

# The Wipe-Out Effects of An EMP

by Michael Knight

Editor, *Family Survival News - Future Times and Trends*. (Reprinted with permission).

When it comes to protecting the US national grid from being wiped out by an EMP event, "Washington is dysfunctional."

Those are the words of Ambassador Henry Cooper, former head of the US underground nuclear test program, speaking at a panel discussion on July 29 about the EMP threat to the US electrical grid.

As the panel saw it, the US is totally ill-prepared for such an event, whether it comes from an X-class flare from the sun, or a high-altitude nuclear weapon launched by some enemy of the United States.



James Woolsey (l) and Ambassador Cooper (r).

Having watched the panel's hour-long discussion, as well as researching other sources of information about the effects, *but more importantly the after-effects*, of an EMP event, we have decided to keep this issue relatively short, because the associated video links are well worth your time.

While the US is currently (as of August 2 2013) under threat from terrorists who we're told have been planning a major event or attack on US facilities somewhere (and it may have happened by the time you receive this) we consider **EMPs** to be a *top priority* subject for careful study and forward planning.

Therefore this is pretty much a one-subject issue, except for a few additional headlines and links.

As long-time subscribers know, we have been aware for years that the sun is approaching what's called a "solar maximum," which could include a double peak situation, perhaps one in the next few months, and another sometime next year.

What's heartening about this panel discussion is that the organizers have filmed it and put it on YouTube, because they believe "the people need to be informed." What's evident from this is that they have become frustrated with the poor coverage of this issue by the mainstream media, and more importantly, the lack of action out of Washington DC when it comes to telling the country how seriously a major EMP would affect life as we know it.

Further, virtually nothing, zilch, nada, zero has been done to harden the transformers that the electric grid relies on for electricity distribution.

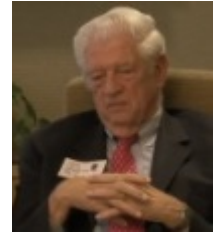
The panelists pulled no punches in their discussion of **"the growing -- and perhaps imminent -- threat of a natural or nuclear electromagnetic pulse (EMP) to the U.S. electric grid and other critical infrastructures that sustain modern civilization and the lives of millions of Americans."**



For background, the event was sponsored by the newly established EMP Coalition, of which Mr. Woolsey is the Honorary Co-Chair.

Other participants were Ambassador Henry Cooper and Dr. Peter Vincent Pry.

Ambassador Cooper led strategic arms control negotiations with the USSR under President Reagan and is currently the Chairman of High Frontier, an organization dedicated to protecting the United States from nuclear attack.



Ambassador Cooper



Dr Peter Pry

Dr. Pry served on the Congressional EMP Threat Commission, as a professional staff member on the House Armed Services Committee and as an analyst in the CIA. (His frustration with the lack of action at the federal level is obvious in the passionate way he addressed the panel, and it's very clear that he's well aware of the dangers an EMP poses for "life as we know it" so to speak).

**As he said, starting with food and water, the United States has 18 categories of infrastructure, all of them dependent on electricity. (Think water distribution, sewage pumping, transport/trucking, oil and gas pipelines, gas pumps, agriculture/food production etc).**

## Bullet points from the panel discussion.

- **Two to three thousand transformers are the heart of this system. They can be very easily damaged and are protected only by a cyclone fence. This applies even at most nuclear power stations; the nuclear aspect is protected, but the transformers are outside.**
- **The civilian grid system was put together without anyone giving "a single thought to security."**
- **Transformers take well over a year to construct, and that is done in South Korea and northern Europe.**
- **Only a handful need to be "taken out" to affect a large area of the country.**
- **There are 3500 utilities in the US, "and they spend less per year on R&D than does the dog food industry."**
- **An EMP (Electromagnetic Pulse) can have a massive effect on the earth. The Quebec event of 1989 caused billions of dollars in damage and put six million people in the dark - fortunately for no more than nine hours in most cases.**
- **Two percent of the population grows food for the entire nation. If their production equipment goes down for lack of electricity (such as pumps for irrigation and so on) what then?**
- **Both the sun - and nuclear weapons - can produce EMPs. And the concept of a nuclear EMP attack is "more troubling" than the thought of North Korea or Iran targeting a city with nuclear weapons, because in that case, a missile launch is required, a city must be targeted, and the missile must re-enter and find its target (and it can be taken out during flight).**

- **But in the case of an EMP attack, all that's required is to detonate an atomic bomb while in orbit...say 200 miles above the surface "and you could very well have a very substantial share of the US go down because of an EMP."**
- We are "behind the Russians, the Chinese and possibly even the North Koreans" when it comes to protecting electrical equipment.
- **Ambassador Cooper:- "We're still in the window of the solar maxima and will be so for the rest of this year" (and into 2014). He noted that "a 1962 high altitude atomic test in the Pacific caused (EMP) damage in Hawaii 900 miles away..."**
- "There are three components to EMPs. One of them is lightning. One is the low frequency long wavelength pulse which is the same as what you get from the sun, and then there is the high frequency short wavelength pulse that causes damage to solid state electronics of all sorts."
- **"Missile defense systems cannot protect you from the sun."**
- "When a nuclear weapon goes off a couple hundred miles above the United States no-one gets hurt immediately. The lights go out and the grid goes out. You lose water, and the power for the sewage. Imagine being in a 100-story building and gravity takes over; and if the windows don't open, and you don't have air conditioning, or all these things you've come to rely on....You have chaos. And that's where people die through being unprepared."
- **There would be massive migration from the cities, even for those who had put aside food and water for the immediate aftermath.**
- "We could use more serious discussion with the population on this subject and what the consequences would be."
- **Ambassador Cooper noted that he learned just six or eight months ago that Congress is blocking anything to do with dealing with the electric power grid.**
- The missile defense system including facilities in North Dakota was postured for a nuclear attack from Russia over the North Pole, "and it still is, "while bases in Alaska and California are geared toward a North Korean attack, with Alaska also able to have a shot at Iranian launches over the North Pole."
- **Woolsey:- "It's possible to also launch around the South Pole and avoid those radar installations and detonate an EMP over the US."**
- Cooper:- "But you don't even need the fancy systems. Just put a bomb on a satellite - and both Iran and North Korea have launched satellites in the past year that could be vectored over the South Pole and over the United States where they could detonate a bomb carried by such a satellite, and you could possibly take down the entire grid. We have no defense against that. We don't even have a radar system that would see it coming."
- **The report is edited at this point, where Cooper starts talking about where the US is apparently the most defenseless, and that is that you don't need ICBMs or even satellite bombs. All you'd need to do to take down the US grid would be to launch a missile from a ship and detonate a bomb over the United States. This potential was identified as far back as 1998.**

- Dr Pry:- "You can use a meteorological balloon and get up to 30 km and if you detonated that anywhere over the eastern seaboard it would probably collapse the eastern grid that generates 70 per cent of our electricity."
- "Efforts have been made since 2009 to get bills like the Grid Act and the Shield Act through the house but here it is 2013 and we've got North Korean freighters showing up capable of launching missiles from the Caribbean."
- In a matter of months, this year, the state of Maine passed legislation intended to protect its grid from any EMP event, which.... is an example of "if Washington won't act, then the states must act."
- Vice Admiral Robert Monroe, former head of the Nuclear Defense Agency, said he can see no way to protect the civilian side of things without a government agency having the authority to tell utilities they must protect the infrastructure from the consequences of an EMP - because at present, their main interest is in keeping costs down, so they do nothing to protect their transformers.
- **Woolsey: "The central theme of the book *"One Second After"* and the Tv series *"Revolution"* (and the film *"Red Dawn"*) is the United States *after* the grid goes down. **So Hollywood and late night Tv and novelists are well ahead of the government of the United States on this matter."****

While the panel and its people are rightly and commendably concerned about the possibility of an EMP attack on the United States by some foreign power, it is our view as an international newsletter that the entire *planet* is susceptible to being crippled by an EMP (also known as a Coronal Mass Ejection, or CME) from the sun.

**Most importantly, whether it's the sun or a high-altitude bomb that brings down the grid, the consequences are the same - and the unprepared will, as Ambassador Cooper and the TV shows, movies and novels have so graphically illustrated, become victims and refugees in an instant.**

Right now, you have the opportunity, indeed the responsibility, to study this issue very thoroughly.

To assist you in that regard, here are some links to videos that are essential viewing.

**Don't just take the time to watch, *make* the time to watch, and *re-watch*, because as one of the commentators points out, "information is the antidote to fear."**

Discovery Channel documentary. 10m 58s. ("The loss of power on a massive scale thrusts us back to an era before technology.").

How to Watch the Sun: Spaceweather 101 - <http://youtu.be/ld5ecZuHECA>

Energy from Space. (A review of the facts without the hype). [http://youtu.be/\\_yy3YJBOW\\_o](http://youtu.be/_yy3YJBOW_o)

Energy from Space 2.0: (Rotation of Venus has slowed). <http://www.youtube.com/watch?v=15b-jx...>

The Next Mini Ice Age. (A possible shift soon). <http://youtu.be/UuYTcnN7TQk>

The REAL Climate Changer: [http://youtu.be/\\_yy3YJBOw\\_o](http://youtu.be/_yy3YJBOw_o)

An Unlikely but Relevant Risk - The Solar Killshot: [http://youtu.be/X0KJ\\_dxp170](http://youtu.be/X0KJ_dxp170)

[The panel discussion.](#) (Also discusses effects on nuclear power stations).

The Crank-A-Watt (TM) hand-cranked generator: [www.PrestoWind.com](http://www.PrestoWind.com)

**(About the author:-** Michael Knight has been a journalist since 1960. He has worked internationally in all media but for the past 20 years since moving to the US he has been an independent researcher and writer, especially on the subject of earth changes. He is editor of *Family Survival News*, *Future Times and Trends*, an international weekly subscription newsletter. [Special half-price link here.](#))