





**Nuclear Plant
Emergency Response**



Nuclear Plant Emergency Response

**State of Georgia Nuclear Plant
Emergency Plan**



Module 8



Nuclear Plant Emergency Response

**Objective of the Radiological
Emergency Preparedness (REP)
Program**

- Provide an overview of the State of Georgia Radiological Emergency Preparedness Program and key issues local and state officials would contend with during an event at a radiological facility impacting the State of Georgia.



Nuclear Plant Emergency Response

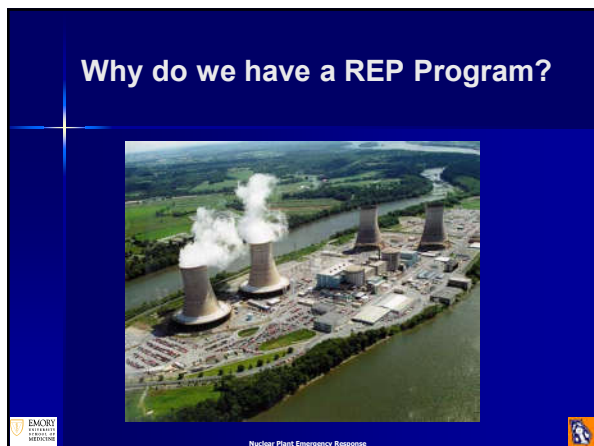


What is the REP Program?

Program ensuring nuclear power plants, state and local governments have plans to protect public health and safety in the event of an accident.

EMORY UNIVERSITY
COLLEGE OF MEDICINE

Nuclear Plant Emergency Response



REP Program

- NRC and FEMA
- Code of Federal Regulations
 - 10 CFR, part 50 and 70
 - 44 CFR part 350-354
- NUREG 0654 - *Criteria for the Preparation and Evaluation of Emergency Response Plans and Preparedness in Support of Nuclear Power Plants*



Nuclear Plant Emergency Response



State Response Plans



Nuclear Plant Emergency Response



All Emergencies are Local

- Like all emergencies, the state primarily plays a support role ensuring resources are available to local governments and responders.
- State does play a greater role in the protective action decision making process for nuclear power plant emergencies



Nuclear Plant Emergency Response





County Response Plans

County Emergency Management Agency
Emergency Operations Plan

LEOP

DAWSON COUNTY
EMERGENCY MANAGEMENT AGENCY
RADIOLOGICAL EMERGENCY
COUNTY RESPONSE PLAN



County Rep

Nuclear Plant Emergency Response

State Response



- Georgia Emergency Management Agency
- Georgia Department of Natural Resources, Environmental Protection Division
 - Environmental Radiation Program
- Georgia Department of Agriculture
- Georgia Department of Public Health
- State Emergency Support Functions (ESFs)
- 4th Civil Support Team (Georgia National Guard)
- County Emergency Management Agencies

Nuclear Plant Emergency Response

Federal Support

- Radiological Assistance Program (RAP)
- Federal Radiological Monitoring and Assessment Center (FRMAC)
- Advisory Team for Environment, Food, and Health (A-Team)
- National Atmospheric Release Advisory Capability (NARAC)
- Aerial Measuring System (AMS)
- Radiation Emergency Assistance Center/Training Site (REAC/TS)
- Nuclear Emergency Support Team (NEST)
- Accident Response Group (ARG)

Nuclear Plant Emergency Response

Emergency Planning Zones

10 mile (plume exposure pathway)
Possibility of direct radiation exposure

50 mile (ingestion pathway)
Possibility of ingesting contaminated material



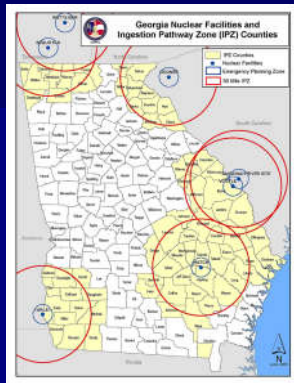
Nuclear Plant Emergency Response



EPZs & IPZs

10 mile – EPZ (plume exposure pathway)

50 mile – IPZ (ingestion pathway)



Nuclear Plant Emergency Response



Georgia's Nuclear Plants

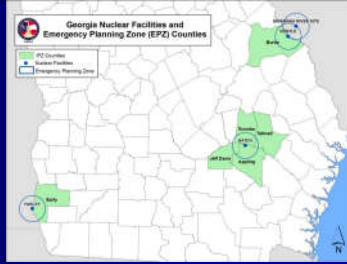


Nuclear Plant Emergency Response



Georgia's 10 Mile Emergency Planning Zone (EPZ) Counties

Appling
Burke
Early
Toombs
Tattnall
Jeff Davis



Nuclear Plant Emergency Response



Plant Hatch Emergency Planning Zones

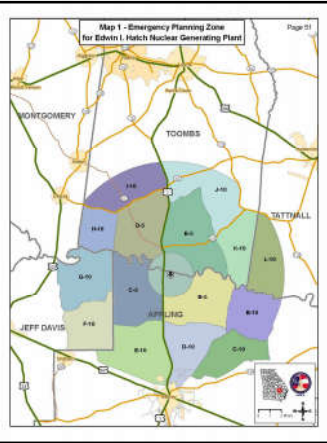
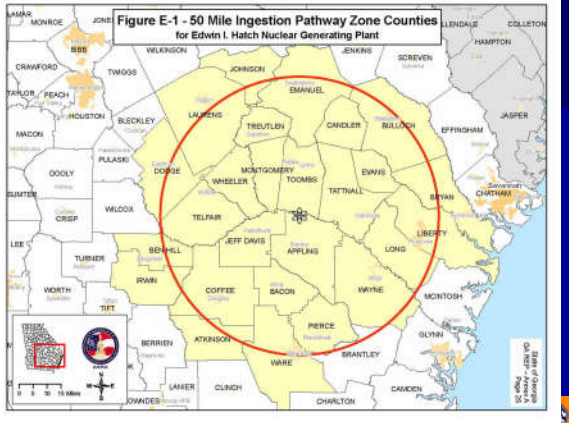




Figure E-1 - 50 Mile Ingestion Pathway Zone Counties for Edwin I. Hatch Nuclear Generating Plant



Emergency Classifications



- Notification of an Unusual Event (NOUE)
- Alert
- Site Area Emergency (SAE)
- General Emergency (GE)

Nuclear Plant Emergency Response

Protective Actions



- Protective Action Recommendations (PARS)**
Based on plant status, meteorological conditions, field monitoring data, models, and utility's recommendation
- Protective Action Decisions (PADS)**
Based on PARS and offsite conditions
Coordinated with County Officials, Bordering State, and Utility

Nuclear Plant Emergency Response

Plume (Early) Phase Activities County EOC



- EOC Activation
- Public Warning Notification
- Evacuation (Special Needs)
- Sheltering
- Reception Center
- Traffic Control
- River Clearance
- Public Information
- Emergency Medical Services
- Radiological Exposure Control

Nuclear Plant Emergency Response

Plume (Early) Phase Activities - State Operations Center

- SOC Activation to include appropriate ESFs
- Facilitate request for assistance from affected local counties
- Public Warning Notification
- Evacuation Coordination and Support
- Radiological monitoring and assessment
- Radiological technical assistance
- Public Information
- Request support from surrounding states (SMRAP, EMAC)
- Coordinate federal resource support (eg - FRMAC)





Nuclear Plant Emergency Response

Public Warning and Notification

Alert and Notification System

- Tone Alert Radios
- Sirens
- EAS



Nuclear Plant Emergency Response

Ingestion (Intermediate) Phase Considerations

- Notification and Warning
- Evacuation vs. Sheltering in Place
- Identification of Specific Zones
- Activation of Pre-Identified Reception Center and Shelter
- Public Information Development and Dissemination
- Traffic and Access Controls
- Re-location, Re-Entry (temporary), and Return
- Recovery



Nuclear Plant Emergency Response


Questions or Comments?



Nuclear Plant Emergency Response



Summary Points



Nuclear Plant Emergency Response

