



NEW HAMPSHIRE STATE EMERGENCY OPERATIONS CENTER

NextEra Seabrook Station Siren Activation Report

Date: July 12, 2022

Time: approximately 1050

Description: On July 12, 2022 at approximately 10:50am, ten Seabrook Station sirens located along New Hampshire beaches broadcast a pre-recorded verbal message which said:

“Attention. Attention. There is a problem at Seabrook Nuclear Power Station. The beaches are closed. Leave the beach area at once and turn on your radio for more information.”

According to NextEra Seabrook station this was a partial activation of the siren notification system and was caused inadvertently by a Seabrook Station employee conducting a test of the siren system.

Background

Radiological Emergency Response Plans

The Nuclear Regulatory Commission (NRC) requires all licensees (nuclear power plants) to have extensive emergency response plans. NextEra Seabrook Station staff are responsible for the procedures in the plant and on the property. The State of New Hampshire, Department of Safety, Homeland Security and Emergency Management is responsible for the Outside Response Organization (ORO) plans to respond to an emergency at the plant that extends beyond their perimeter. The ORO for New Hampshire is comprised of 17 communities located within an approximate 10-mile radius around Seabrook Station, three host communities in which reception centers for evacuees would be established, Rockingham County Sheriff Department and state agencies. The document entitled the “State of New Hampshire Emergency Operations Plan, Radiological Emergency Response for Nuclear Facilities Incident Annex and Implementing Procedures for State Agencies” (RERP) sets forth the plans and procedures for the state level response. In addition, each community, the State Transportation Staging Area (STSA), Rockingham County Dispatch Center (RCDC), and the host communities have individual plans. All plans are reviewed by HSEM staff annually and sent to FEMA for approval. Every two years the plans are evaluated by FEMA in a graded exercise. The most recent exercise was April 6, 2022, in which the ORO and Seabrook Station were able to successfully demonstrate the ability to execute the approved plans.

Emergency Classifications

Emergencies at a nuclear power plant are classified according to plant conditions and the potential or actual release of radioactive materials. The four emergency classifications are: Notification of an Unusual Event, Alert, Site Area Emergency, and General Emergency (most serious). The Unusual Event is defined by the NRC as follows:

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.

No releases of radioactive material requiring offsite response or monitoring are expected, unless further degradation of safety systems occurs.

Note: The terms Notification of Unusual Event, NOUE and Unusual Event are used interchangeably.

Nuclear Alert System Phone (NAS)

The NAS Phone, which is to be used for any of the four categorized events above, is a secure telephone communications system that links NextEra Seabrook station with HSEM, NHSP Communications, RCDC and Massachusetts Emergency Management Agency. NHSP Communications is staffed 24 hours per day, 365 days per year and is primary point of contact with the State.

Sirens

Seabrook Station owns, maintains, and tests 121 sirens located in the 10-mile radius around Seabrook Station referred to as the Emergency Planning Zone (EPZ), including 27 in Massachusetts. Of those 121, the ten located along the New Hampshire seacoast can emit a warble tone or broadcast a pre-recorded verbal message in English and French which says:

“Attention. Attention. There is a problem at Seabrook Nuclear Power Station. The beaches are closed. Leave the beach area at once and turn on your radio for more information.”

The remaining 111 sirens emit an audible warble tone. All the sirens can be used in public address mode where a microphone at the control console can be used for an *ad hoc* message.

The alert message is pre-recorded in English and French and stored on a digital chip in each of the ten beach sirens. When activated, the siren units will rotate. They begin facing north, play the message, and then turn 45 degrees to face east, south, and west repeating the message at each direction. The full rotation takes approximately three minutes. The process would then repeat in French completing the cycle. There is also a test message (which has not been used since the 1990’s) loaded in the ten sirens which says:

“Attention, Attention. This siren will soon be sounded as part of an audible test of the Seabrook Station Siren System. When the siren sounds no action is required. The siren sounding is only a test. Repeat, the siren sounding is only a test. No action is required.”

As outlined in the state plans, the Seabrook station sirens can be activated by several sources. The decision to activate any or all of the sirens is made by the HSEM Director, HSEM Assistant Director, or designee. Once the decision is made, State Emergency Operations Center (SEOC) staff make the notifications through phone calls and the issuing of a form 300B posted to the web-based incident management platform WebEOC. The primary initiator of the sirens is Rockingham County Dispatch Center (RCDC), second is the New Hampshire State Police, third is Emergency Support Function (ESF) 2 in the SEOC, and last would be the individual towns.

RCDC: dispatch is only authorized to sound the sirens upon direction from HSEM

State Police: Should RCDC be unable to execute the activation of the sirens, or in the case of a fast moving event at Seabrook Station, the state police can activate the sirens upon direction from HSEM

ESF2: If RCDC and State Police are unable to activate the sirens, ESF2 will initiate this step upon direction from HSEM

Towns: Each individual town has the capability of activating the sirens within their community. The alert function for Seabrook Station emergencies should only be activated as a last resort and under the direction of HSEM. They may use the sirens for other emergencies; however, these are different tones and procedures.

In the case of an actual emergency, the verbal alert would complete a full cycle of English and French messages on the ten beach sirens and the additional selected sirens would have sounded. In addition, the lifeguards and staff from the Department of Natural and Cultural Resources would facilitate the evacuation of the beaches, with the support of local and state law enforcement agencies. The full siren activation would be accompanied by emergency radio and television broadcasts to the public to explain the reason for the siren. WOKQ, 211, 911, and the Joint Information Center receive the information to facilitate communication to the public and media.

NH Beaches	# of Sirens
1. Rye	3
2. Seabrook	2
3. North Hampton	1
4. Hampton	4
TOTAL	10

NH Communities	# of Sirens
1. New Castle	1
2. Portsmouth	8
3. Rye	4
4. Seabrook	6
5. Greenland	4
6. Stratham	6
7. North Hampton	5
8. Newfields	2
9. Exeter	10
10. Brentwood	5
11. Kingston	4
12. Newton	5
13. East Kingston	4
14. Kensington	6
15. South Hampton	4
16. Hampton Falls	4
17. Hampton	6
TOTAL	84

MA Communities	# of Sirens
1. Salisbury	5
2. Amesbury	4
3. Merrimac	3
4. Newbury	6
5. Newburyport	5
6. West Newbury	4
TOTAL	27

Incident Detail

On July 12, 2022 at approximately 1050 the ten Seabrook Station sirens located along the beaches of New Hampshire, located in the towns of Seabrook, North Hampton, Hampton, and Rye, were inadvertently activated by a NextEra technician located at the Seabrook Station and broadcast the pre-recorded spoken public alert. The message was as follows:

“Attention. Attention. There is a problem at Seabrook Nuclear Power Station. The beaches are closed. Leave the beach area at once and turn on your radio for more information.”

Once the Seabrook technician was made aware of the activation, he cancelled it. It is believed that the siren did not complete a full rotation, which would indicate that the message was broadcast for less than three minutes.

It was later determined by Seabrook Station leadership that the audio spoken alert function was inadvertently activated during a routine bi-weekly test of the system by Seabrook Station staff.

Incident Timeline

Rockingham County Dispatch Center (RCDC) reported that they received a call from a member of the public asking about an alert being broadcast at the beach regarding a problem at Seabrook Station Nuclear Plant at approximately 10:54. RCDC Supervisor contacted the Seabrook Station employee who conducts the siren tests at Seabrook Station, to ask about the alert. He verified the alert had been activated, but he wasn’t sure from where it was initiated. He stated there was no emergency at the plant, and asked RCDC to issue a message over the radios used to communicate with the local Emergency Operations Centers to inform them of the inadvertent activation.

Multiple and repeated attempts by Homeland Security and Emergency Management (HSEM) staff members to reach Seabrook Station staff were unsuccessful. At 1106 the State Police Communications Supervisor used the NAS phone to call the control room at Seabrook Station and was able to verify there was no emergency.

Communication timeline:

- 10:53: First call received by 911 about Hampton sirens going off.
- 10:54 First call received by RCDC asking about beach sirens going off.
- 10:56: RCSO Dispatch Supervisor called a Seabrook Station siren maintenance staff member. He advised her that he could see what happened but didn't know where it came from but that it was not a real emergency.
- 10:57: Hampton Police advised 911 of accidental activation of the Seabrook sirens, and that there was no emergency.
- 10:57: HSEM Radiological Preparedness Assistant Section Chief called Seabrook Station Project Manager Lead/Regulatory Affairs on his mobile phone with the information on the sirens going off with a request to call her back.
- 11:02: DESC Directors notified of "accidental activation of sirens."
- 11:06: State Police Communications Supervisor call to Seabrook Plant – control room supervisor from State Police via orange NAS phone and confirmed it was accidental.
- 11:09: HSEM Field Representative called HSEM Radiological Preparedness Section Chief to let him know that Rockingham County Dispatch sent information through the CAD system of inadvertent siren activation.
- 11:10: Seabrook Station Project Manager Lead/Regulatory Affairs, called HSEM Radiological Preparedness Section Chief by mobile phone and verified the activation was an error and there was no emergency at the plant.
- 11:10: A Page was sent to State Police Troop A sworn and command staff: "Be advised Seabrook Station had an accidental trip of an alert message that was broadcast – there is no emergency."
- 11:11: MS TEAMS message sent to IPOC staff by HSEM to confirm inadvertent activation..
- 11:13: DNCR Federal Emergency Management Agency (FEMA) Coordinator was notified by HSEM Assistant Section Chief of the inadvertent activation and to verify there was no need to evacuate the beaches.
- 11:15: HSEM Community Liaisons called each of the 17 EMDs in the Emergency Planning Zone (EPZ) around Seabrook Station and the three host communities to notify them that the sirens were activated inadvertently.
- 11:42 Code Red Reverse 911/ NH Alerts message sent to 17 EPZ communities by DESC.
- 11:49: message regarding the sirens posted to social media.
- 11:51: Direction given to issue a WEA message.
- 12:02 RCDC, at the request of Seabrook Station, used the public address feature of the beach sirens to announce there was no emergency.
- 13:32 IPAWS WEA message sent to Town of Seabrook. The WEA messages had to be sent one town at a time due to node structure set up by FEMA. All communities notified by 1348.

Internal Review Findings

- The inadvertent activation of sirens does not meet the requirements to be declared an "Unusual Event" which is the lowest level of event addressed in the NRC event priority.

- On July 12, 2022, there is no established state procedure for a response to an inadvertent siren activation. RCDC has a procedure to shut off a siren, but it only covered the technical procedure and did not address any communications process to the public once the siren was stopped.
- Communication:
 - There was no immediate notification from NextEra Seabrook Station to the State of New Hampshire, Homeland Security and Emergency Management regarding the siren activation. The NAS phone, which is a secure line between the Seabrook Station control room and the state warning point was not used. It was unclear if the phone could be used when the partial activation of the siren system did not meet the criteria for an Unusual Event notification
 - Several sources (911, NHSP, RCDC, Seabrook PD and HSEM) were able to verify that the activation was an error, but due to the lack of a defined communications plan for situations of accidental siren activations between the agencies there was a delay getting the information to the public.
 - Three Divisions in DOS (911, NHSP and HSEM) received public inquires and eventually independently received information that it was an inadvertent siren activation. There was no communications between the areas until approximately 20 minutes after the initial calls were received.
 - WOKQ was not notified. This is the radio station listed in the Seabrook Station Emergency information brochures sent to residents of the EPZ, and on signs posted at all the beach entrances.
 - The Public Address mode of the sirens was not immediately used to clarify that the verbal message was a test or an error.

Corrective Actions and Recommendations

Seabrook Station

- Seabrook Station has adopted procedures to prioritize the use of the NAS phone as the primary tool of communications between Seabrook Station, HSEM, NHSP and RCDC in the case of any unexpected event whether specifically addressed in the Radiological Emergency Response Plan or not.
- Seabrook Station has moved the backup siren system control panel located in the siren shop to avoid the possibility of a future inadvertent activation.
- Review the capabilities of the siren system to determine how current features or upgraded technology could improve the system and allow the automatic notification of the state when a siren is activated.

State of New Hampshire Homeland Security and Emergency Management

- In response to this incident, HSEM has developed a draft protocol to be used in the case of an inadvertent siren activation to be included in the state RERP. The plans will include activation of the SEOC in an Enhanced Monitoring state to ensure efficient communication and to ensure the

established protocols are followed. This addendum will be submitted to FEMA as part of the RERP review process for approval in October.

- Update the RCDC procedures and job aids for an inadvertent siren activation. The current procedures only address an instance in which RCDC makes the inadvertent activation. We will expand the information to include communication pathways should the activation be initiated elsewhere.
- The content of the messages should be evaluated and updated to ensure clear and concise information is disseminated in appropriate languages.
- Leverage the Mutualink software suite to create a call group and procedures to facilitate real time internal communications between the 911 PSAP supervisors, NHSP Communications Supervisor and HSEM Duty Officer.