



FEMA

June 2, 2020

Kathryn Brock  
Director, Division of Preparedness and Response  
Office of Nuclear Security and Response  
U.S. Nuclear Regulatory Commission  
Mail Stop T4D22A  
Washington, D.C. 20555

RE: COVID-19 Preparedness Assessments for FEMA Region I Millstone Power Station and Seabrook Station

Dear Ms. Brock:

Pursuant to the FEMA Preparedness Assessment Framework – COVID-19 memorandum dated May 13, 2020, FEMA Region I completed the assessments for the States of Connecticut and New Hampshire and local communities within the 10-mile Emergency Planning Zone (EPZ) of the Millstone Power Station and the Seabrook Station. These assessments included the examination of the local Offsite Response Organizations (OROs), in order to assess their continued capability to adequately respond to an incident at the Stations.

Based on the assessments conducted and our review of available information gathered in discussions with the OROs, FEMA concludes that offsite radiological emergency preparedness remains adequate to provide “Reasonable Assurance” and that appropriate measures can be taken to protect the health and safety of the public in a radiological emergency at all of the listed Nuclear Power Plants. At this time, FEMA is not initiating any further action in any of the listed nuclear stations 10-mile EPZ’s. If FEMA does become aware of any degradation of the offsite infrastructure or a significant reduction in OROs’ capabilities that could directly impact public health and safety, FEMA stands ready to initiate assessments and forward its findings to the NRC for appropriate review and action.



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Please contact me at 202-436-5838, if you have any questions or require any further assistance on this matter.

Sincerely,

Hampton H. Hart, Jr.  
Deputy Director  
Technological Hazards Division

Attachment:

Region I Assessment:

Millstone Power Station and the Seabrook Station  
Radiological Emergency Response Compensatory Actions During COVID-19 Pandemic

cc: Deputy Administrator, Resilience  
Assistant Administrator, National Preparedness Directorate  
Associate Administrator, Office of Response and Recovery  
REP Program Branch Chief  
Region I RAC Chair  
FEMA National Watch Center



# Memo

To: Bryan Gran  
REP Supervisor  
CT DEMHS.

From: Jeffrey Semancik   
Director, Radiation Division  
CT DEEP

CC: Radiation Division Staff  
Jeffrey Johnson, GDEB Emergency Planning  
Col. Christopher Lewis, DEEP ENCON  
Dean Rowe, Manager Emergency Planning Millstone Power Station  
NERHC Members  
Ingrid, Pierce, FEMA R1  
Doug Tiftt, Regional state Liaison Officer, US NRC

Date: 4/9/2020

Re: Radiological Emergency Response Compensatory Actions During COVID-19 Pandemic

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## Background

There is currently an outbreak of respiratory disease caused by a novel coronavirus. The virus has been named “SARS-CoV-2” and the disease it causes has been named “Coronavirus Disease 2019” (COVID-19). On January 31, 2020, HHS issued a declaration of a public health emergency related to COVID-19 and mobilized the Operating Divisions of HHS. On March 10, 2020, Governor Lamont declared a Public Health and Civil Preparedness Emergency and on March 13, 2020, the President declared a national emergency in response to COVID-19.

SARS-CoV-2 has demonstrated the capability to spread rapidly. To respond effectively to the COVID-19 outbreak, appropriate clinical management and infection control in conjunction with implementation of community mitigation efforts are critical. Some of the existing response strategies in CT’s Radiological Emergency Plan (REP) may present significant

infectious disease risk to both responders and the public as well as represent a burden to the emergency response organizations actively engaged in the COVID-19 public health response.

### **Guidance and Compensatory Actions**

In order to avoid further putting responders and the public at risk or overwhelming emergency response organizations at the front-lines of this pandemic attack should a nuclear or radiological emergency occur coincident with the pandemic, CT DEEP Radiation Division is implementing the following guidance and compensatory actions to its portions of the REP.

- **Shelter in Place (SIP) as the most effective public protective action to a release exceeding EPA Protective Action Guidelines (PAGs).** The EPA PAG Manual (EPA-400) provides PAGs for public protective actions at 1 to 5 rem (10 to 50 mSv) projected public dose over four days. The recommended protective action is, “Sheltering-in-place or evacuation of the public.” While it is generally most protective to evacuate the public prior to any release, the presence of the high risk of COVID-19 transmission represents a significant impediment to any orderly evacuation because the key strategy to prevent rapid transmission and spread of the disease is to maintain social distancing and minimize movement and gathering of large populations. Since evacuation would result in both movement of large populations and aggregation of people at community reception centers, evacuation represents significantly greater overall risk to the health and safety of the public than a projected dose of 5 rem. Moreover, current stay at home orders are in place with the majority of the public sequestered in their immediate family units. Schools throughout the state have been closed with children conducting education from their homes. Selection of SIP also alleviates other burdens on emergency responders during an evacuation. Specifically, SIP eliminates the need to staff Transportation Staging Areas or Community Reception Centers many whose staff may be actively engaged in the public health response to the COVID-19 pandemic. SIP also relieves the burden on local law enforcement agencies (LLEAs) for traffic management and allows EM’s to remain focused on pandemic response. As there are no acute effects for radiation doses below 25 rem, evacuation should not be considered unless measured offsite dose exceeds levels that would result in offsite doses greater than 25 rem. With the shielding effects from buildings in a SIP situation, the projected doses from most postulated events are not expected to exceed this threshold.
- **Hospitals and nursing homes should be directed to preferentially SIP. Evacuation of critical populations in hospitals and nursing home should not be considered for doses less than 50 rem or implemented until projected dose exceeds 100 rem.**

COVID-19 is particularly impactful to vulnerable populations in nursing homes. In addition, hospital intensive care infrastructure is stressed to capacity in caring for severe COVID-19 patients, many of whom are on supplemental life support provided by mechanical ventilators. The additional stress of attempting to move patients and residents in a vulnerable position could result in significantly more risk. Acute Radiation Sickness (ARS) does not present until approximately 100 rem. The additional shielding from these large institutional structures is expected to reduce the dose by a further factor of 10 to 100 times. Therefore, for most postulated events, the dose to these patients is expected to be well below any level that would result in acute effects. Dose to health care workers in these facilities should be monitored by dosimetry and hours limited to those on shift to further reduce their dose.

- **In the event of a radiological release, the Emergency Response Joint Information Center (JIC) should clearly articulate the difference between SIP and stay at home orders.** On March 20, 2020, Governor Lamont issued a stay at home order for personnel not involved in essential business. However, under this order, the public is not restricted from outdoor activities and has been even encouraged to get outside. In response to a large radiological release, the JIC needs to ensure the public understands the SIP order includes staying indoors with windows closed and outdoor air intake secured. They should also understand they should not be going out for recreation or for other reasons unless specifically authorized as Emergency Workers with a response dosimetry and limits.
- **The DEEP radiological response organization will maximize remote capabilities to reduce the risk for transmission of COVID-19 and the subsequent impact to radiological assessment capabilities.** Aggregation of critical radiological expertise represents a significant risk to sustaining operations for the duration of an event. Recognizing that there will be some impact to the efficiency of operations, a review of the key tasks and objectives for the response indicates that we can maintain sufficient effectiveness in radiological emergency response while minimizing the risk of COVID-19 transmission with the following compensatory actions:
  - **Only the Radiation Duty Officer (RDO) and Radiation Division Director will report to the State Emergency Operations Center (SEOC).** The Radiation Division Director provides technical recommendations directly to the Governor during radiological emergencies. Especially with the unique situation that would exist in the combination of pandemic response and radiological emergency, is critical that the Director be able to interact directly

with the Unified Command and the Governor. The RDO provides command and control to the radiological assessment team. He needs to interact with the assessment staff and provide technical information to the Director. With other staff working remotely, the risk for COVID-19 transmission is minimized with two staff members in the SEOC.

- **Offsite Dose Assessment will be conducted remotely.** DEEP personnel qualified to conduct dose assessment using Dominion MIDAS and RASCAL represent a limited critical resource. In order to ensure their availability, key dose assessment personnel have been provided a state laptop as well as a Dominion laptop. The Dominion laptop has the capability to access the data on the plant process computer and to run MIDAS. Dose assessments can be provided remotely to the RDO or Director.
- **Field Teams will deploy solo with one Radiation Division staff member (no ENCON driver) for overland monitoring.** Normally field teams consist of an Environmental Compliance (ENCON) law enforcement driver and a radiation expert from DEEP radiation division. Putting two people in close proximity within one vehicle creates a significant risk of COVID-19 transmission. Therefore, during the pandemic response, the radiation expert will perform all duties of a field team. In order to assure safety, this can result in some loss of efficiency which we accept. However, with the current stay at home order in place, traffic has been reduced and this creates less of a challenge. The rad expert will monitor radiation levels via Ultraradiac or PRD mounted on/near the dash display. Since DEEP has adopted RadResponder, measurements taken in safer areas near predesignated points will be properly recorded for dose correlation. Field team members are trained and qualified in all tasks assigned to the teams. The one exception to this guidance is for overwater monitoring. For these points, ENCON officers are required to operate the boat.
- **Field Monitoring Team Coordinators (FMTCs) response will be conducted remotely.** The FMTC function is provided by emergency response personnel from General Dynamics Electric Boat (EB). EB personnel have been provided an encrypted state radio with Rad Control channels. Along with cellphone, this provides two methods to communicate with field teams. Dispatch and data assessment is accomplished using RadResponder which they can also access remotely.

- **DEEP Dominion Emergency Operations Facility (EOF) Liaison position will be suspended.** This position is not required by the REP. RDO and Director have the ability to monitor plant information via Dominion laptops connected to the plant process computer. DEEP EOF Liaison will provide defense in depth coverage for the RDO and Dir. This is particularly important as mutual aid from the New England Radiological Health Compact may not be able to travel and support due to movement restrictions.
- **PPE will be enhanced for field teams if access to high COVID-19 risk areas is required.** DEEP has sufficient PPE available. PPE includes Tyvek suits, nitrile gloves and full face respirators. Field team personnel maintain respirator qualifications. Team members have individual respirators with iodine cartridges integrated with P-100 particulate filters that exceed the CDC recommendations for respiratory protection from COVID-19.

Currently, DEEP has been able to maintain calibration of its radiation detection instrumentation and other equipment.

DEEP Radiation Division is continuing to monitor impacts to the REP due to actions and restrictions taken during the current COVID-19 Public Health Emergency and will make modification to these compensatory actions are required. Please contact me if you have any questions for concerns.

JDS