



# Backgrounder

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## Emergency Planning and Preparedness at Nuclear Power Plants

### Background

The Nuclear Regulatory Commission (NRC) reexamined the role of emergency planning (EP) for protecting the public in the vicinity of nuclear power plants following the accident at the Three Mile Island nuclear power plant in 1979. The accident pointed out the need for improved planning, response and communication capabilities by Federal, State, and local governments to deal with possible reactor accidents.

The NRC now requires that emergency plans include preparations for evacuation or other actions to protect the residents in the vicinity of nuclear plants in the event of a serious incident. The events of Sept. 11, 2001, prompted an increased focus on emergency planning and further review of the issues involved. The NRC's main federal partner in EP is the Federal Emergency Management Agency (FEMA), part of the Department of Homeland Security (DHS).

Nuclear power plant owners, government agencies, state and local officials, as well as thousands of first volunteers and first responders, have worked together for more than 20 years to create a system of emergency preparedness and response that will serve the public well in the unlikely event of an emergency. Since commercial nuclear power plants began operating in the United States, there have been no physical injuries or fatalities from exposure to radiation from the plants among members of the U.S. public. Even the country's worst nuclear power plant accident at Three Mile Island resulted in no identifiable health impacts.

### Reasonable Assurance

In the U.S., 104 commercial nuclear power reactors are licensed to operate at 65 sites in 31 states. For each, there are onsite and offsite emergency plans to assure that adequate protective measures are taken to protect the public in the event of a radiological emergency. Federal oversight of emergency planning for licensed nuclear power plants is shared by the NRC and FEMA (now part of the Department of Homeland Security) through a memorandum of understanding. The memorandum is responsive to the President's decision of December 7, 1979,

Emergency planning regulations require the rapid notification of the public when a general emergency (the most serious accident category) exists at a plant.

Detailed information about emergency planning and preparedness is contained in NRC regulations, specifically Appendix E of Title 10 in the Code of Federal Regulations, Part 50 and in NUREG-0654 (FEMA-REP-1), a joint publication of the NRC and FEMA published in March 2002, entitled "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants."

Additional information on the NRC's Emergency Preparedness and Response programs is available on the NRC Web site at: <http://www.nrc.gov/what-we-do/emerg-preparedness.html>.

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