



Bus Driver Partnership

New Hampshire Department of Safety • Division of Homeland Security and Emergency Management

New Hampshire Homeland Security and Emergency Management (HSEM)



What does HSEM do in an emergency?

- Planning: Responsible for all emergency planning at the state level, and oversight of local planning
- Response and Recovery: HSEM is a coordinating agency assigning resources to the needs of the communities

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- HSEM is a coordinating agency. We link resources to local communities who need assistance above and beyond their capabilities.
- Educating the public
- Training
- Other types of hazards: Cyber attacks, terrorist attacks, State-level planning, preparation, response to, recovery from and mitigation of all emergencies and disasters.
Natural disasters such as hurricanes, floods
Human-caused disasters, such as nuclear power plant accidents or chemical spills.

Seabrook Station



Seabrook Station:

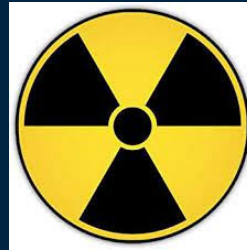
- Owned and Operated by NextEra Energy
- Located on 900 acres in Seabrook, New Hampshire



Radiological Emergency Preparedness (REP)



Emergency at the Nuclear Energy
Facility in Seabrook, NH



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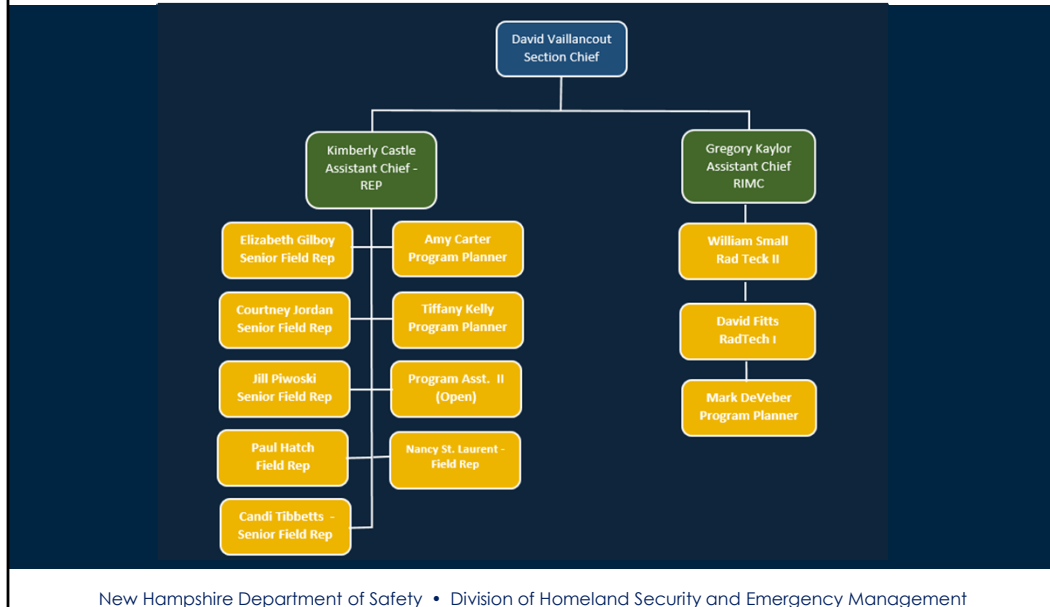
One type of hazard that requires special planning and response is an Emergency at the Nuclear Energy Facility in Seabrook

Nuclear Emergency



- What comes to mind when you hear of an emergency at a nuclear power plant?
 - When you hear “Radiation”?
- Are you comfortable responding to an emergency to help during an evacuation?

New Hampshire REP Team



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The New Hampshire Division of Homeland Security and Emergency Management has a team of people who are responsible for Radiological Emergency Preparedness as it is related to Seabrook Station

REP Related Facilities



- State Emergency Operations Center
- Local Emergency Operations Centers
- Emergency Operations Facility (SS)
- Reception Centers
- State Transportation Staging Area

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Several facilities are involved in planning for and responding to an emergency at Seabrook Station

Federal Regulation



- NRC: regulates and monitors all aspects of operations and emergency planning **on site**
- FEMA: regulates and monitors all **offsite** emergency planning

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Nuclear energy is one of the most regulated industries in the country
The NRC has inspectors present at each nuclear energy facility

What is Radioactivity?



- Radioactivity is the spontaneous release of energy from an unstable atom to get to a more stable state
- Ionizing Radiation is the energy that comes from a radioactive atom.

Common Radiation Exposure



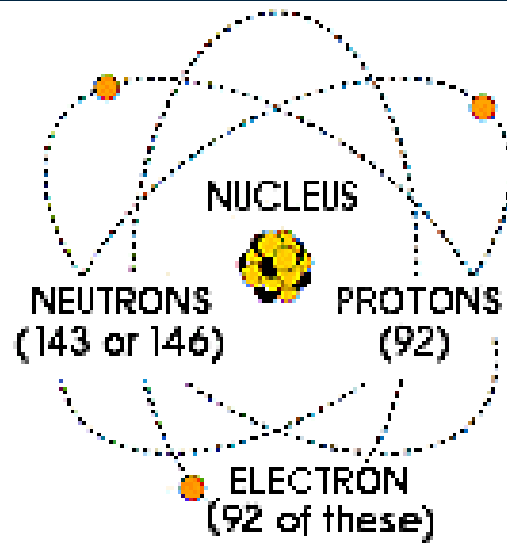
- Full Body CT = 1000 mrem
- Radon in average home = 228 mrem
- Cosmic Radiation at sea level = 30 mrem
- Commercial Flight Crews = 307 mrem per year
- Your food and drink: 30 mrem per year
- The average background radiation is 620mrem

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Radiation exists in nature, and we are exposed to it every day. Normal activities and medical procedures bring us into contact with radiation.

What happens inside the Nuclear Energy Facility reactor?

Fission



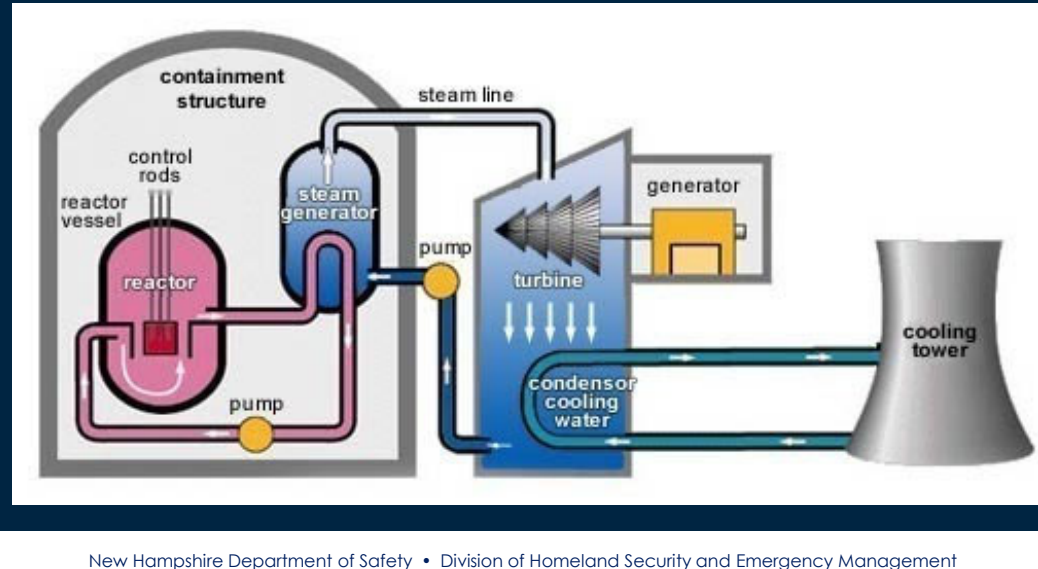
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Fission: splitting atoms

When the bond that holds the particles that comprise the atom is broken, a tremendous amount of energy is released.

These atoms continue to release energy while returning to a stable state.

Making Electricity



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The energy released by the fission process is in the form of heat. That energy is used to heat water, which creates steam, which turns the turbines and generates electricity.

Seabrook Station – Safety Information



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Seabrook Station – Safety Information

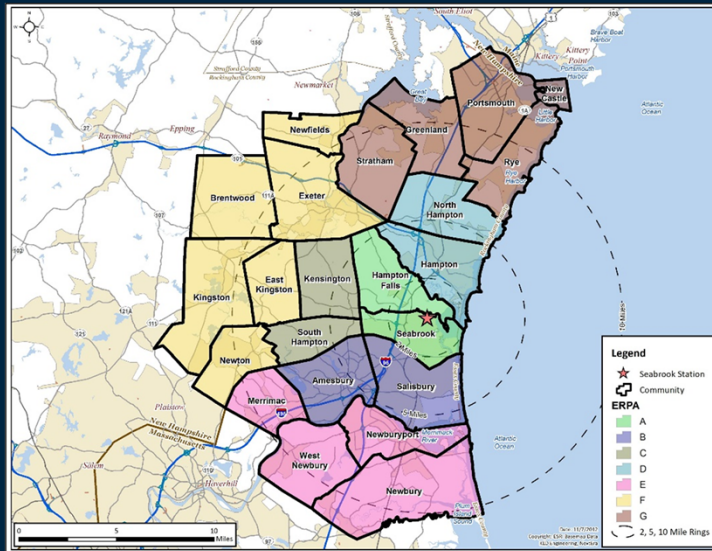


- Seabrook Station is designed with multiple layers of containment
- The systems have multiple redundancies and back up systems
- The NRC conducts regular safety inspections: Seabrook consistently scores the highest level of safety performance

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“Containment” refers to the physical barriers between the fuel and the environment

Emergency Planning Zone (EPZ)



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The Emergency Planning Zone (EPZ) is an area approximately 10 miles around Seabrook Station. Each community has individual plans, evacuation routes, and exercises all to protect the public in case of an emergency

Emergency Classifications



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

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- Conditions at the plant are classified in four categories:
 - Unusual Event: something outside normal operating conditions has occurred, but there is no threat to the public. This could be something as simple as spilled bleach
 - Alert: The conditions at the plant could result in a release, but would not extend beyond containment
 - Site Area Emergency: more serious, however, any release is not expect to extend beyond the perimeter of the facility or exceed exposure guidelines
 - General Emergency: this is the most serious level. A release has occurred, or is expected, and could impact the health or safety to the general public.
- An emergency at a nuclear energy facility would be a slow-moving event
- Circumstances that would take us from an Unusual Event to a General Emergency would take days to weeks

Protective Steps



- Prior to any release of radioactive material that could reach beyond the perimeter of the facility, we would have already taken action:

Protective Steps



- Unusual Event: No action needed
- Alert:
 - We would put emergency staff and facilities on standby
 - We would have schools conduct an early release of the children and cancel classes and activities until the event ends

Protective Steps



- Site Area Emergency:
 - Notify the State Transportation Staging Area and Reception Centers to notify staff and prepare for activation
 - Distribute Traffic Control Equipment

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- Reception Centers are located in Manchester, Rochester, and Dover. These facilities would be a place for evacuees to go for information and to register
- The activities are to ensure we are prepared for an evacuation

Protective Steps



General Emergency

- Shelter-in-place:
 - Facilities that have residents who would be difficult or too fragile to move would shelter-in-place to mitigate any chance of them still being outside when a release to the environment occurs.

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Examples of such facilities would be nursing homes and jails

Protective Steps



General Emergency

- Evacuations:
 - Prior to a release we would recommend evacuation of specific communities.
 - The communities would be determined through analysis of the plant conditions, weather, wind, and other factors that would impact the direction of the release

Evacuation



What is your role in an evacuation?

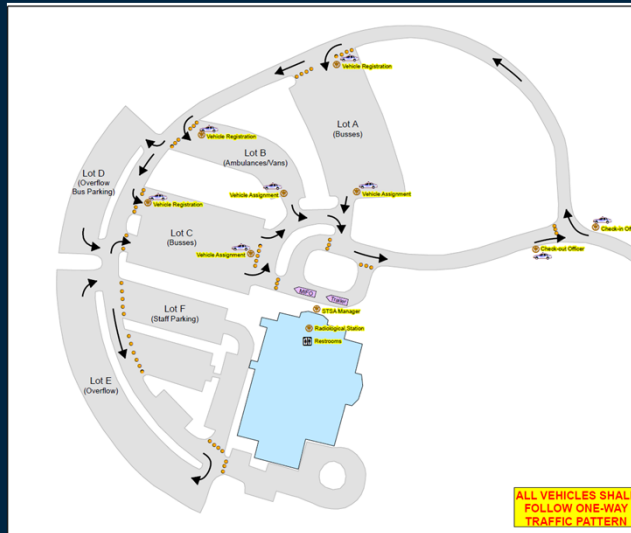
- You would perform your regular job transporting members of your community to their destination

Where would you report?



- State Transportation Staging Area (STSA) located at the courthouse site in Brentwood
- Staffed by Rockingham County Sheriff's department staff
- Buses would be staged and dispatched from the STSA

STSA



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The STSA takes up all of the parking lots at the courthouse. Each type of vehicle is assigned to a designated lot

STSA – What to Expect



- You will be met at the entrance by an arrival staff member who will assign you to a lot, and provide you with a map of the facility.
- They will verify that your vehicle has at least $\frac{3}{4}$ tank of fuel. If you do not have $\frac{3}{4}$ tank, and are unable to get fuel, still proceed to the STSA for instructions.

STSA – What to Expect



- When you arrive at the assigned lot, another staff member will direct you to a parking space, record your information on a form and direct you to the Driver Information Table located at the front of the courthouse

STSA – What to expect



- The staff at the Driver Information Table will take your form. This is given to the logistics section, so your vehicle information can be entered into our tracking system. This is where they will pull information to dispatch needed vehicles

STSA – What to Expect



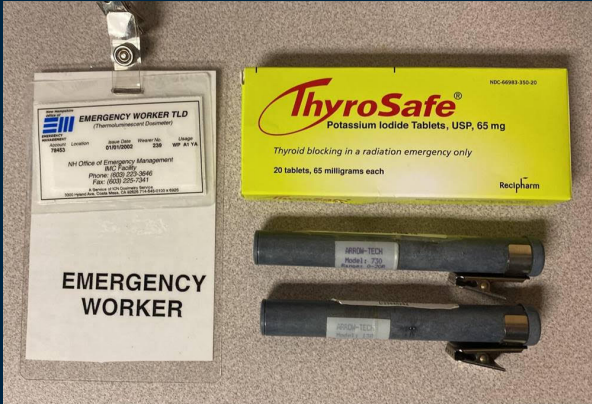
Radiological Equipment Section

- You will receive some equipment and a safety briefing.

STSA – What to Expect



Equipment



What to Expect



Equipment

- Emergency Worker Card
- KI – Potassium Iodide tablets
- Dosimetry: Self Reading and Control

Dosimetry

STSA – What to expect



If there is no release, why do we give you equipment?

- We want you to feel safe while evacuating people from the EPZ
- Drivers will use the equipment to monitor themselves, so they can see they are not being exposed to radiation from the plant

STSA – What to Expect



- When you are dispatched to a community, a staff member will give you maps that will take you to the local transportation staging area (LTSA).
- The staff at the LTSA will give you maps of the route you will take to pick up passengers and deliver them to a Reception Center

Emergency Evacuations



- When your passengers have been delivered to the assigned Reception Center, your shift is finished
- Any type of evacuation is stressful for the residents of the impacted communities. They will be very excited to see you arrive!

Emergency Planning



The EPZ communities are the most prepared in the state

- No other communities have an entire team of people dedicated to their plans, drills, exercises, training, and Local Emergency Operations Centers procedures
- Most of those activities can be used in any emergency response

Emergency Response



The evacuation procedures we developed for the REP program can be used in any emergency that threatens the safety of our residents:

- Hurricanes
- Flooding
- Major Fires

State/Bus Driver Partnership



- Transportation is a critical emergency response component
- Bus Drivers have an important role

Thank you



REP@dos.nh.gov

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