

# Emergency Management and Response Information Sharing and Analysis Center (EMR-ISAC)

**INFOGRAM 21-10**

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*NOTE: This INFOGRAM will be distributed weekly to provide members of the Emergency Services Sector with information concerning the protection of their critical infrastructures. For further information, contact the Emergency Management and Response- Information Sharing and Analysis Center (EMR-ISAC) at (301) 447-1325 or by e-mail at [emr-isac@dhs.gov](mailto:emr-isac@dhs.gov).*

## Firefighter Safety for Solar Power Systems

*A study on firefighter safety and the emergency response for solar power systems was recently released by the [Fire Protection Research Foundation](#). Recognizing its relevance for the Emergency Services Sector (ESS), the [Emergency Management and Response—Information Sharing and Analysis Center \(EMR-ISAC\)](#) analyzed the main points contained in the final report: "[Firefighter Safety and Emergency Response for Solar Power Systems](#)," (PDF, 3 MB).*

*According to the Summary Observations, this report assembles best practice information for firefighters and fireground incident commanders to assist in their decision-making process with emergency events involving solar power systems. It is focused on structural firefighting in buildings and structures having solar power systems that generate thermal and/or electrical energy, with particular emphasis on solar photovoltaic panels used for electrical power generation.*

*Researchers collected and analyzed applicable scientific studies, training guidance, case study reports and loss data, and available emergency response guidance relating to solar power systems. Its deliverables are intended to serve as the basis for training program development by others.*

*The EMR-ISAC summarized the following important issues excerpted from the document for ESS personnel to consider or address for emergency responses where solar power systems are present:*

- *Identify the type and extent of a solar power system during the emergency event size-up.*
- *Distinguish the difference between a solar thermal system and photovoltaic system, and their respective hazards.*
- *Assume photovoltaic systems and all their components are always electrically energized.*
- *Follow normal structural firefighting tactics, but with awareness of the dangers to energized equipment exposure.*
- *Pay particular attention to large commercial photovoltaic systems that generate high levels of electricity.*
- *Remain aware of unanticipated dangers and leave the scene in a safe condition without the risk of a shock hazard or re-kindling of the fire.*

*For more information about this and other research by the Fire Protection Research Foundation, consult their research [web site](#) or write to [foundation@nfpa.org](mailto:foundation@nfpa.org). See the [Southface](#) web site for more information regarding solar thermal and photovoltaic systems.*

## Vigilance for Terrorism

*As demonstrated by recent events, emergency personnel must remain alert and prepared to respond to possible act of terrorism, according to the [International Association of Fire Chiefs \(IAFC\)](#). The [Emergency Management and Response—Information Sharing and Analysis Center \(EMR-ISAC\)](#) noted that IAFC recommends fire departments remain vigilant when responding to potential incidents involving improvised explosive devices to prevent injury to first responders and the general public.*

Based on discussions with the Fire Department of New York, IAFC developed the following [reminders](#) abridged by the EMR-ISAC for fire departments to consider when responding to incidents:

- Situational awareness is key—thoroughly size up a situation before taking action.
- Look for things appearing out of the ordinary—question anything that seems to be suspicious.
- Work with local law enforcement—establish and maintain close relationships with police authorities.
- Take precautions to ensure safety—reposition personnel and equipment to a safe area.

The IAFC publication, [Terrorism Response: A Checklist and Guide for Fire Chiefs](#), offers helpful information on how to make sure emergency departments are prepared to respond to possible acts of terrorism. This document is a toolkit regarding terrorism preparedness for departments of all types and sizes. “It is designed to enable fire chiefs to assess, prevent, prepare for, and respond to and recover from terrorist attacks in a methodical, clear, and comprehensive manner.”

### Transportation Emergency Preparedness Program

According to its [web site](#), the U.S. Department of Energy (DOE) retooled its approach to emergency responder preparedness and implemented the more simplified and responder-friendly Transportation Emergency Preparedness Program (TEPP) to address responder concerns. At this site, the [Emergency Management and Response—Information Sharing and Analysis Center](#) (EMR-ISAC) confirmed that TEPP is a component of the overall comprehensive emergency management system established by DOE.

“TEPP integrates a basic approach to transportation emergency planning and preparedness activities under a single program with the goal to ensure DOE, its operating contractors, and state, tribal, and local emergency responders are prepared to respond promptly, efficiently, and effectively to accidents involving DOE shipments of radioactive material.” It is designed and implemented using an approach to guarantee that initial responders to a radiological transportation accident have the necessary knowledge and skills needed to successfully and safely mitigate the accident. The TEPP mission is to ensure that emergency responders “have access to the plans, training, and technical assistance necessary to safely, efficiently, and effectively respond to transportation accidents involving DOE-owned radioactive materials.”

At the TEPP [Fact Sheet](#) (PDF, 160 KB), the EMR-ISAC verified that several planning tools have been developed to assist responders to prepare for a transportation incident involving radioactive material:

- *Model Needs Assessment* assists jurisdictions in determining their readiness for responding by identifying strengths and possible improvement areas.
- *Model Planning Annex* provides a basic structure and annotated guidance for preparing a transportation addendum to an existing emergency plan.
- *Model Initial Response Procedures* identifies five procedures that can be incorporated into existing standard operating procedures.
- *Drills-In-A-Box* presents seven scenarios and materials for preparing and conducting tabletop exercises, drills, and practical exercises for transportation incidents.

In addition to the above, TEPP offers an [Emergency Responder Radioactive Material Quick Reference Sheet](#) (PDF, 461 KB) as a concise tool for use by emergency departments and agencies.

### Copper Thefts: Disruption to Emergency Communications

From multiple news services during the past several months, the [Emergency Management and Response—Information Sharing and Analysis Center](#) (EMR-ISAC) observed that citizens throughout the nation are occasionally denied telephone and 9-1-1 service caused by copper theft from electrical transmission lines

*and telephone wires. The frequently high prices for metals, especially copper, have apparently made a minor nuisance into a potentially major problem for emergency communications.*

*“Tampering with telephone lines can put people at risk by leaving them without telephone service—including 9-1-1 service,” said [Mike Barger](#), a spokesman for AT&T. “And thieves could be killed or seriously injured. That’s because the wires often are under high tension, and when they are cut a pole could potentially snap. In addition, our lines typically co-exist with electric wires, and if a thief comes into contact with the wrong wire he or she could be electrocuted.”*

*The EMR-ISAC learned that AT&T issued a [guide](#) (PDF, 2.8 MB) for law enforcement and fire departments to assist them in catching copper cable thieves and identifying where the cable originated. In part, their guide says that copper cable theft is a crime with probable devastating consequences in communities. “Any loss of communication can paralyze critical public health and emergency services and even threaten our national security.”*

*See the [web site](#) of the Federal Bureau of Investigation for more information pertaining to how copper thefts threaten U.S. critical infrastructures.*

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