As solar generation increases, so does the potential for fires. **Are you prepared?**

Potential Risks from Fires at Solar Generation Facilities

There is little data industry wide on fires at solar generation facilities, but they do happen, and it's estimated that around half ignite from on-site causes. Solar photovoltaic (PV) panels are rarely the cause of such fires. Equipment, such as electrical cabinets, inverters, and cables, are likely the culprits. Remote locations can result in long response times to fire events. Solar PV panels and systems contain cadmium telluride, lead, cadmium gallium selenide, silicon tetrachloride, and hexafluoroethane, which may be harmful if released to the air, soil, or water.

How real is the threat?

- Fires at renewable facilities are likely underreported domestically, but there is growing scientific research
- Areas with high solar PV potential are also areas with high wildland fire hazard potential, and climate change will increase the frequency and severity of fires

Should you be concerned?

- Fires can result in damage, destruction, and potential releases of harmful chemicals
- Even the highest rated PV modules (Class A) will only withstand 10 minutes of burning
- During a fire, sulfur dioxide, hydrogen fluoride, hydrogen cyanide, and other harmful compounds are released from burning PV panels

What can we do about this?

- Fire prevention plans reduce the risk and potential impacts of fires
- Technologies to prevent high temperature fires at solar sites are in their infancy
- **Additional industry research is warranted**

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