCY / RESPONSIBILITY	Command and Control	Communications	Notification	Public Alerting	Public Information	Accident Assessment	Shelter in Place	Evacuation	Access and Traffic Control	Food, Water and Milk Control	Radiological Exposure Control	Emergency Medical Services	Mass Care	Law Enforcement	Fire and Rescue	Public Health and Sanitation	Reentry and Recovery
Governor	P				P		P	P									P
Emergency Management	S	P	P	P	S	S	S	S	S	S	S	S	S	S	S	S	S
Department of Public Health			S		S	P	S	S		P	P	P				P	S
State Police		S		S			S	S	P					P			S
Highway Department		S							S								
Mass. National Guard		S						S	S		S			S			
Dept. Env. Quality Engineering						S				S							
Dept. Environmental Management				S			S	S									
Dept. Food and Agriculture						S				S							
Dept. Fish, Wildlife & P.C. Vehicles										S							
Nuclear Incident Advisory Team						S											

c. The State of Maine

In addition, the State of Maine, which lies within the ingestion EPZ, has the capability to carry out appropriate response actions. These plans describe their respective responsibilities, authorities, capabilities, and emergency functions.

d. Local Governments

Local governments within the sites' plume exposure EPZ, in coordination with the emergency management agencies of the states, maintain emergency plans which, should the need arise, contain instructions to carry out specific protective measures, dependent upon various emergency conditions

The local governments with emergency service departments and other agencies interrelated to these local governments within the 10-mile EPZ (plume exposure pathway) of Seabrook Station are:

New Hampshire

- Seabrook
- Portsmouth
- Greenland
- Rye
- North Hampton
- South Hampton
- Hampton
- Hampton Falls
- Stratham
- Exeter
- Newfields
- Brentwood
- Kingston
- East Kingston
- Kensington
- Newton
- New Castle

Massachusetts

- Salisbury
- Newburyport
- Newbury
- West Newbury
- Amesbury
- Merrimac

Both New Hampshire and Massachusetts, as well as the localities within the plume EPZ, have prepared plans for a response to an emergency at Seabrook Station. Refer to the state and local Emergency Operations Plans for details on their concept of operations.

A.4	Written agreements with the support organizations having an emergency response role within the EPZs are included. The agreements describe the concept of operations, emergency measures to be provided, mutually acceptable criteria for their implementation, and arrangements for exchange of information.

Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by Seabrook Station with the following organizations:

- State of New Hampshire and Commonwealth of Massachusetts
- Town of Seabrook Fire Department, Ambulance Service
- Town of Seabrook Fire Department, Fire Support Service
- Exeter Hospital
- Wentworth-Douglass Hospital
- Portsmouth Police Department
- Pease Development Authority (EOF Space)

Letters of agreement with participating local service organizations are maintained in Emergency Preparedness Department files.

B: Onsite Emergency Organization

On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and the interfaces among various onsite response activities and offsite support and response activities are specified.

Regulatory References: 10 CFR 50.47(b)(2); 44 CFR 350.5(a)(2);
10 CFR Part 50, Appendix E.IV.A

B.1.a	The site-specific emergency response organization (ERO) is developed. Note that while other site programs, such as operations, fire response, rescue and first aid, and security, may be controlled via other licensing documents, it is only when these personnel are assigned EP functions that they become part of this regulatory standard. Consideration is given to ensure that EP functions are not assigned to individuals who may have difficulties performing their EP function(s) simultaneously with their other assigned (non-EP) duties. Appendix E to 10 CFR Part 50 requires licensees to perform an on-shift staffing analysis to ensure on-shift staff can support the EP functions assigned, as well as other assigned duties.

The Seabrook Station on-shift staffing analysis report has been developed in accordance with 10 CFR 50 Appendix E.IV.A.9 and NEI 10-05.

Refer to EP-SBK-142, SBK OnShift Staffing Analysis.

B.5	The external organizations, including contractors, that may be requested to provide technical assistance to and augmentation of the ERO, as applicable, are specified.

2. Other External (non-NextEra) Support Organizations

   Westinghouse (the NSSS vendor for Seabrook Station): Upon request, Westinghouse will provide emergency technical assistance, including equipment and/or services, in support of Seabrook Station in the unlikely event of an emergency.

C: Emergency Response Support and Resources

Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate state and local staff at the licensee's EOF have been made, and other organizations capable of augmenting the planned response have been identified.

Regulatory References: 10 CFR 50.47(b)(3); 44 CFR 350.5(a)(3); 10 CFR Part 50, Appendix E, Sec. IV.E

C.4	Radiological laboratories, their general capabilities, and expected availability to provide radiological monitoring analysis services that can be used in an emergency are described. Plans to augment the identified radiological laboratories are described.

The station's main chemistry lab is the primary location equipped for chemical and radiological analysis.

Additionally, GEL Laboratories, Charleston, South Carolina, is available on a continuous 24 hour, seven days a week basis to provide a full spectrum of radio-analytical measurements on environmental sample media.

GEL Laboratories is capable of providing on a continuous basis a full spectrum of radio-analysis of environmental samples which includes identification of principal accident radio-nuclides and their evaluation against EPA dose guidelines for relocation and FDA derived intervention levels associated with consumption of contaminated foods.

D: Emergency Classification System

A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.

Regulatory References: 10 CFR 50.47(b)(4); 44 CFR 350.5(a)(4);
10 CFR Part 50 Appendix E.IV.B and C

D.1	A standard emergency classification and action level scheme is established and maintained. The scheme provides detailed EALs for each of the four ECLs in Section IV.C.1 of Appendix E to 10 CFR Part 50.

The Seabrook Station EAL scheme is documented in EP-SBK-141, SBK Emergency Action Level Technical Basis Document.

E: Notification Methods and Procedures

Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and follow up messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.

Regulatory References: 10 CFR 50.47(b)(5); 44 CFR 350.5(a)(5);
10 CFR Part 50 Appendix E.IV.A, C, D and E

E.1	**The mutually agreeable process for direct and prompt notification of response organizations, aligned with the emergency classification and action level scheme, is described.**

2. ORO Notification

The following state 24/7 warning points are notified of a declared emergency at Seabrook Station:

- New Hampshire State Police (NHSP) Communications Center Dispatcher
- Massachusetts Emergency Management Agency (MEMA) 24-hour Dispatcher

E.2	The alert and notification systems (ANSs) used to alert and notify the general public within the plume exposure pathway EPZ and methods of activation are described. This description includes the administrative and physical means, the time required for notifying and providing prompt instructions to the public within the plume exposure pathway EPZ, and the organizations or titles/positions responsible for activating the system.

Primary Alert and Notification System (ANS): Siren system.

Backup ANS: Automated dialing system.

State of New Hampshire and Massachusetts are responsible for activation of primary and backup ANS.

Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-SBK-145, SBK Alert and Notification System Design Report.

F: Emergency Communications

Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

Regulatory References: 10 CFR 50.47(b)(6); 44 CFR 350.5(a)(6);
10 CFR Part 50, Appendix E.IV.E

F.1	**Each principal response organization establishes redundant means of communication and addresses the following provisions:**

F.1.a	**Continuous capability for notification to, and activation of, the emergency response network, including a minimum of two independent communication links.**

Seabrook Station has established an emergency communications network for notifying and coordinating activities with offsite and onsite emergency response organizations. A summary of the communication network is presented below.

1. Nuclear Alert System

   The Nuclear Alert System (NAS), originating in the Control Room, and comprised of leased telephone lines, is used to notify the state 24/7 warning points of a declared emergency at Seabrook Station.

   The Nuclear Alert System (NAS) has been installed in the two states' Emergency Operations Centers (EOCs), the MA Region I EOC in Tewksbury, the NH Rockingham County warning point in Brentwood, and the Emergency Operations Facility (EOF).

   Provisions are made for backup power to the Nuclear Alert System.

2. Telephone System

   The Telephone System is used as a means of communications for notification and coordination with onsite and offsite organizations/teams. The telephone system is interconnected with the public address system and leased communications systems. If power is lost to the Station PBX, certain extensions located in the Control Room, TSC, OSC and Guard Island will be automatically connected to the public telephone exchange network directly. Power to the PBX is backed up by uninterruptible power supplies and the diesel generator.

3. Offsite Monitoring Team Radio Network

   The Offsite Monitoring Team Radio Network is a UHF network, using radio frequencies supporting the Seabrook Public Alert Notification System (PANS). This network consists of the following:

   - A tone remote, control base, and antenna assigned to the Emergency Operations Facility (EOF) which can transmit to radiological survey via five distinct channels.
   - Mobile radios are installed in dedicated radiological survey vehicles and portable mobiles are available which can be installed in any vehicle.

- Portable radios are available to support State radiological survey teams, as needed.

All components of the EOF controls are backed up by emergency power. All system repeaters are backed up by emergency power.

4. NRC Communications Channels

A designated FTS-2001 telephone is installed in the Control Room as the Emergency Notification System (ENS) line. This line is used to provide initial emergency notifications to the Nuclear Regulatory Commission Headquarters Operations Center in Rockville, MD. The line is staffed on an around-the-clock basis by both organizations. The ENS line is also available in the EOF and the Alternative TSC.

Designated FTS-2001 telephones are installed in the Emergency Operations Facility and the Technical Support Center to support the Health Physics Network (HPN). These telephones will be used to provide radiological and protective action-related information to the NRC.

Additional FTS-2001 and commercial line capabilities have been established in each response center for use by NRC response team members.

The Emergency Response Data System (ERDS) is installed as a user-selected function on the Main Plant Computer System (MPCS).

5. Station Paging System

A plant paging system is used for alerting in-plant personnel of emergencies. A central control panel is located in the Control Room. The paging system is accessed through dedicated paging system handsets which are located throughout the plant including the Control Room, Technical Support Center, Operations Support Center, and Security Guard House.

The system consists of four channels, and is utilized as a page/talk system under normal operations. During emergency situations, the system can be used for (1) alerting Station personnel; (2) coordinating activities between onsite response teams and the Technical Support Center; (3) calling missing persons that may be in the Station; (4) coordinating activities between Control Room and Technical Support Center; and (5) communicating between Station centers.

A multi-tone generator is associated with the paging system. This generator produces the various alarms designated to alert Station personnel of emergency situations. Alerting is ensured by the location of the page system speakers. In high background noise areas, beacon lights or similar devices supplement the speakers. The alerting signal is manually initiated from the Control Room by keying the appropriate alarm station. The evacuation alarm takes priority over all other transmissions.

Power to the paging system is provided by uninterruptible power supplies, independent from the power supply for the telephone system. The paging system is used daily and the alerting alarm is tested weekly.

6. Sound-Powered Telephone System

The Station has been equipped with a multiple loop sound-powered telephone system. Jack locations have been provided near many major pieces of equipment and on control panels, instrument racks, motor control centers, unit substations and switchgear. Switching panels are provided in the Control Room to enable the loops to be connected together. A supply of sound powered telephone handsets and cables are available in the Control Room emergency supply room. Since no external power is necessary for operation, the system is available during an emergency; however, its greatest application would occur during a recovery phase.

F.2	Systems for coordinated communication methods for applicable fixed and mobile medical support facilities are described.

The Seabrook Fire Department ambulance will be used for medical transportation of injured and contaminated personnel. The ambulance is capable of radio communications with the hospital while en route with a patient.

H: Emergency Facilities and Equipment

Adequate emergency facilities and equipment to support the emergency response are provided and maintained.

Regulatory References: 10 CFR 50.47(b)(8); 44 CFR 350.5(a)(8);
10 CFR Part 50, Appendix E.IV.E

H.1	A TSC is established, using current Federal guidance, from which NPP conditions are evaluated and mitigative actions are developed.

Site specific TSC details:

- The Technical Support Center (TSC) is located in the Control Building
- The TSC is located adjacent to the Control Room and is enclosed in the same habitability envelope.
- If the TSC is unavailable, the Outage Control Center is the designated backup.

~~A Technical Support Center (TSC) has been established in the Control Building to direct post-accident evaluation and assist in recovery actions. The TSC is habitable to the same degree as the Control Room for postulated accident conditions. The TSC has the capability to access and display Station parameters, including the Safety Parameter Display System (SPDS), independent from actions in the Control Room. The TSC is included in the Station emergency communications network. The TSC has access to the Seabrook Updated Final Safety Analysis Report (UFSAR) and station procedures, and a selected set of system prints, system flow diagrams, cable/wiring diagrams and equipment specifications. The TSC has the capability to assess radiological habitability conditions by monitoring for direct radiation and airborne particulates, and sampling for airborne radioiodines.~~

H.2	An OSC is established, using current Federal guidance, from which repair team activities are planned and teams are dispatched to implement actions.

The Operations Support Center (OSC), located on the first floor of the Administration and Service Building, provides a general assembly/dispatch area for assigned Station manpower needed to effect protective and corrective actions in support of the emergency situation. The OSC is included in the Station emergency communications network.

Emergency equipment is provided at the Radiological Controlled Area (RCA) access point located within the OSC. Tools required by repair teams are provided at tool cribs maintained by the Maintenance Department in the RCA and other locations in the plant. Should conditions warrant evacuation of this center, the TSC will assume OSC functions; otherwise the OSC will remain active and staffed until terminated by the Site Emergency Director.

H.3	An EOF is established, using current Federal guidance, as the primary base of emergency operations for the licensee during a radiological incident. The EOF facilitates the management and coordination of the overall emergency response, including the sharing of information with Federal, state, local, and tribal government authorities.

An Emergency Operations Facility (EOF) is located at the Pease International Tradeport in Portsmouth, New Hampshire. ~~The State of New Hampshire Incident Field Office is physically co-located with the EOF. This arrangement ensures close coordination with State emergency response staff.~~

~~The EOF is included in the Station emergency communications network, as described in Section F, which links all emergency response facilities, monitoring and assistance teams dispatched from the EOF, and offsite agencies. The EOF has the capability to access and display Station parameters, including the Safety Parameter Display System, independent of both the TSC and Control Room. Backup power to the EOF is available.~~

~~Radiological assessment, monitoring and evaluation, and protective action recommendation formulation are directed from the EOF. The EOF organization is responsible for continuous evaluation and coordination of all Seabrook Station activities related to an emergency having, or potentially having, adverse radiological consequences. Copies of selected building prints and general building layouts are available via the LAN and on disk and can be printed out at the EOF. Emergency planning documents applicable to Seabrook Station, including area maps, emergency response procedures, State and local emergency plans are available in the EOF. The Seabrook Station updated UFSAR is available via the LAN. A backup disk version is maintained at the EOF.~~

~~The EOF has sufficient assembly space and is designed to accommodate responding representatives from government and industry. The EOF serves as the base of operations for Station material control, coordination of industry support, and establishment of a long-term organization to recover from the accident conditions and results. The EOF can serve as a centralized meeting location for key representatives from offsite authorities and Station management. The EOF can also act as a focal point for the coordination and acquisition of company resources and liaison with the Seabrook Station Joint Owners, American Nuclear Insurers and Institute of Nuclear Power Operations (INPO).~~

~~Emergency equipment maintained at the EOF includes gear necessary to assess radiological habitability. This consists of monitoring for direct radiation, and sampling for airborne radioparticulates and radioiodines. The EOF provides information needed by Federal, State and local authorities for implementation of offsite emergency plans.~~

H.4	An alternative facility (or facilities) is established, using currently provided and/or endorsed guidance, which would be accessible even if the NPP site is under threat of or experiencing hostile action.

An alternative facility for TSC responders has been identified as a designated area in the EOF for hostile action-based events or other catastrophic events that prevent site access in accordance with 10 CFR 50 Appendix E, Section IV, E, 8, d. Procedures for TSC responders are located in the alternative facility.

An alternative facility for OSC responders has been identified as a designated area in the EOF for hostile action-based events or other catastrophic events that prevent site access in accordance with 10 CFR 50 Appendix E, Section IV, E, 8, d. Procedures for OSC responders are located in the alternative facility.

H.5	A JIC is established, and its location is identified, to coordinate communication from Federal, state, local, and tribal government authorities and licensee personnel with the public and media.

The Joint Information Center (JIC) is co-located with the EOF in Portsmouth, New Hampshire.

I: Accident Assessment

Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

Regulatory References: 10 CFR 50.47(b)(9); 44 CFR 350.5(a)(9);
10 CFR Part 50, Appendix E.IV.A, B and E

I.4.a	The contingency arrangements to obtain and analyze highly radioactive samples from the reactor coolant system, containment atmosphere and sump, and spent fuel pool storage area are described.

When an emergency condition results in core damage, an in-station (e.g., containment) source term that could be subsequently released, or a release, station emergency response personnel will obtain and analyze various post accident samples. Potential sampling points include containment atmosphere, gas spaces in other plant areas, and the plant vent stack. Per the Seabrook Station Post Accident Assessment Program, archive samples of the reactor coolant system and containment sump can also be obtained and analyzed. Source-term components, including radioiodine, would be quantified and evaluated in terms of actual or potential impact.

Chemistry procedures describe post-accident contingency plans for obtaining Reactor Coolant, and Residual Heat Removal, and Containment Sump samples. Procedures are in place to assess core damage under accident conditions.

J: Protective Response

A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. **Evacuation** time estimates have been developed by applicants and licensees. Licensees shall update the evacuation time estimates on a periodic basis. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

Regulatory References: 10 CFR 50.47(b)(10); 44 CFR 350.5(a)(10);
10 CFR Part 50, Appendix E.IV.E and I

J.2	Provisions are made and coordinated with appropriate offsite entities for evacuation routes and transportation for onsite individuals to a suitable offsite location. Selection of location considers the potential for inclement weather, high traffic density, and potential radiological conditions. Alternate location(s) and route(s) are identified.

Upon being released, station evacuees will be advised of area evacuation routes by security. Site evacuation routes are noted in Figure J.2-1 SBK Evacuation Routes, used to depart from the site, and evacuation from the 10-mile EPZ will be by way of evacuation routes identified in the ETE.

If a radioactive release has occurred which might result in the contamination of Station evacuees, personnel trained in contamination monitoring techniques will proceed to the remote monitoring area to perform contamination monitoring of evacuated vehicles and personnel. All evacuating personnel will be instructed to report to the remote monitoring area to be surveyed for contamination levels. If contamination is detected, actions will be implemented that appropriately correspond to the type and degree of contamination and that are consistent with the priorities of the emergency actions and conditions underway.

Remote Monitoring Area (RMA), shown in Figure J.2-2, Remote Monitoring Area Layout, is located at the Security Firing Range on Rocks Road is designated for site evacuees, and the process to use them, have been identified.

J.6	The basis and methodology are established for the development of PARs for the responsible OROs, including evacuation, sheltering, and, if appropriate, radioprotective drug use, for the plume exposure pathway EPZ. Current Federal guidance is used.

The Seabrook Station site specific basis adaptation of NUREG-0654 Supplement 3 PARs is documented in EP-SBK-144, SBK Protective Action Recommendation Technical Basis Manual.

J.8	The latest ETEs are: incorporated either by reference or in their entirety in the emergency plan.

J.8.a	Incorporated either by reference or in their entirety in the emergency plan.

The Seabrook Station site specific ETE report is documented in EP-SBK-143, SBK Evacuation Time Estimate Study.

Figure J.2-1: Seabrook Station Evacuation Routes

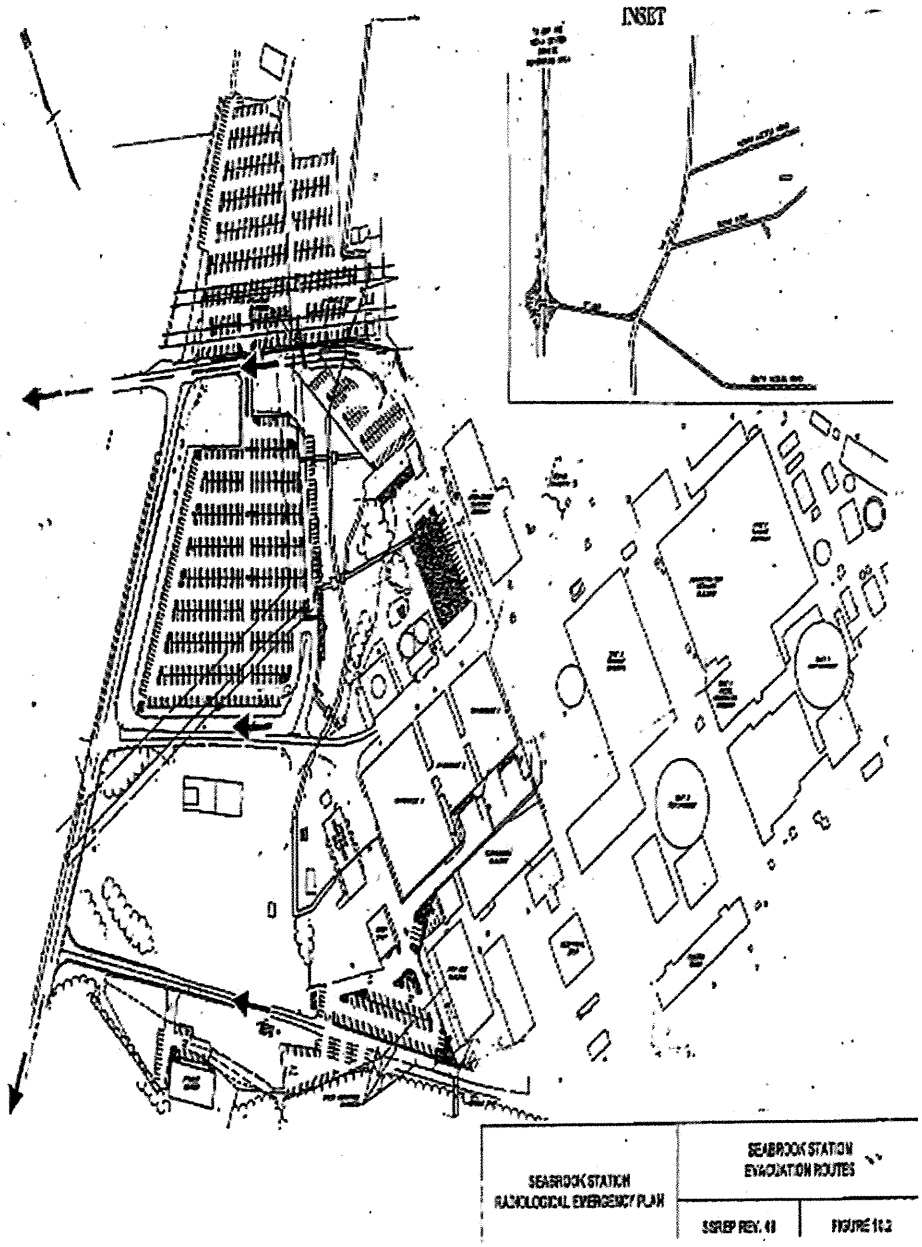
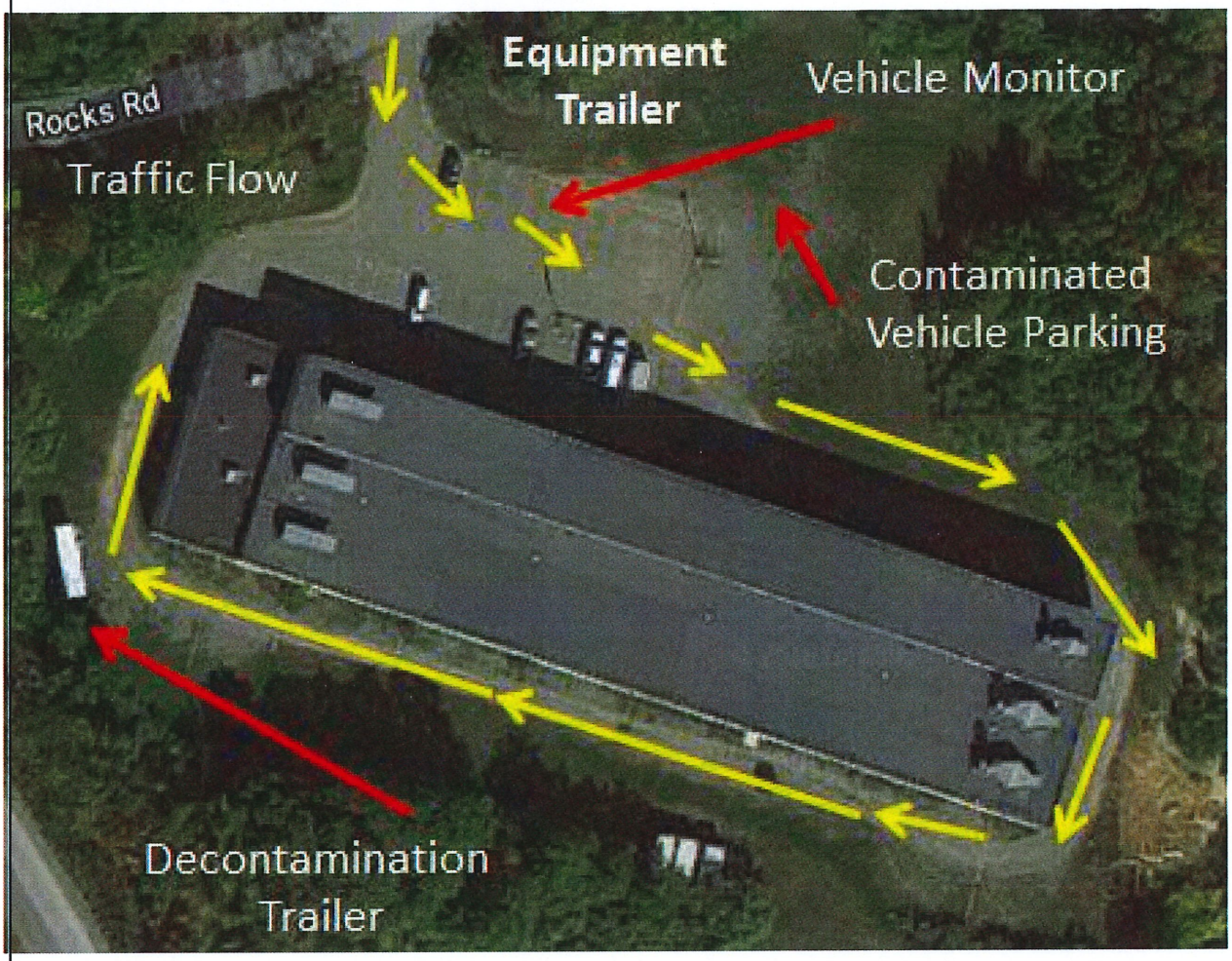


Figure J.2: Remote Monitoring Area Layout



K: Radiological Exposure Control

Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

Regulatory References: 10 CFR 50.47(b)(11); 44 CFR 350.5(a)(11);
10 CFR Part 50, Appendix E.IV.E

K.1	The radiation protection controls for emergency workers to be implemented during emergencies are described. These controls address the following aspects:

K.1.e	The capability to decontaminate emergency workers, equipment, and vehicles.

Station decontamination facilities are located in the Operations Support Center, specifically at the Radiologically Controlled Area HP Control Point. The RCA shower is available for personnel decontamination purposes. Soap, brushes, etc., are available to aid in decontamination efforts. Survey instrumentation for personnel monitoring is available here. If necessary, internal contamination can be assessed with the use of whole body count equipment (FASTSCAN) or its backup. All waste generated through the use of the decontamination facilities is collected and processed by the station liquid radwaste system.

L: Medical and Public Health Support

Arrangements are made for medical services for contaminated injured individuals.

Regulatory Reference: 10 CFR 50.47(b)(12); 44 CFR 350.5(a)(12); 10 CFR Part 50, Appendix E.IV.E

L.2	Arrangements for the medical treatment of contaminated injured onsite personnel and those onsite personnel who have received significant radiation exposures and/or significant uptakes of radioactive material are described. These arrangements include the following components:

L.2.b	Primary and backup offsite medical facilities to treat contaminated, injured personnel on a continuous basis.

The primary and backup offsite medical facilities to treat contaminated, injured personnel from Seabrook Station are:

Primary – The Exeter Hospital, Inc. – Exeter Hospital will provide medical assistance to Seabrook Station personnel. The agreement provides for the treatment of personnel who may be considered to have substantial radiation related injuries, or who may have been exposed to and contaminated by radioactive materials.

Backup – Wentworth-Douglass Hospital in Dover, NH may be utilized if the treatment required extend beyond the capacity of the Exeter Hospital.

L.4	Each organization arranges for the means to control contamination while transporting victims of radiological accidents to medical support facilities and the decontamination of transport vehicle following use.

The Seabrook Fire Department ambulance will be used for medical transportation of injured and contaminated personnel. The ambulance is capable of radio communications with the hospital while en route with a patient.

N: Exercises and Drills

Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.

Regulatory References: 10 CFR 50.47(b)(14); 44 CFR 350.5(a)(14);
10 CFR Part 50, Appendix E.IV.F

N.4.g	**Post-Accident Sampling Drills** Post-accident sampling drills are conducted annually. These drills address capabilities including analysis of liquid and containment atmosphere samples with simulated elevated radiation levels. This criterion is not applicable if the NPP unit(s) does (do) not have licensing basis requirements for post-accident sampling.

Post-Accident Sampling Drills will be conducted annually. These drills will address capabilities including analysis of liquid and containment atmosphere samples with simulated elevated radiation levels.

P: Responsibility for the Planning Effort

Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.

Regulatory References: 10 CFR 50.47(b)(16); 44 CFR 350.5(a)(16); 10 CFR Part 50, Appendix E.IV.B and G

P.6	A listing of annexes, appendices, and supporting plans and their originating agency is included in the emergency plan.

External emergency plans specific to the support of Seabrook Station include the following:

1. State Plans
   - New Hampshire Radiological Emergency Response Plan
   - Massachusetts Radiological Emergency Response Plan for Licensed Nuclear Power Plants - Appendix 2 to Hazard Specific Supplement No. 6
   - Maine Ingestion Pathway Plan for Seabrook Station
2. Local Plans

   New Hampshire

   - Seabrook
   - Portsmouth
   - Greenland
   - Rye
   - North Hampton
   - South Hampton
   - Hampton
   - Hampton Falls
   - Stratham
   - Exeter
   - Newfields
   - Brentwood
   - Kingston
   - East Kingston
   - Kensington
   - Newton
   - New Castle

   Massachusetts

   - Salisbury
   - Newburyport
   - Newbury
   - West Newbury
   - Amesbury
   - Merrimac

P.7	An appendix containing a listing by title of the procedures required to maintain and implement the emergency plan is included. The listing includes the section(s) of the emergency plan to be implemented by each procedure.

Table P.7-1 provides a listing of the Seabrook Station site-specific procedures required to maintain and implement the emergency plan, and the section(s) of the emergency plan implemented by each procedure.

Table P.7-1: Seabrook Station Emergency Plan Response and Administrative Procedures

Document ID	Document Title	Plan Sections Implemented
	[To be developed following E-Plan approval]	