



October 31, 2012

NRC 2012-0095
10 CFR 50.54(f)

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

Point Beach Nuclear Plant, Units 1 and 2
Docket 50-266 and 50-301
Renewed License Nos. DPR-24 and DPR-27

NextEra Energy Point Beach, LLC Response to 10 CFR 50.54(f) Request for Information
Regarding Near-Term Task Force Recommendation 9.3, Emergency Preparedness

- References:
- (1) NRC letter to All Power Reactor Licensees and Holders of Construction Permits in Active or Deferred Status, dated March 12, 2012, Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident (ML12073A348)
 - (2) NRC letter to Nuclear Energy Institute (NEI), dated May 15, 2012, U.S. Nuclear Regulatory Commission review of NEI 12-01, "Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities," Revision 0, Dated May 2012 (ML12131A043)

On March 12, 2012, the NRC staff issued Reference (1), requesting information pursuant to 10 CFR 50.54(f). Enclosure 5 of Reference (1) contains specific Requested Actions and Requested Information associated with Recommendation 9.3 for Emergency Preparedness (EP) programs. Reference (1) requested addressees provide an assessment of the current communications systems and equipment used during an emergency event to identify any enhancements that may be needed to ensure communications are maintained during a large scale natural event meeting the described conditions.

Reference (2) documents the NRC's review and acceptance of NEI 12-01, Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities, Revision 0, as providing an acceptable method for licensees to employ when responding to the 10 CFR 50.54(f) letter regarding Recommendation 9.3.

The Point Beach Nuclear Plant Communications Assessment During an Extended Loss of AC Power is provided in Enclosure 1 and was prepared in accordance with the guidance of NEI 12-01, Revision 0. The planned communications improvements resulting from the assessment, along with an implementation schedule, are identified as new Regulatory Commitments and are provided in Enclosure 2.

If you have any questions please contact Mr. Michael Millen, Licensing Manager, at 920/755-7845.

I declare under penalty of perjury that the foregoing is true and correct.
Executed on October 31, 2012.

Very truly yours,

NextEra Energy Point Beach, LLC

A handwritten signature in black ink, appearing to read 'Larry Meyer', is written over a faint circular stamp or watermark.

Larry Meyer
Site Vice President

Enclosures

cc: Administrator, Region III, USNRC
Project Manager, Point Beach Nuclear Plant, USNRC
Resident Inspector, Point Beach Nuclear Plant, USNRC
Director of Office of Nuclear Reactor Regulation, USNRC

ENCLOSURE 1

**NEXTERA ENERGY POINT BEACH, LLC
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2**

**NEXTERA ENERGY POINT BEACH, LLC RESPONSE TO 10 CFR 50.54(F) REQUEST
FOR INFORMATION REGARDING NEAR-TERM TASK FORCE RECOMMENDATION 9.3,
EMERGENCY PREPAREDNESS**

**POINT BEACH NUCLEAR PLANT COMMUNICATIONS ASSESSMENT
DURING AN EXTENDED LOSS OF AC POWER**

**POINT BEACH NUCLEAR PLANT
COMMUNICATIONS ASSESSMENT
DURING AN EXTENDED LOSS OF AC POWER**

Point Beach Nuclear Plant response to NRC Request for Information Pursuant to Title 10 of the code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3 and 9.3 of the Near-Team Task Force Review of insights from the Fukushima Dai-ichi Accident, dated March 12, 2012. The NRC requested among other things, information related to Emergency Communications.

Dates of Assessment:
August 15, 2012 through September 28, 2012

Executive Summary:

This assessment reviews the communications capabilities of Point Beach Nuclear Plant to support emergency response to events involving loss of AC power and large scale natural events that disable the communications infrastructure in the area surrounding the plant out to 25 miles. Disabled infrastructure includes normal AC electrical service, commercial telephone service, cellular telephone service, and radio communications towers. Backup power sources at offsite locations within the 25 mile area may be considered available and functional.

This assessment was conducted in accordance with industry guidance contained in NEI 12-01, Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities, dated May 2012.

The conclusion of the assessment is that Point Beach Nuclear Plant has a diverse set of communications systems, designed to ensure reliable communications during normal plant operations and during emergency situations, including loss of offsite power. The communications systems are not safety related. Reliability is established by providing primary and backup systems that are sufficiently independent of one another and by backup power capability to protect against loss of offsite power events.

The beyond design basis events assumed in this assessment introduce failure modes that could render a significant portion of existing communications capabilities non-functional. The assessment concludes that enhancements are necessary to maintain communications capabilities for responding to beyond design basis events. These enhancements include:

- Provide additional radio repeaters or backup power for existing repeaters to allow multiple talk groups at any given time.
- Provide additional portable generators to power battery chargers for the existing installed batteries that supply power to the radio system, Private Branch Exchange (PBX) phone system, and Gai-Tronics system, within the station power block. (The same battery supplies both the radio and Gai-Tronics system)
- Install larger Uninterruptible Power Supply (UPS) devices or re-power existing UPS devices for the PBX phone system and Stationary Satellite phone system.
- Provide additional portable generators to power battery chargers for portable radio batteries and portable satellite phone batteries.
- Provide permanent docking stations and remote antenna capabilities for portable satellite phones.
- Provide backup emergency power at the Emergency Operations Facility (EOF).
- Provide a portable radio antenna at the EOF.

Topic: 10 CFR 50.54(f) Request For Information – Near Term Task Force (NTTF) Recommendation 9.3 - Communications

NRC Requested Information

NRC Requested Actions

It is requested that addressees assess their current communications systems and equipment used during an emergency event. It is also requested that consideration be given to any enhancements that may be appropriate for the emergency plan with respect to communications requirements of 10 CFR 50.47, Appendix E to 10 CFR Part 50, and the guidance in NUREG-0696, Functional Criteria for Emergency Response Facilities. Also addressees are requested to consider the means necessary to power the new and existing communications equipment during a prolonged Station Black Out (SBO).

NRC Request Assumptions

The NRC requests that the following assumptions be made in preparing responses to this request for information: the potential onsite and offsite damage is a result of a large scale natural event resulting in a loss of all AC power.

In addition, assume that the large scale natural event (LSNE) causes extensive damage to normal and emergency communications systems both onsite and in the area surrounding the site. It has been recognized that following a large scale natural event that AC power may not be available to cell and other communications infrastructures.

NRC Requested Information

Addressees are requested to provide an assessment of the current communications systems and equipment used during an emergency event to identify any enhancements that may be needed to ensure communications are maintained during a large scale natural event meeting the conditions described above.

4.0 COMMUNICATIONS DURING AN EXTENDED LOSS OF AC POWER

4.1 REQUIRED EMERGENCY COMMUNICATIONS CAPABILITIES

Consistent with emergency planning standard requirements, communications systems and equipment associated with the emergency response functions described in the tables below, should be available during an extended loss of AC power. Availability should be determined after a review of existing capabilities and consistent with the assumptions listed in NEI 12-01, Rev. 0, Section 2. In particular, it is important that the primary and backup (if applicable) power source for each communications system or piece of equipment be identified.

End-point equipment identified for a communications link listed in the tables below should be used solely for the purpose indicated. For example, a satellite telephone assigned to the Control Room should not be credited for performing both Offsite Response Organization (ORO) and NRC notifications. When performing this assessment, consideration should be given to the desirability of providing some communications capabilities in alternate facilities at offsite locations instead of their normal locations in on-site facilities.

NOTE: In the tables below, when referring to “Additional Information” in column 8, ensure the following is addressed:

1. Provide a description of any new communications system(s) or technologies that will be deployed based upon the assumed conditions described above, and
2. Provide a description of how the new and/or improved systems and power supplies will be able to provide for communications during a loss of all AC power.

4.1.1 Notifications to, and communications, with OROs [per 10 CFR 50 Appendix E]

Emergency Response Facility	Minimum Communications Links	Primary Method Described in site E-Plan	Primary Method Available following Assumed LSNE?	Backup Method(s) Described in site E-Plan	Backup Method(s) Available following Assumed LSNE?	Planned or Potential Improvement Identified?	Refer to Following Section for Additional Information
Control Room (Common for both units)	1 per Control Room for Shift Communicator	Two Digit Dial Select	NO	PBX Phone Cell Phone Satellite Phone	NO NO YES	NO NO YES	Satellite phone - Attachment B
Technical Support Center (TSC) (adjacent to Operational Support Center (OSC))	1 for Key TSC Communicator	Two Digit Dial Select	NO	PBX Phone Cell Phone Satellite Phone	NO NO YES	NO NO YES	Satellite phone - Attachment B

4.1.1 Continued

Emergency Response Facility	Minimum Communications Links	Primary Method Described in site E-Plan	Primary Method Available following Assumed LSNE?	Backup Method(s) Described in site E-Plan	Backup Method(s) Available following Assumed LSNE?	Planned or Potential Improvement Identified?	Refer to Following Section for Additional Information
Emergency Operations Facility (EOF)	1 for Key EOF Communicator	Two Digit Dial Select	NO	PBX Phone Cell Phone Satellite Phone	NO NO YES	NO NO YES	Satellite phone - Attachment B

4.1.2 Notifications to, and communications with, the Nuclear Regulatory Commission (NRC) Headquarters Incident Response Center and the appropriate NRC Regional Office Operations Center [per 10 CFR 50 Appendix E]

Emergency Response Facility	Minimum Communications Links	Primary Method Described in site E-Plan	Primary Method Available following Assumed LSNE?	Backup Method(s) Described in site E-Plan	Backup Method(s) Available following Assumed LSNE?	Planned or Potential Improvement Identified?	Refer to Following Section for Additional Information
Control Room (Common for both units)	1 per Control Room for Emergency Notifications System (ENS) Communicator	Emergency Notifications System (ENS)	NO	PBX Phone Cell Phone Sat. Phone	NO NO YES	NO NO YES	Satellite phone - Attachment B
TSC (adjacent to OSC)	1 for ENS Communicator	ENS	NO	PBX Phone Cell Phone Sat. Phone	NO NO YES	NO NO YES	Satellite phone - Attachment B
EOF	1 for Health Physics Network (HPN) Communicator	Health Physics Network (HPN)	NO	PBX Phone Cell Phone Sat. Phone	NO NO YES	NO NO YES	Satellite phone - Attachment B
TSC (adjacent to OSC)	1 for HPN Communicator	HPN	NO	PBX Phone Cell Phone Sat. Phone	NO NO YES	NO NO YES	Satellite phone - Attachment B

4.1.3 Communications between licensee emergency response facilities [per 10 CFR 50 Appendix E. Additional links that support performances of critical response functions are also specified.] The minimum communications links to support this function are listed below by facility. For example, if the normally used telephone system cannot be restored to service, these links could rely upon some combination of radio, sound-powered and satellite-based communications systems.

Emergency Response Facility	Minimum Communications Links	Primary Method Described in site E-Plan	Primary Method Available following Assumed LSNE?	Backup Method(s) Described in site E-Plan	Backup Method(s) Available following Assumed LSNE?	Planned or Potential Improvement Identified?	Refer to Following Section for Additional Information
Control Room (Common for both units)	1 per unit	PBX Phone	YES	FM Radio Cell Phone Public Address System (Gai-Tronics) Satellite Phones	YES NO YES YES	YES NO NO YES	PBX Phone - Attachment A FM Radio - Attachment C Gai-Tronics - Attachment D Satellite Phone - Attachment B
TSC	1 each for: • Senior/Lead TSC Manager • Operations Coordination • Maintenance Coordination • Engineering Coordination • Radiological Support Additional response coordination links for multi-unit sites: • 1 for each position providing Unit Response Coordination.	PBX Phone	YES	FM Radio Cell Phone Public Address System (Gai-Tronics) Satellite Phones	YES NO YES YES	YES NO NO YES	PBX Phone - Attachment A FM Radio - Attachment C Gai-Tronics - Attachment D Satellite Phone - Attachment B

4.1.3 Continued

Emergency Response Facility	Minimum Communications Links	Primary Method Described in site E-Plan	Primary Method Available following Assumed LSNE?	Backup Method(s) Described in site E-Plan	Backup Method(s) Available following Assumed LSNE?	Planned or Potential Improvement Identified?	Refer to Following Section for Additional Information
OSC	1 each for: <ul style="list-style-type: none"> • Senior/Lead OSC Manager • Radiological Support Additional response coordination links for multi-unit sites: <ul style="list-style-type: none"> • 1 for each position providing Unit In-Plant Team Coordination. 	PBX Phone	YES	FM Radio Cell Phone Public Address System (Gai-Tronics) Satellite Phones	YES NO YES YES	YES NO NO YES	PBX Phone - Attachment A FM Radio - Attachment C Gai-Tronics - Attachment D Satellite Phone - Attachment B
EOF	1 each for: <ul style="list-style-type: none"> • Senior/Lead Manager • Key Protective Measures • Operations or Technical Support (as needed to support performance of dose projections, formulation of PARs and plant status updates to ORO authorities). 	PBX Phone	YES	FM Radio Cell Phone Satellite Phones	YES NO YES	YES NO YES	PBX Phone - Attachment A FM Radio - Attachment C Satellite Phone - Attachment B
Joint Public Information Center (JPIC)	1 for Senior Manager	PBX Phone	NO	Cell Phone Satellite Phones	NO YES	NO YES	Satellite Phone - Attachment B

4.1.4 Communications with field/offsite monitoring teams [per 10 CFR 50 Appendix E]

Emergency Response Facility	Minimum Communications Links	Primary Method Described in site E-Plan	Primary Method Available following Assumed LSNE?	Backup Method(s) Described in site E-Plan	Backup Method(s) Available following Assumed LSNE?	Planned or Potential Improvement Identified?	Refer to Following Section for Additional Information
Primary location where field/offsite monitoring team coordination is performed	Field/offsite monitoring team coordination	FM Radio	Yes	Cell phone Satellite	NO YES	NO YES	FM Radio - Attachment C Satellite Phone - Attachment B
Primary location from which field/offsite monitoring teams are deployed	1 for each field/offsite monitoring team	FM Radio	Yes	Cell phone Satellite	NO YES	NO YES	FM Radio - Attachment C Satellite Phone - Attachment B

4.1.5 Communications with other Federal agencies as described in the site emergency plan (e.g., the US Coast Guard) [per 10 CFR 50 Appendix E]

Emergency Response Facility	Minimum Communications Links	Primary Method Described in site E-Plan	Primary Method Available following Assumed LSNE?	Backup Method(s) Described in site E-Plan	Backup Method(s) Available following Assumed LSNE?	Planned or Potential Improvement Identified?	Refer to Following Section for Additional Information
Primary location where communication with Federal agencies is performed	Coordination with Federal agencies	PBX Phone	NO	Cell phone Satellite phone	NO YES	NO YES	Satellite Phone - Attachment B

4.1.6 Coordination and direction of on-site and in-plant response teams. This includes teams necessary to affect emergency repairs, firefighting, search and rescue, radiological monitoring, and implementation of Transition Phase coping and severe accident management strategies. To accommodate the timeline associated with NRC Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (as discussed in Section 1); this element should be assessed in two phases.

Phase 1 Assessment

Emergency Response Facility	Minimum Communications Links	Primary Method Described in site E-Plan	Primary Method Available following Assumed LSNE?	Backup Method(s) Described in site E-Plan	Backup Method(s) Available following Assumed LSNE?	Planned or Potential Improvement Identified?	Refer to Following Section for Additional Information
On-shift staff	Number necessary for the on-shift staff to perform Initial Phase coping actions (reflecting current staff & strategies)	FM Radio	YES	Gai-Tronics	YES	YES	FM Radio - Attachment C Gai-Tronics - Attachment D
OSC and other site-specific locations as necessary	1 each for: <ul style="list-style-type: none"> • On-site radiological monitoring 2 each for: <ul style="list-style-type: none"> • Firefighting (1 for brigade leader and 1 for the brigade) 2 each per unit for: <ul style="list-style-type: none"> • In-plant rad. monitoring • Search and Rescue • Emergency repairs 	FM Radio	YES	Cell Phone Gai-Tronics	NO YES	YES YES	FM Radio - Attachment C Gai-Tronics - Attachment D

4.2 Plant Paging (Announcement) System

Emergency Response Facility	Minimum Communications Links	Primary Method Described in site E-Plan	Primary Method Available following Assumed LSNE?	Backup Method(s) Described in site E-Plan	Backup Method(s) Available following Assumed LSNE?	Planned or Potential Improvement Identified?	Refer to Following Section for Additional Information
Control Room (Common for both units)	See assumptions and discussion in NEI 12-01.	Gai-Tronics	YES	Face-to-face communications	YES	NO	Gai-Tronics - Attachment D
TSC	See assumptions and discussion in NEI 12-01.	Gai-Tronics	YES	Face-to-face communications	YES	NO	Gai-Tronics - Attachment D

4.3 Communications Equipment at ORO Facilities

Emergency Response Facility	Minimum Communications Links	Primary Method Described in site E-Plan	Primary Method Available following Assumed LSNE?	Backup Method(s) Described in site E-Plan	Backup Method(s) Available following Assumed LSNE?	Planned or Potential Improvement Identified?	Refer to Following Section for Additional Information
Location where OROs receive notifications of an emergency declaration or a Protective Action Recommendation (as described in the site emergency plan)	At least one. See assumptions and discussion in NEI 12-01.	PBX Phone	No	Cell Phone Satellite phone	NO YES	NO YES	Satellite Phone - Attachment B

4.4 Notification of the Emergency Response Organization (ERO)

Emergency Response Facility	Minimum Communications Links	Primary Method Described in site E-Plan	Primary Method Available following Assumed LSNE?	Backup Method(s) Described in site E-Plan	Backup Method(s) Available following Assumed LSNE?	Planned or Potential Improvement Identified?	Refer to Following Section for Additional Information
Location where ERO notifications of an emergency (as described in the site emergency plan)	At least one. See assumptions and discussion in NEI 12-01.	Pager	NO	Predetermined response based on wide area loss of power (memo to employees)	YES	YES	Pager - Attachment E

4.5 EQUIPMENT LOCATION REQUIREMENTS

To be assumed functional, a piece of on-site communications equipment should be stored in a location, and maintained in a manner, that maximizes survivability following a beyond design basis event.

The Interim Staff Guidance for FLEX equipment was issued, by the NRC on August 30, 2012. All equipment storage locations will be assessed and where needed, enhancements identified earlier in this assessment report will be made to verify:

1. Location or manner of storage reasonably precludes wetting from flooding;
2. Location or manner of storage reasonably precludes damage from a seismic event; and,
3. Equipment is stored, or otherwise available, in locations that can be readily accessed when needed. To the degree practical, potential constraints to equipment access or movement when selecting a storage location will be considered.

When assessing storage locations, criteria presented in regulatory and industry guidance applicable to equipment associated with NRC Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond Design Basis External events (e.g., FLEX equipment) has been/will be considered.

This guidance applies to equipment at the point of use (e.g., a radio) as well as any supporting infrastructure components. Such components may include portable power sources, and radio system repeaters and antennas.

4.6 PERFORMANCE CHARACTERISTICS

1. This assessment has confirmed that once the communications enhancements have been implemented, the systems and equipment identified for usage will support communications among and between:
 - a. Licensee emergency response facilities, including Security.
 - b. Field/offsite monitoring teams and the location controlling deployment of the teams (e.g., the EOF).
 - c. The Shift Communicator, Key TSC and EOF Communicators, and the ORO contact points.
 - d. ENS and HPN communicators and the NRC staff.
 - e. On-site and in-plant teams and the location controlling deployment of the teams (e.g., the OSC).
2. This assessment has verified that with the enhancements implemented, radio system(s) used by ERO personnel will possess the necessary design and operating characteristics to adequately support emergency communications.
3. This assessment has verified that expected reliance upon "multi-use" equipment is minimized. This means that communications equipment used to implement emergency response functions is not relied upon to simultaneously support other functions (e.g., Security). There are no cases where multiple-usage is unavoidable.

4.7 OTHER ASSESSMENT CONSIDERATIONS

1. Portable backup AC power source(s) for communications systems and components have been assessed, and in accordance with final rulemaking:
 - a. Backup AC power sources credited as operable will meet the assumptions and requirements discussed in section 4.5 above.
 - b. Sufficient power source fuel will be available on-site to support the expected run time.
2. Assess battery-operated equipment:

Enhancements have been identified to verify that there are a sufficient number of on-site and charged batteries to support operation of required equipment. This number was determined with consideration given to the following items:

 - a. A sufficient number of charged batteries available at the start of an event to support performance of the required emergency response functions listed in Section 4.1, Required Emergency Communications Capabilities.
 - b. The vendor's stated minimum reliable operability period for a fully-charged battery was used.
 - c. Availability of on-site battery charging capability.
 - d. Delivery of replacement batteries - assumed to occur any time after T + 24 hours.(T= time of beyond design basis event)
3. This assessment has identified that the only manual action that may need to be taken by emergency responders to facilitate the use of any communication link would be if the portable generators were used to provide power. Procedure enhancements will be needed and potential training on the process will be needed.

4.8 QUALITY AND MAINTENANCE-RELATED REQUIREMENTS

Preventive maintenance requests will be generated to check new equipment purchased/installed for this assessment. EP procedures will be changed / added to account for new equipment.

4.9 NATIONAL COMMUNICATIONS SYSTEM (NCS) SERVICES

Government Emergency Telecommunications Service (GETS) cards will be made available to some of our EP personnel and emergency response positions. Wireless Priority Service (WPS) cards are telephone specific and contain monthly fee. It was determined that WPS cards are not needed.

4.10 COMMUNICATIONS PROVIDER EMERGENCY SERVICES

Cellular providers in the area have mobile devices capable of extending cellular service to affected areas.

4.11 PERSONNEL TRAINING

Need training for EP and other personnel on the new communications devices (interim devices and final configuration).

5.0 Planned Improvements

5.1 Planned or potential improvements to existing on-site communications systems and their required normal and/or backup power supplies:

- Install larger UPS devices or re-power existing UPS devices for the PBX Phone system and Stationary Satellite phone system.
- Extend life of battery supply for the PBX phone system with temporary power (portable generator) for the installed charger.
- Provide external antennas and docking stations (Control Room and TSC) to allow indoor use of portable Satellite phones.
- Provide portable repeaters or enhance the power supply of installed repeaters to allow simultaneous conversations.
- Provide portable generators for charging radio and satellite phone batteries.
- Provide portable generator to allow charging of the communications inverter battery (Supply to the radio and Gai-tronics system).
- Revise training and procedures to reflect portable generator use and portable satellite phone use.
- Incorporate testing, maintenance, and storage of any new equipment into existing procedures.
- Include information from NPM 2012-0171, ERO Response During Major Losses of Communication, in ERO training.

5.2 Planned or potential improvements to off-site communications systems and their required normal and/or backup power supplies:

- Acquire Government Emergency Telecommunications Service (GETS) cards for selected phones/positions and update training and procedures as required.
- Provide external antennas and docking stations in the EOF to allow indoor use of portable Satellite phones.
- Improve satellite phone availability at ORO facilities and update existing procedures to incorporate the phone numbers.
- Provide backup emergency power at the EOF.
- Provide a portable radio antenna at the EOF.
- Revise training and procedures to reflect portable generator use and portable satellite phone use.
- Provide portable generators for charging radio and satellite phone batteries.
- Incorporate testing, maintenance, and storage of any new equipment into existing procedures.

5.3 Provide a description of any new communications system(s) or technologies that will be deployed based upon the assumed conditions;

- No new communications systems will be deployed.

5.4 Provide a description of how the new and/or improved systems and power supplies will be able to provide for communications during a loss of all ac power.

- Portable generators will be able to supply the existing battery chargers for the PBX phone system and the communications inverter (supplies power to the FM radio system and Gai-Tronics system). Providing power to these installed batteries would allow the radio system and Gai-Tronics system to operate for an indefinite amount of time.
- Portable generators will be able to recharge portable communication equipment batteries. Providing a means to recharge the batteries/spare batteries will allow each piece of equipment to operate for an indefinite amount of time.
- Re-powering or installing larger UPS units on the PBX phone system and Stationary Satellite phone system needs to be done to maintain the PBX phones and Stationary Satellite phones available on a long term loss of AC power.
- Providing portable repeaters or enhancing the power supply of installed repeaters will allow multiple conversations to take place on the radio system.
- External antennas will allow users to be in a sheltered area when using a portable satellite phone. The antennas need to be connected to a docking station to be functional.
- Obtaining GETS card for select positions/phones will ensure line priority is given in the event of an emergency.

6.0 PBNP Emergency Response Communication Systems (Current Capabilities)

Communications Systems/Equipment	Alternate methods	System/Equipment Description
PBX Telephone System.	<ul style="list-style-type: none"> • Radios • ERO Pagers • Company Intranet messages • Company e-mail • Cellular telephones • Gai-Tronics • Handheld bullhorn 	<p>PBX telephone system with at least 1,200 telephone extensions, including locations at the TSC, OSC, EOF, Off Site Radiation Protection Facility (OSRPF), Alternate Emergency Operations Facility (AEOF) and JPIC.</p> <p>See Attachment A for a more detailed description.</p>
HPN	<ul style="list-style-type: none"> • Local Commercial Telephone System • Cellular telephones • Satellite phones 	<p>The HPN is a special commercial telephone circuit (FTS) controlled by the NRC. During an emergency event, it is used at the request of the NRC, to provide onsite and offsite radiological data to the NRC.</p> <p>See Attachment A for a more detailed description.</p>
Cellular telephones	<ul style="list-style-type: none"> • Radios • Plant PBX Telephone System • Gai-Tronics system • Satellite Phones 	<p>US Cellular is the Cell phone provider for Company issued cell phones.</p> <p>See Attachment B for a more detailed description.</p>
Satellite phones	<ul style="list-style-type: none"> • Radios • Plant PBX Telephone System • Cellular telephones • Gai-Tronics system 	<p>Point Beach has Stationary Satellite phones and Portable Satellite phones.</p> <p>See Attachment B for a more detailed description.</p>
ENS	<ul style="list-style-type: none"> • Plant PBX Telephone System • Cellular telephones • Satellite Phones 	<p>The ENS is a special commercial telephone circuit controlled by the NRC. During an emergency event, it is used to provide initial notification of the event to the NRC.</p> <p>See Attachment A for a more detailed description.</p>
Two digit dial select	<ul style="list-style-type: none"> • Plant PBX Telephone System • Cellular telephones • Satellite Phones 	<p>The Two-Digit Dial Select circuit is a unique, dedicated telephone network and is used as the primary means of notifying the state and counties of events at Point Beach.</p> <p>See Attachment A for a more detailed description.</p>

6.0 Continued

Communications Systems/Equipment	Alternate methods	System/Equipment Description
Radios	<ul style="list-style-type: none"> • Plant PBX Telephone System • Gai-Tronics • ERO Pagers 	<p>The Point Beach FM radio system has base station consoles in the Control Room, OSC, Central Alarm Station, Secondary Alarm Station, and the Site Boundary Control Center (SBCC). The radio system utilizes an automatically actuated radio transmitter (repeater) which retransmits signals received from hand held units. This extends the hand-held units' range and provides for better reception throughout the plant. Radios are also capable of operating point-to-point.</p> <p>See Attachment C for a more detailed description.</p>
ERO Pagers	<ul style="list-style-type: none"> • Plant PBX Telephone System • Cellular telephones 	<p>Point Beach utilizes the NXT Communicator system to activate the ERO during emergency events. The NXT system software and transmission towers are located in two geographically separate locations in the United States; Tennessee and Arizona. These separate locations act as primary and secondary base stations for issuing ERO activation transmissions to ERO member's home phones, work phones, cell phones if applicable and ERO pagers. The ERO pager transmissions are initiated through the JSM Communications</p> <p>See Attachment E for a more detailed description</p>
Gai-Tronics (Plant Public Address System)	<ul style="list-style-type: none"> • Radios • Plant PBX Telephone System • Cellular telephones • ERO pagers • Email 	<p>The plant paging system (Gai-Tronics) is an internal plant five-channel multi-station public address system. Each public address station has the capability of general announcement of party-line conversation via any channel. Plant fire and Evacuation alarms use this system.</p> <p>See Attachment C for a more detailed description.</p>

Attachment A

PBNP Phone System Description

PBX Phone System:

There are 2 PBXs, one located on the Turbine Deck, Unit 1 (Plant), and the other in the Nuclear Engineering Services (NES) Building. Telephones located in the TSC, OSC, EOF, OSRPF, AEOF and the JPIC are connected to the PBX located on the Turbine Deck. The PBX in the NES Building services the NES, Training Building and the trailer complex near the Energy Center. The turbine deck PBX is powered from lighting panel 65-L via telephone equipment room lighting transformer (XL-34) and 480V MCC 1B-11. The NES PBX is normally supplied from lighting panel 133L and 480V MCC B-60. Both PBX systems have a battery backup power supply with about eight hours of capacity. Eight in-plant extensions automatically take over eight Mishicot, Wisconsin exchange lines upon loss of all in-plant PBX system power.

The two PBX Systems are connected together through a number of T1 fold connections. Each PBX has a backup capability of approximately eight hours in the event of loss of power; however the T1 connection between the two will go down within minutes of the power outage.

The PBX system satisfies the equipment location requirements of Section 4.5 and will be available as described below after a Beyond Design Basis External Event (BDBEE).

Stationary Satellite system communications are available from all the Emergency Response Facilities and Security through the PBNP PBX lines with dedicated callback numbers to the Control Room, TSC, and EOF.

Assumptions are that there is a loss of all AC power within a 25 miles radius and has the following affects on the PBNP phone system:

Plant PBX System

- Communication within the plant will remain for eight hours.
- Communication to the buildings north of the site (Outside the protected area), will remain for eight hours.
- Communication to the Energy Center will be lost.
- Communication to the JPIC will be lost.
- Communication to the NES, Training Building, and the Trailer complex near the Energy Information Center will be lost.
- Communication anywhere offsite will be lost.

NES PBX System

- Communication within the NES and Training Building will remain for eight hours.
- Communication to the Plant will be lost.
- Communication to the buildings north of the site (Outside the protected area), will be lost.
- Communication to the Energy Information Center will remain for eight hours.
- Communication to the AEOF will be lost.
- Communication anywhere offsite will be lost.

Attachment A (continued)

Stationary Satellite Phones

- Satellite Communication offsite from within the NES will remain for eight hours.
- Satellite Communication offsite from the Plant will be lost.
- Satellite Communication offsite from the buildings north of the site (Outside the protected area), will be lost.
- Satellite Communication offsite from the Energy Center and EOF will be lost.
- Satellite Communication offsite from the AEOF will remain. There are two stationary Satellite phones at the AEOF.

Two Digit Dial Select Phone Systems:

The Two-Digit Dial Select circuit is a unique, dedicated telephone network and is used as the primary means of notifying the state and counties of events at Point Beach. The system allows for conference calling with any or all of the following locations: Manitowoc and Kewaunee County EOCs and Sheriff Dispatch centers, Wisconsin EOC and State Patrol in Madison, Kewaunee Power Station Control Room, EOF and TSC, and Point Beach's TSC, EOF, AEOF, and Control Room. Commercial telephones are used as the back-up means for notification if the Two-Digit Dial Select System becomes out-of-service.

This system will be lost during a BDBEE due to loss of external phone lines.

ENS Phone System:

The ENS is a special commercial telephone circuit controlled by the NRC. During an emergency event, it is used to provide initial notification of the event to the NRC and thereafter is to be used to communicate plant systems and radiological data.

This system's power supply will be lost during a BDBEE and it will not be available.

HPN Phone System:

The HPN is a special telephone circuit (FTS) installed by the NRC. During an emergency event, it is used at the request of the NRC, to provide onsite and offsite radiological data to the NRC. There are two desk-sets in both the TSC and EOF. It is assumed that one will be staffed by licensee personnel and the other by a member of the NRC response team. Continuous communications of the licensee may be requested.

This system's power supply will be lost during a BDBEE and it will not be available.

Attachment A (continued)

Point Beach Phone System Enhancements

- Extend life of battery supply for the PBX phone system with temporary power for the installed charger.
- Install larger UPS devices or re-power existing UPS devices for the PBX system.
- Obtain GETS Cards for selected phones/positions.

Attachment B

PBNP Stationary Satellite Phone System Description

Satellite system communications are available from all the Emergency Response Facilities and Security through the PBNP PBX lines with dedicated callback numbers to the Control Room, TSC, OSRPF, and EOF. Direct satellite phone units (independent of the PBX) are also available in the Control Room, AEOF, TSC, and with the Security Group.

Stationary Satellite phone system will not be available after a BDBEE for the Control room, TSC, and EOF.

PBNP Portable Satellite Phone System Description

There are 15 portable satellite phones. These phones require the user to be outdoors with a clear view to the sky. The phones are located as follows; Control room (3), TSC (3), EOF (4), OSC (2), JPIC (1), and Security Group (2).

The portable satellite phones will be stored in locations that meet the requirements of Section 4.5 and will be available following a BDBEE.

Satellite Phone Enhancements

- Extend life of battery supply for the PBX phone system with temporary power for the installed charger.
- Install larger UPS devices or re-power existing UPS devices for the satellite phone system.
- Provide external antennas and docking stations (Control Room, TSC, EOF) to allow indoor use of portable Satellite phones.
- Provide portable generator to charge satellite phone batteries.
- Revise procedures and training to support the use, testing, maintenance and storage of any new equipment.
- Improve satellite phone availability at ORO facilities and update existing procedures to incorporate the phone numbers.

Attachment B (continued)

PBNP Cell Phone System Description

PBNP cellular service is provided through US Cellular. The Radiation Protection group has cellular phones available for offsite field monitoring teams in the OSRPF. Cellular phones are also supplied to approximately 100 plant employees in all major departments.

Emergency service is available through US Cellular. It is assumed that all cellular service is lost at the plant at the initiation of the event. There will be some service available on the fringe of the 25 mile zone and could be used to communicate with satellite phones located in various emergency facilities. There is also emergency service available from other cellular vendors. The availability of cellular service would be a long term enhancement but short term recovery of this communication method is not needed for emergency plan communications.

It is assumed the Cellular service is not available following a BDBEE.

Point Beach Cell Phone Enhancements

- There are no enhancements identified at this time.

Attachment C

PBNP Radio System Description

The Point Beach FM radio system has base station consoles in the Control Room, OSC, Central Alarm Station, Secondary Alarm Station and the SBCC. The radio system utilizes an automatically actuated radio transmitter (repeater) which retransmits signals received from hand held-units. This extends the hand-held units' range and provides for better reception throughout the plant. These hand-held units are also capable of operating point-to-point independent of the repeater system. Point-to-point communication has limited range due to the configuration of the plant structures. These hand-held units are available in the Control Room, TSC, Radiation Protection Station, SBCC, and from Security. The radio system is used for in-plant security, operations, maintenance and radiation protection surveys, and would be used during emergencies. Using this radio system, Control Room personnel can also communicate 24 hours a day with the Manitowoc County Sheriff's Department. This allows indirect communications with the Aurora Medical Center-Manitowoc County. The radio system also provides a direct communications link with the Security Building or the TSC from the Control Room.

The major components of the radio system are located in an enclosed room located within the non-nuclear room, Unit 2, 52' elevation of the plant.

The major components of the radio system are powered from instrument bus distribution panel Y-12. This panel is fed from inverter 1DY-201, which is powered by a 125vdc bus supplied by either station battery 1D-205 or battery charger 1D-207. Other components are fed from various emergency lighting panels in several locations. Only one repeater is powered from Y-12, which will allow only one individual to be talking at any given time. Point-to-point communications would be available for additional conversations but the distance between radios in point-to-point mode is limited.

The radio system meets the equipment location requirements of Section 4.5 and will be available following a BDBEE.

Point Beach Radio System Enhancements

- Provide portable repeaters or enhance the power supply of installed repeaters to allow simultaneous conversations.
- Provide portable generator to power battery charger 1D-207 to maintain communications inverter.
- Provide backup emergency power at the EOF.
- Provide portable generator to charge radio batteries.
- Provide a portable radio antenna at the EOF.
- Revise procedures and training to support the use, testing, maintenance and storage of any new equipment.

Attachment D

PBNP Plant Paging System Description

The plant paging system (Gai-Tronics) is an internal plant five-channel multi-station public address system. Each public address station has the capability of general announcement of party-line conversation via any channel.

The normal power supply to the Gai-Tronics system is from instrument bus distribution panel Y-12. This panel is fed from inverter 1DY-201, which is powered by a 125vdc bus supplied by either station battery 1D-205 or battery charger 1D-207.

The Gai-Tronics system meets the equipment location requirements of Section 4.5 and will be available following a BDBEE.

The Gai-Tronics system is assumed to be functional immediately after an event and will accomplish in-plant notification of on-site employees.

Point Beach Plant Paging System Enhancements

- Provide portable generator to power battery charger 1D-207 to maintain communications inverter. (Same as enhancement for radio system)

Attachment E

Point Beach ERO Paging System Description

PBNP utilizes the NXT Communicator system to activate the ERO during emergency events. The NXT Communicator system software and transmission towers are located in two geographically separate locations in the United States; Tennessee and Arizona. These separate locations act as primary and secondary base stations for issuing ERO activation transmissions to ERO members' home phones, work phones, cell phones if applicable, and ERO pagers. The ERO pager transmissions are initiated through the JSM Communications Company, who owns the alpha numeric pagers worn by the PBNP ERO and area towers for transmitting messages originating from the NXT Communicator system. There are six JSM pager transmission towers located 180 degrees around the plant that are outside the 25 mile radius. Those towers are located in the towns of Sturgeon Bay, Sobieski, Appleton, Brillion, Chilton, and Sheboygan. When a call is made from the site to NXT Communicator to activate the ERO, the NXT Communicator software sends commands to the PBX phone system, in-plant phone system, and the ERO pager system. These pager transmission towers outside of the 25 mile radius would reach ERO pagers approximately 15 miles into the 25 mile radius. As such, most ERO personnel living outside of a 10 mile radius around the PBNP site could receive the page. The initial call to NXT Communicator can be made from a stand alone satellite phone.

In the event that there is a major loss of communication capabilities, NPM 2012-0171 ERO response during Major Losses of Communication, was sent to all ERO members. The memo provides guidance to ERO members that if they are aware of grid disturbances, siren activations, major power outages or other events that could impact the stability of the Point Beach site; they should take the following actions:

- If possible, monitor local radio communications for the extent of impact from the event. Do not call the control room.
- Should the situation appear to be of a magnitude that could affect the stability of the Point Beach site and there are major disturbances to communications such that phone, pager, and cellular service are not functioning, first ensure your family and homes are safe. Then, if you can travel safely, report to your emergency response facility.
- In the event that your respective facility is inaccessible, ERO members are directed to go to the JPIC, located approximately 25 miles from Point Beach, in Green Bay, Wisconsin.

Point Beach ERO Paging System Enhancements

- Include information from NPM 2012-0171, ERO Response During Major Losses of Communication, in ERO training.

ENCLOSURE 2

NEXTERA ENERGY POINT BEACH, LLC POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

NEXTERA ENERGY POINT BEACH, LLC RESPONSE TO 10 CFR 50.54(F) REQUEST FOR INFORMATION REGARDING NEAR-TERM TASK FORCE RECOMMENDATION 9.3, EMERGENCY PREPAREDNESS

SUMMARY OF REGULATORY COMMITMENTS

NextEra Energy Point Beach, LLC proposes the following new Regulatory Commitments:

<u>Planned Communications Improvement</u>	<u>Implementation Schedule</u>
Improve availability of satellite phones at Offsite Response Organization (ORO) facilities and update the applicable procedures.	6/15/13
Obtain Government Emergency Telecommunications Service (GETS) cards for selected phones/positions. Complete appropriate training and update the applicable procedures.	6/15/13
Install larger Uninterruptible Power Supply (UPS) devices or re-power existing UPS devices for the PBX phone system and Stationary Satellite phone system.	9/15/13
Provide backup emergency power at the Emergency Operations Facility (EOF).	9/15/13
Provide additional portable generators to power battery chargers for portable radio batteries and portable satellite phone batteries. Complete appropriate training and update the applicable procedures.	12/15/13
Provide permanent docking stations and remote antenna capabilities for our portable satellite phones. Complete appropriate training and update the applicable procedures.	12/15/13
Provide additional radio repeaters or backup power for existing repeaters to allow multiple talk groups at any given time. Complete appropriate training and update the applicable procedures.	10/31/14
Provide additional portable generators to power battery chargers for the existing installed batteries that supply power to the radio system, PBX phone system and Gai-Tronics system within the station power block (The same battery supplies both the radio and Gai-Tronics system). Complete appropriate training and update the applicable procedures.	10/31/14
Provide a portable radio antenna at the EOF.	10/31/14