

REP QUARTERLY

Radiological Emergency Preparedness (REP)
Quarterly Newsletter

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REP Resources

[REP Program Information](#)

[REP Manual](#)

[IAEA Nuclear Security e-Learning Modules](#)

[EPA Protective Action Guide \(PAG Manual\)](#)

[NUREG 0654](#)

Calendar

FEMA webinar opportunities:

- [REP Policy](#) (Feb. 3, 1-2:30 p.m. EST)

Message from the Indiana State REP Coordinator

Despite the challenges caused by the COVID-19 pandemic, the Indiana Department of Homeland Security's (IDHS) radiation programs continue to provide a heavy focus on the Radiological Emergency Preparedness (REP) Program.

This newsletter will serve as a source of information about nuclear power plants near Indiana and radiological preparedness efforts happening throughout the Hoosier state. Additionally, this newsletter also will improve outreach efforts with Indiana's ingestion pathway counties and radiation stakeholders. As FEMA adapts to hosting virtual REP training courses, the IDHS radiation programs will request a series of trainings for the second, third and fourth quarters of 2021. If there is a particular REP course your county would like to have, please let us know by emailing hazmat@dhs.in.gov.

In addition, Indiana will transition from the 2016 REP manual to the 2019 version by Dec. 22, 2022. The IDHS REP program will continue to follow federal guidance and policies to ensure capabilities exist to prevent, protect against, mitigate the effects of, respond to and recover from incidents involving nuclear power plants.

Best regards,

Sarah Chaney, Interim REP Coordinator



Virtual REP Exercises During COVID-19

- [Inclusive Preparedness is Effective](#) (Feb. 10, 1-2:30 p.m. EST)

RadResponder webinar opportunity:

- [Indoor Monitoring Enhancements](#) (Feb. 9, 1-2:00 p.m. EST)

IDHS Radiation Equipment Notice

Many of the IDHS calibration/repair vendors face issues conducting business during COVID-19. IDHS radiation programs is working on a plan to have all equipment calibrated and repaired in accordance with manufacturer's standards.

Agencies that need IDHS radiation detection equipment calibrated or repaired should contact IDHS radiation programs at hazmat@dhs.in.gov for more information.

D.C. Cook's New Mobile Siren System

The D.C. Cook Nuclear Power Plant in Bridgman, Mich., has upgraded its siren system to provide local residents emergency alert notifications on their mobile devices during an incident.

Read more about the benefits of this siren upgrade [here](#).

Adhering to CDC safety guidelines, many emergency preparedness exercises across the country were postponed or cancelled last year as a result of the COVID-19 pandemic. Fortunately, modern technology allows for exercises in a virtual environment during the pandemic.

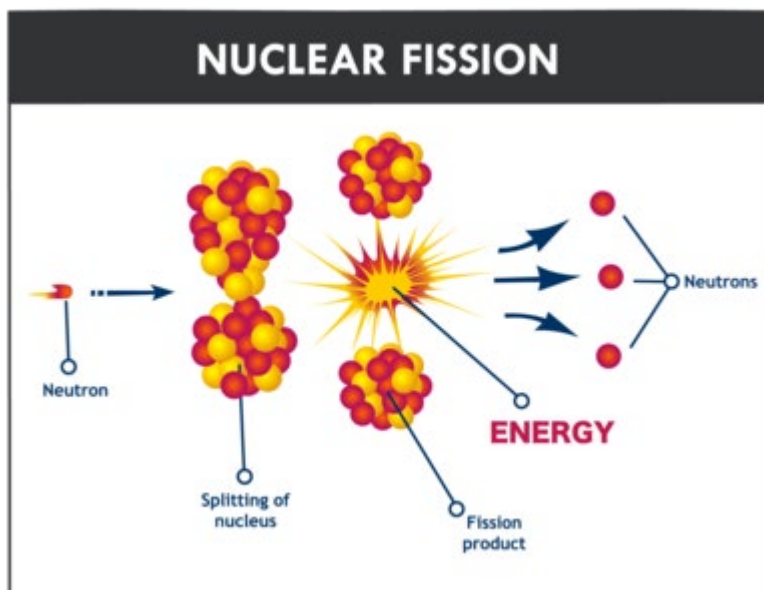
Exercising virtually has many benefits, including but not limited to:

- Preventing the spread of COVID-19 during exercises.
- Saving money and time by eliminating the travel requirements of participants.
- Ability to record exercise sessions for future use.

REP exercises also can be conducted virtually. There are several different platforms that can support virtual exercises, such as Microsoft Teams, Cisco Webex and Zoom. Before making the decision to postpone or cancel a radiological exercise this year, consider hosting it virtually.

Remember, organizations asking to delay or modify REP exercises must coordinate with FEMA REP as well as state and local jurisdictional agencies.

How Does Nuclear Power Work?



Nuclear fission, the power source for nuclear power plants.

Steam power plants, whether they are coal or nuclear, use heat to make electricity. They operate like a giant tea kettle, turning water into steam, which is then used to turn a generator to make electricity. The only difference between coal and nuclear power plants is nuclear plants use uranium as the fuel to produce the heat instead of coal.

In a nuclear power plant reactor, water is heated by a process called nuclear fission:

- Uranium atoms are split when they are struck by neutrons.
- When the atoms split, they release heat, along with two or three more neutrons.
- These neutrons then strike other uranium atoms, again causing the atoms to split, release heat and again, two or three more neutrons. This is called a chain reaction.

The steam spins the turbines, which are tied to the generators. The generators then produce electricity.

Sarah Chaney, Interim REP Coordinator
(317) 464-7394
hazmat@dhs.in.gov
dhs.IN.gov