



Managing and Responding to **emergencies**

An emergency—or the threat of an emergency—can be anything from a flood, a bomb threat, a fire, a hazardous spill, to a terrorist attack. In any of these or other situations, TVA must be prepared to protect employees, property, customers and the health and safety of the public, as well as the Tennessee Valley's resources.

In spite of emergencies, the region's power needs will continue, so we also must continue to generate power, and we must continue to manage navigation, flood space, water quality and other real-time water-flow requirements.

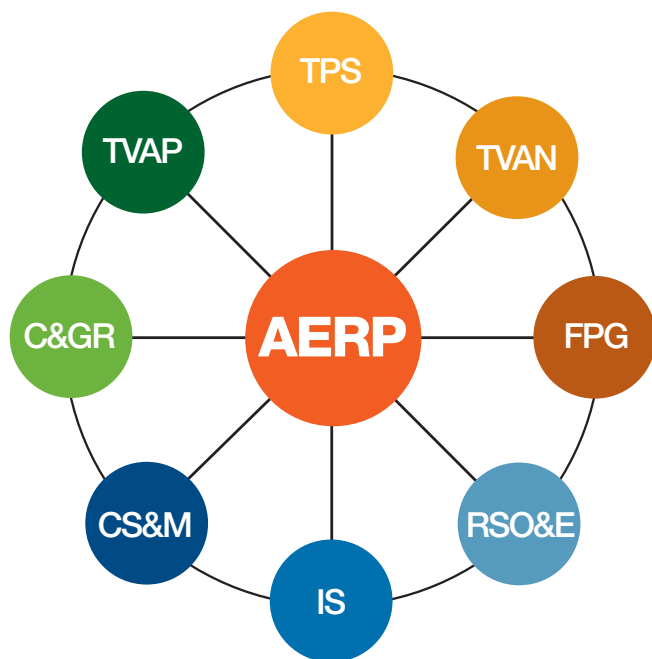
How do we do this? All employees must be prepared and ready to do their part. We must communicate, and our efforts must be coordinated. Not an easy task for a diverse and complex business such as TVA.

But we are prepared. More than 3,100 employees throughout TVA have received specific training to prepare them for possible emergencies. And many more employees are prepared to support emergency-response efforts.

Part of being prepared means we have a plan. TVA's umbrella emergency plan is the Agency Emergency Response Plan. The AERP is supported by many other emergency-response plans, outlining just how TVA would respond in the event of an emergency impacting one part of the business.

This insert in TVA's Business Education series gives a high-level overview of the various efforts involved in making sure TVA is prepared for emergencies. Turn the page to find out more.

Agency Emergency Response Plan



The Agency Emergency Response Plan is the umbrella plan that outlines how TVA will respond to emergencies — those ranging from predicted severe weather to security or terrorist threats. The plan outlines the comprehensive web of coordination and communication that would need to take place if the magnitude of the emergency or multiple simultaneous events indicate the need for a coordinated, integrated agency-level response.

The AERP is supported by organizational emergency plans. These plans, outlined below, describe what each organization would do to manage and respond to a localized emergency — one that impacts a specific area of business. Individual business units have responsibility for the areas and have the authority to activate their individual portion of a plan if warranted. Most organizations also have an Emergency Operation Center (EOC) — the physical location from which emergency efforts for their organization would be directed.

Depending on the type of emergency, a single plan or multiple plans may be implemented. In any case, many organizations throughout TVA are involved in integration and coordination to ensure success.

TPS

Transmission/Power Supply Group

Transmission/Power Supply has full responsibility for emergency planning for and restoration of the 17,000 miles of transmission line, 117,000 transmission-line structures, 1,015 individual interchange and connection points, and about 600 transformers that make up TVA's transmission system. The Transmission Emergency Plan brings together organizations and individuals necessary to form



an effective team to ensure an orderly restoration of the TVA transmission system as quickly as possible in the most efficient and safe manner. TPS also assists distributors of TVA power and works with them, through the Emergency Load Curtailment Plan, to coordinate emergency actions necessary on rare occasions when the system is stretched to its limits and demand must be reduced.

Just one example of emergency-response efforts by TPS was in May 2003, when a tornado struck the Jackson, Tenn., area, moving through the center of downtown. About \$2 million in damage was done to the TVA power system, and 11 local residents lost their lives. Restoration efforts were coordinated through the TPS Emergency Operations Center, which pulled together more than 150 TVA employees to repair the system. Power was restored to the last customer in just 15 hours, and all damage was repaired in 15 days. This work included replacing or repairing 73 structures on 12 transmission lines.

TVAN

TVA Nuclear

TVA Nuclear has full responsibility for nuclear-site-emergency planning and for security at each of TVA's three nuclear sites. TVAN's responsibilities include the Radiological Emergency Plan, maintaining the Emergency Preparedness Program in a state of readiness, working with state and local emergency-response agencies, and accident-recovery activities. One major goal is to always

be ready to mitigate any radiological emergency at a TVA nuclear site in order to protect the health and safety of the general public and TVA personnel.



To ensure that TVA is prepared, at least four drills are conducted annually at each site. The drills are realistic, with some involving state and local emergency responders and even the local media, to make sure everyone would be prepared in the event of a nuclear emergency.

FPG

Fossil Power Group

The Fossil Power Group Emergency Plan brings together organizations and individuals needed to restore the TVA fossil system in the most efficient manner in the event of a major system interruption, plant event, threat or natural disaster. Each of the 13 sites has an emergency plan, and there is also an overall FPG plan, coordinating efforts throughout the TVA fossil system.



Additional emergency planning at some fossil plants is necessary since the installation of selective catalytic reduction systems to reduce nitrogen-oxide emissions and help TVA meet clean-air requirements. The new equipment requires the use of anhydrous ammonia, which will be stored onsite. Since anhydrous ammonia can be dangerous if released from its storage tank, specific emergency plans, including training and emergency-notification sirens, are installed at fossil plants with SCRs. Kingston Fossil Plant, for example, recently began testing its siren on the first Thursday of every month.

RSO&E

River System Operations & Environment

River System Operations & Environment is responsible for providing emergency notification and response during events that involve dam safety, reservoir levels, navigation, hydro-power generation, the environment or public safety around TVA reservoirs. Business units within RSO&E have plans and procedures in place to respond to all of these types of emergencies.

In addition to coordination with other TVA organizations, RSO&E coordinates with outside emergency-management agencies to ensure effective multi-organizational response when an emergency occurs. RSO&E also manages and maintains the TVA Environmental Management System. The EMS, which applies to all TVA organizations, ensures that TVA is prepared and can respond to potential environmental emergencies.



Some examples of RSO&E emergency-response activities include 1) notifying those at risk from critically high water due to a flood or dam failure, 2) maintaining emergency-action plans for 29 hydro plants, 19 nonpower dams, 1 pumped storage plant and 13 navigation locks, 3) responding to environmental emergencies, such as a hazardous material (or hazmat) spill, 4) providing 24/7 staffing of the

Hydro Dispatch Control Cell and the River Forecast Center and 5) conducting drills and exercises to test emergency-notification and response capabilities.

IS

Information Services



An emergency also can impact TVA's computer systems, causing the loss of critical data or the disruption or loss of system integrity. An emergency also could cause TVA to lose system availability. Since just about everyone depends on a computer to some extent, maintaining system security is a critical function for TVA.

TVA's IS organization leads the effort in maintaining the security of information and system assets. IS maintains the Emergency Operations Center in Chattanooga to ensure that critical information technology operations are continued in the event of an emergency or threat of emergency. One way the EOC helps TVA prepare for such an emergency is by providing backup systems, particularly for critical operating systems.

IS, with business-unit representatives, conducts regular assessments to identify and correct system weaknesses. Disaster-recovery drills are performed annually, increasing TVA's ability to manage and respond to emergencies impacting computer systems. For example, late last year, a four-day disaster-recovery drill was conducted to simulate a disaster and test the ability to recover critical applications.

CS&M

Customer Service & Marketing

Customer Service & Marketing is responsible for maintaining communications between TVA and its customers and coordinating any emergency response they require. If an emergency occurs, TVA's customers will naturally have unique interests and concerns. During an emergency, CS&M establishes communication with the distributors of TVA power and directly served customers and ensures coordination of any joint emergency response. An example of how CS&M works proactively with customers is when the Emergency Load Curtailment Plan is implemented. Because of CS&M's relationship with TVA's customers, many customers and valley industries — along with TVA — voluntarily reduce power consumption in their facilities to help meet the demand.

CS&M also works with TPS to help distributors with power restoration if needed, particularly in weather-related emergencies.

C&GR

Communications & Government Relations

Communications & Government Relations is responsible for implementing the Agency Information Plan which ensures needed information is provided to internal and external stakeholders, including employees, retirees, local media, local communities, elected officials and the financial community. C&GR staff members are on call 24/7 to handle internal and external communications for TVA, including communication for emergencies and potential emergencies. *TVA Today*, the company's daily electronic employee-information publication, is just one way employees can obtain emergency information and instructions.

TVAP

TVA Police

TVA Police is responsible for providing service and protection to TVA employees and the public, as well as maintaining law and order on TVA property (except at nuclear sites, where TVAN provides internal security). TVAP represents TVA to other law-enforcement and intelligence agencies, state and federal agencies, and the military, and TVAP establishes a system in which these different agencies can work together. TVAP has procedures for response to security incidents, terrorism and weapons of mass destruction.



How is the AERP triggered? How do we ensure coordination among organizations if the AERP is activated?

The Chief Operating Officer has the responsibility to activate the AERP. To ensure availability 24/7, a Senior Management Executive, or SME, is designated to represent the COO at all times. Generally, the AERP would be activated when the magnitude of the emergency indicates a need for overall coordination of TVA resources, or if multiple organizations or organizational assets are affected. Upon activation of the AERP, the Agency Command Center (ACC) is established as the physical location for representatives from the various organizations to interface. Specific employees have been designated to staff the ACC, and the ACC staff maintains continuous contact with their respective EOCs.

If the U.S. Department of Homeland Security raises the threat level, is the AERP automatically activated?

Not necessarily. Here's what happens:

After the terrorists events Sept. 11, 2001, TVA established a TVA-wide cross-functional Critical Security Review Team, which developed the TVA Security Matrix. This matrix provides a standardized and systematic approach to responding to changes in the threat levels and serves as a checklist to assure that all appropriate actions have been considered.

If the threat level, as established by the U.S. Homeland Security Advisory System, is elevated, two things happen. The TVA Police Director, using the security matrix as a checklist, coordinates the appropriate response with the Executive Vice President of Administration, the SME and TVAN Security. Then the COO or SME, in consultation with the TVAP Director, determines if the AERP should be activated. If so, some or all of the activities on the previous page could be triggered.



No matter what type of emergency, the region's power needs will continue. An emergency at one power-generating facility may mean another plant needs to postpone an outage or step up operations to meet the power demand. Or TVA may need to purchase power from the bulk-power-trading market.

In some cases, the Emergency Load Curtailment Plan may need to be activated to reduce power demand. Before TVA asks the public to reduce electrical usage, TVA, along with distributor and directly served customers, may reduce the use of nonessential power.

The bottom line is that TVA must, in real time, despite any type of emergency, evaluate the situation and determine what source of power, or combination of sources, makes the best sense to meet customer demand.

Employees may remember in January 2003, when TVA hit our current system peak, a *TVA Today* was issued notifying employees of actions being taken by Facilities Management to reduce power use in TVA facilities. Employees also were encouraged to conserve energy at home.

Continuity of Operations — what we do if we lose the use of a building

Parallel to the plans described in this section are the Continuity of Operations Plans, commonly called "COOP plans." These plans, which currently involve office buildings, ensure that the capability exists to continue core business functions and activities in the event an emergency threatens to disrupt operations, usually by rendering a building unusable. COOP plans provide for emergency locations, supplies and equipment should TVA lose the use of one of its office buildings. A COOP plan may or may not be activated in a specific emergency—it would depend on the emergency's impact on TVA's ability to continue operations.

So what does all of this mean?

All emergency planning experts agree—being able to respond appropriately to emergencies begins with the individual employee. YOU play an important role in TVA's ability to manage and respond to emergencies. Here's what you can do:

Always display your TVA identification badge and report any suspicious activity to TVAP.

Become familiar with the different types of emergency planning as outlined in this edition of *Understanding How TVA Works*.

Become familiar with the information under **Emergency on the InsideNet home page (listed as a **Shortcut**). This site includes:**

- The number you should call to notify TVA Police or your local emergency responder of an

emergency or possible emergency. Make a note of it.

- The location where you should go if an emergency occurs at your site. Know this location and become familiar with your site's Building Emergency Response Plan. If your location is not listed, ask your manager where you should go if an emergency occurs at your site. Make a note of this location, so it will be easy to remember if you need it.

- Specific instructions outlining exactly what to do in these types of emergencies:

- Fire/smoke/explosion
- Medical emergencies
- Bomb threats
- Weather emergencies
- Hazardous material spills or leaks
- Suspicious packages
- Civil disturbances
- Suspicious/irate person(s)

If an emergency occurs at work (during or outside work hours), get away from danger by following the procedures in your local Occupancy Emergency Plan or site emergency plan and the directions of members of your on-scene emergency team. If you become

separated from your work group, let your manager know that you are safe. All managers are responsible for reporting the safety of their employees in emergency situations.

Finally, have confidence that TVA can handle a wide range of emergencies. Plans are prepared and reviewed often. Drills are conducted periodically. Without a doubt, TVA is prepared to protect employees, property, customers, the health and safety of the public, and the Tennessee Valley's resources.