Off the Grid

By Reg P. Wydeven December 11, 2010

One of my all-time favorite movies is 'Ocean's Eleven.' Frank Sinatra, Dean Martin, Sammy Davis, Jr. and the whole Rat Pack star in this 1960 flick about eleven Army buddies who rob five of the biggest casinos in Las Vegas in one night. The gang knocks out the electricity for the whole city so that the casinos' emergency generators activate and open the doors to all of the cashiers' offices. The crew takes up jobs in the casinos as entertainers, waiters and busboys and make off with the loot – with a surprise twist at the ending.

In 2001, the movie was remade featuring George Clooney in Sinatra's role as Danny Ocean, and the Eleven are made up of Brad Pitt, Matt Damon and other hip stars. The update infuses the suave, cool feel of the original but modernizes it with the latest techno gadgets used to pull off the heist.

Like his predecessor, Clooney's Ocean also knocks out the power on the Strip so his crew can break into the vault of the three biggest casinos, the Bellagio, the Mirage and MGM Grand. This time around, however, they use a "pinch" to cut the electricity. It works by creating a burst of energy using a magnetic field that "pinches" a column of charged gas particles known as an electromagnetic pulse, or EMP. The EMP knocks out any electronic device in its path.

The trick worked great and again the fellas made off with the booty, and once more there was a shocking twist at the conclusion. While it made for an entertaining movie, most people aren't really worried about EMPs being used to rob casinos. The federal government is concerned about terrorists using EMPs to knock out our infrastructure.

In August, the House of Representatives unanimously passed the GRID Act, which authorized the federal government to take emergency measures to protect approximately 300 giant power transformers around the country from EMP weapons and solar flares. The bill was gutted, however, before going before the Senate.

There's little doubt the issue will come up again. Congress has even created an EMP Commission, which recommends spending between \$10 billion to \$20 billion over the next five years to protect giant power transformers and transmission lines. Without adequate protection, these items would simply melt in the event of an EMP attack or a massive solar flare.

Peter Pry, a former CIA analyst and the executive director of the Commission, claims that two commission reports indicate that if electricity is successfully knocked out, "within 12 months of an EMP attack or a massive solar flare, between two-thirds to 90 percent of the U.S. population would perish."

U.S. intelligence analysts originally believed that it would take a massive weapon of 25 megatons or more to generate the amount of EMP needed to knock out the U.S. power grid. According to Pry, Russia has developed a "super EMP weapon with a low explosive yield – as low as one kiloton – that would produce 200 kilovolts per meter, eight times the gamma radiation of a 25-megaton weapon." Such a weapon could be carried in a backpack, or loaded on a freighter and fired from a low-technology missile launcher into the atmosphere over the U.S.

Because I'm not much of a hunter or fisherman, I've started stocking up on canned goods.