

RADIOLOGICAL EMERGENCY PREPAREDNESS PROGRAM

2020 Annual Report Snapshot

The Radiological Emergency Preparedness Program (REPP) community leads the nation in building a culture of preparedness while safeguarding the health and well-being of the public in communities near commercial nuclear power plants (NPPs). The REPP Annual Report highlights activities of the Program and the Technological Hazards Division (THD), best practices, and future plans.

REPP COMMUNITY AT A GLANCE

Nearly **3M people** live within **10 miles** of a commercially operating NPP.



In 2020, there were **56 operating NPPs** with **94 power reactors** in **9 FEMA regions** and **28 states**, producing approximately **20% of the nation's power**.

On average, a REPP exercise includes evaluation at **29 locations**, with **62 agencies participating**.

What We Do



Educate jurisdictions to prepare for the possibility of an incident at an NPP



Provide guidance and policies to strengthen capabilities to prevent, respond to, and recover from an incident at an NPP



Evaluate emergency plans and level of preparedness of jurisdictions to respond to an incident at an NPP

What We Did

Conducted **15** exercises



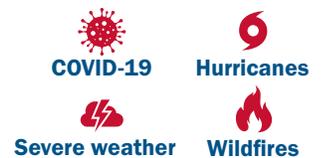
47% of activities used virtual tools



Provided **51** training courses, leading to **1,003 course completions**

Conducted **73%** of trainings virtually

Supported **79** disaster deployments



Programmatic Trends



Virtual collaboration



Greater use of technology



More frequent communication



Relationship building

What We Are Doing Next



Conducting assessments in safe environments



Supporting policy- and response-related changes to plans and procedures



Strengthening whole community engagement



Enhancing internal communications and operations



Improving our exercise evaluation system



Building data analytics with FEMA regions and other FEMA divisions

Supporting FEMA's Mission

- THD staff are deployed across the nation and territories to join disaster response and recovery efforts.
- Regional staff conduct Preliminary Capabilities Assessments or Disaster Initiated Reviews to assess offsite impacts from disasters occurring at or near NPPs.
- REPP ensures that the public can safely evacuate during an event that could temporarily impede a jurisdiction's ability to perform emergency management functions.

Special Projects to Know

The REPP Data Analytics Project began as a pilot approach to determine the feasibility of analyzing REPP's After-Action Reports, which are text-heavy exercise assessments. The resulting dashboard makes it easier to understand and analyze data. The pilot's success supported the development of several analytics projects, including the Regional Overview Project, which translates REPP assessment data from multiple regions into consistent National Preparedness System language. REPP Data Analytics supports strategic efforts and enhances tracking capabilities and reporting for THD, also benefiting offsite response organizations.

The National REPP Public Information Map (PIM) Application is an open-source, [interactive mapping application](#) that connects users to state, local, and tribal governments and federal radiological preparedness resources, including information on hazards and demographics. The National REPP PIM consolidates information and data from public resources into a tool that can help strengthen community planning and decision-making for offsite response organizations and emergency managers.

The REP Recovery Initiative was a series of virtual learning sessions focused on the radiological emergency preparedness community and obstacles resulting from the radiological nature of hazards. THD completed 10 presentations in 2020, increasing engagement to 96 participating agencies and 425 individual attendees. The series provided offsite response organizations with the understanding of the differences between responding to and recovering from an incident at an NPP, including applicable federal laws and available resources. To learn more about the series, please contact THD-REPP-Operations@fema.dhs.gov.



THD's Support of Perseverance Rover Launch to Mars

On July 30, 2020, the National Aeronautics and Space Administration (NASA) launched the Perseverance rover on a rocket to Mars from Cape Canaveral Air Force Station in Florida. A FEMA Region 4 staff member coordinated with NASA to provide situational information to FEMA leadership in case of a release of radioactive particles at launch or before the rocket left orbit. Supporting the state of Florida and Brevard County (host county for St. Lucie NPP) allowed FEMA to further demonstrate its ability to work cooperatively and REPP's benefit to communities. THD will also use knowledge gained from this experience to better understand the challenges and benefits of response personnel working with technical experts to achieve a common goal.

Created by THD through a collaboration with the Annual Report Working Group, one-on-one discussion sessions, online surveys, existing documents, and data analytics. Send questions to THD-REPP-Operations@fema.dhs.gov.