

Summer Causes Increased Need for Electronics Protection

Heat Waves, Thunderstorms and Electric Line Flashovers Conspire as Power Perils



When the Heat is On

As the temperature increases, so too does the demand for electricity. Increased use of air conditioners and indoor electronics taxes most electricity providers' supplies. In order to compensate, energy companies plead with consumers to conserve energy and reduce usage.

In a Flash

According to the Electrical System Reliability Task Force (an advisory board to the U.S. Secretary of Energy), hot weather-induced line sags and flashovers from transmission lines to trees can also cause outages. Trees limbs near overhead lines cause outages when they come in contact with conductors, thereby short-circuiting the lines. (Such short circuits can also cause surge-related damage to unprotected home electronics). In addition to heat-caused outages, summer usually means an increase in thunderstorm and lightning activity.

Lightning Facts!

Compiled with information from *The Weather Channel*, *Automated Weather Service, Inc.*, *National Weather Service*, *Global Atmospheric, Inc* and *LightningTalks.com*

The National Weather Service indicates there are up to 1,800 thunderstorms in progress somewhere on the earth at any given moment. Each year, the earth hosts over 16 million storms and 3 billion lightning strikes. The United States experiences approximately 100,000 thunderstorms with 20 million lightning strikes annually.

The Facts

Lightning can:

- have a flash that can be six to eight miles long.
- heat up to 60,000 degrees Fahrenheit (about five times the temperature of the sun).
- carry 1 billion volts and 10,000 to 20,000 amperes of current. Your house probably uses only 200 amps.
- cause the ground surface to be lethal up to a 60-foot radius at the time of the strike. If the strike occurs in water, that increases to 600-foot radius.

Lightning Myths:

Myth: Lightning rods attract/discharge lightning.

Truth: The direction lightning takes is purely random. Rods only provide a conductive path to ground for an electrical charge that is already in the area.

Myth: Lightning never strikes the same place twice.

Truth: Lightning often strikes the same location several times a year. The Empire State Building is hit about 25 times per year.

Myth: Umbrellas, cleats, and golf clubs attract lightning.

Truth: Nothing "attracts" lightning. The only determinant that effects where lightning will strike is the location of the thunderstorm itself.

Myth: Lightning strikes, or is more likely to strike, tall objects.

Truth: Lightning has the ability to strike everything and everywhere.

Myth: Lightning victims are electrified.

Truth: Victims and the surrounding ground do not carry an electrical charge after the strike and are safe to touch.

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Lightning Safety Awareness Week

June 18-24, 2006

The National Oceanic and Atmospheric Administration (NOAA), through the National Weather Service Office of Climate, Weather, and Water Services will help celebrate the fourth annual National Lightning Safety Awareness Week from June 18 through 24, 2006.

The Service provides topic overviews for each day of the week including a lightning overview, scientific facts, outdoor safety tips, indoor safety suggestions, and medical aspects related to lightning. NOAA/NWS has partnered with sports celebrities in creating public service announcements and other multimedia to stress the importance of lightning safety.

Visit <http://www.lightningsafety.noaa.gov/week.htm> for the week's schedule, to view campaign highlights and more.