



GRID DANGERS!

*A Quick Guide to the Problems & Obstacles That Threaten Our Families, Texas & America.
If you think it's bad, it's a lot worse than you think. But there are steps we can take.*

To be like the sons of Issachar, who had *understanding of the times*, to know what our families, Cooke County, and Texas should do. ~ I Chron. 12:32

You (and we) don't want to hear any of this, but we must. The clock is ticking. The question is not if, but when.

The following is from:

Command Sergeant Major Michael Mabee ~ Secure the Grid Coalition member, paramedic, decorated for actions at the World Trade Center, two wartime deployments to Iraq, missions to Guatemala, author of *The Civil Defense Book*, largest online library of Government Grid Security Documents and database of Electric Disturbance Events, currently suing the federal government over grid security and reliability (over 200 filings). Lived through the Texas Grid failure in Winter 2021 (210 fatalities) in his Fort Worth home.

2022 Grid Down Power Up Documentary and **Secure the Grid Coalition** featuring:

- Texas State Senator **Bob Hall**
- Filmmaker/Producer **David Tice**
- CSM **Michael Mabee**
- Center for Security Policy and Committee on the Present Danger: China **Frank Gaffney**
- Director of Infrastructure Security for CSP & US Marine Corps Reserves **Lt. Col. Tommy Waller**
- Chief of Staff, Congressional EMP Commission and Executive Director of the Task Force on National and Homeland Security and author of *Blackout Warfare: Attacking the US Electric Power Grid* **Dr. Peter Pry**
- Creator of the Joint Base San Antonio Electromagnetic Defense Initiative **Lt. Col. Eddie Stamper**.

The U.S. Electric Grid (capitals are for emphasis) is *the largest machine in the history of the world*. Spread across the nation, built piece by piece since 1882, highly complex, it is run by some 3,000 public and private companies, involving over 60 different regulatory entities. It has three sections: Eastern, Western, and Texas.

THE IMPORTANCE

• Today, *we all exist on life support* ~ the Electric Grid. If unplugged, everything stops. If it lasts longer than backup generators have fuel, then tap **water** won't flow (even from a well), **food** supplies will dwindle and no longer arrive, **lights** are out, **gas** won't pump, **trucks and cars** soon will not run (and may be fried by EMP), **airlines, trains, ships** can't operate, **refrigerators and freezers** will fail, **air conditioning** won't cool, **heaters** won't heat, **electronics** are soon dead, **communications** stop, **pharmacies, hospitals and banks** will soon lose power and computer access (Money? Medical supplies? Prescriptions?) **replacement parts** will be unavailable, **ammo** supplies will dwindle. Etc. Even "green" power depends on fossil fuels and electrical energy transfer. Without energy to run and to cool, **nuclear** power becomes deadly.

• If/when it happens, *it's too late*: “There won't be enough money or time in the world to get it working again.”
~ **Dr. William Graham**, Chairman of Congressional EMP Commission.

• Today, we as a country are not knowledgeable or equipped to live in **the equivalent of the 1800s**. The **Congressional EMP Commission** has determined that the North American landmass could sustain only 30 million people prior to electric power, which was the U.S. population pre-power. They had the knowledge, the culture, the networks, and the equipment to live without electricity and gasoline. The Commission's conclusion? Over one year, only about 10% of today's U.S. population would survive. *Some 270 million people would die in America*. Lt. Col. Waller believes more. Try to imagine the cities and the suburbs.

• “*But I'm a prepper. I'm ready.*” No matter how knowledgeable and prepared you are, *you cannot survive alone*. How long can you hold out without support? How will you handle the desperate and armed people who want what you have? You must have a **community** of knowledgeable, prepared, trustworthy people.

You need a community and a plan.

THE DANGERS

• **Coronal Mass Ejection (EMP from the Sun)**

In 1859, the Carrington Event knocked out America's and part of Europe's telegraph system and injured telegraph operators. In 1921, a solar storm ignited a telegraph exchange in Sweden, shut down the signal and switching system of the New York Central Railroad, played havoc with telegraph and telephone lines, and ignited various building fires. In 1989, a CME took out the Hydro-Quebec Power Grid, but only for 9 hours.

“It is a 100% chance that Earth will be struck at some point in the future by a Coronal Mass Ejection that is large enough to take down our Grid. It would probably have global implications. This has been thoroughly documented.” ~ Lt. Col. Tommy Waller

Is there a solution? Yes. The technology exists. “*One third of one percent* of the Biden Infrastructure Bill could protect the entire Grid by installing neutral ground blockers.” ~ June 2022 testimony by Col. Waller to the Secretary of Energy Advisory Board. The warning is being ignored.

• **China, Russia, Iran EMP attack**

Engineer and Air Force officer **Bob Hall** was picked to be project manager of a crash program to harden America's Minute Man Missile System from EMP. He has been involved with this military and security challenge for decades. He states that, from records obtained after the collapse of the Soviet Union and from defectors with boxes of data, we *know* that the Russians, Chinese, and Iranians have in their *war plans a first-strike action* to take down our Grid with an EMP attack. *It is not speculation.* ~ Texas State Senator Bob Hall

North Korea (controlled by China) launched two satellites, one in 2013, one in 2016, on a polar orbit, crossing the U.S. several times a day. To date, neither has emitted any data. They are either both total duds, or they are weapons waiting for a signal to drop a weapon. ~ Texas State Senator Bob Hall

It doesn't have to be a missile. It could be non-nuclear. There is an item called an EMP suitcase, operable by a single individual with little or no training. A lone madman or terrorist could topple the pillars of civilization in a major metropolitan area. ~ Dr. Peter Pry

• **Cyber attack**

“Cyberspies have penetrated the U.S. electrical grid and left behind software programs that could be used to disrupt the system, according to current and former national-security officials. The spies came from China, Russia and other countries, these officials said, and were believed to be on a mission to navigate the U.S. electrical system and its controls. The intruders haven’t sought to damage the power grid or other key infrastructure, but officials warned they could try during a crisis or war.” ~ *Wall Street Journal*, 2009

Despite the fact that we have known for a decade that the **Russians and Chinese** have penetrated the electric grid, little has been done. ~ *CSM Michael Mabee*, 2019

This is not a threat. This is happening now. We are under attack. This is an urgent situation. ~ *Maine U.S. Senator Angus King, committee hearing, 2019*

“In December 2015, a first-of-its-kind cyber attack cut the lights to 225,000 people in western Ukraine, with hackers also sabotaging power distribution equipment, complicating attempts to restore power. Ukrainian security services blamed that attack on **Russia**.” *Reuters*, 2017 About 60 substations were knocked offline.

“In February 2021, malware originating from **China** was found in an Indian power grid. Experts have suggested the malware may have shut off the lights of Mumbai city at the height of the border stand-off in Ladakh.” ~ *The Print (India)*, Sept. 22, 2021, *Aadil Brar*

“The DHS (Homeland Security) reports that the energy sector is the target of more than 40 percent of all reported cyberattacks. In 2014, the National Security Agency (NSA) reported that the agency had tracked intrusions into industrial control systems by entities with the technical capability ‘to take down control systems that operate U.S. power grids, water systems and other critical infrastructure’.” ~ *U.S. House hearing, 2016 (Mabee website post, 2018)*

• **Physical attack**

In 2013, a major transformer leak was reported by PG&E, south of San Jose, CA. **Terrorist** attackers fired shots into the substation, perpetrating the most serious attack on the U.S. grid in history. For 20 minutes, gunmen fired at transformers at Metcalf Power Substation, as seen on security cameras. They knew what they were doing, had the specific objective to knock out the substation, and hit the cooling fins 90 times. There was no security at all, but someone heard the shots and called 911. The gunmen escaped. The substation was down for weeks. The act could have brought down all of Silicon Valley. ~ *60 Minutes, Feb 27, 2022*

Over the last decade, 38% of electrical disturbances were due to physical attack. Over 700 physical attacks on the U.S. Grid over the past 10 years. ~ *CSM Michael Mabee (60 Minutes)*

There are 55,000 substations across the U.S. Grid, each housing transformers, many without any security. A takedown of just 20 substations could cause cascading blackouts and collapse the Grid. Perhaps just 9 substations. ~ *Jon Wellinghoff, former chairman of FERC, the Federal Energy Regulatory Commission, 60 Minutes, Feb 27, 2022*

• **Extreme weather**

In February 2021, “Snowmageddon,” a weather event forecast well in advance, brought Texas literally **less than 5 minutes away from catastrophic failure** that could have meant weeks, maybe months, without the Grid. Over just *one week*, the State reported 246 weather-related deaths, at least 210 related directly to the Grid. ~ *CSM Michael Mabee*

“The damage far exceeded the 2011 Texas storm. Nearly a third of the grid’s power plants went offline.” ~ *Houston Chronicle Feb. 26, 2021*

Michael Mabee is investigating criminal negligence in regard to the Texas Grid. “The failure of the Texas grid in February of 2021 was at least the fourth in a series of identical incidents which occurred in 1989, 2011, 2014 and 2021. In all four events, the Texas grid failed due to cold weather. However, recommendations from official reports after the 1989, 2011 and 2014 blackouts were not followed and effective extreme weather protections were not implemented.” Mabee analyzed electrical disturbance reports from 2010 to 2020 and found Texas reports to be just shy of 71% weather related compared to 52.6% across the country. ~ *CSM Michael Mabee*

“The experiences of 1989 are instructive, particularly on the electric side. In that year, as in 2011, cold weather caused many generators to trip, derate, or fail to start. The PUCT investigated the occurrence and issued a number of recommendations aimed at improving winterization on the part of the generators. These recommendations were not mandatory, and over the course of time implementation lapsed. Many of the generators that experienced outages in 1989 failed again in 2011.” ~ *Texas Joint FERC/NERC report of August 2011*

• **Chinese-manufactured extra-high-voltage transformers**

Transformers are the backbone of the Grid. In the past, the U.S. typically sourced them from Germany or South Korea. In 2006, the U.S. imported 366 large transformers from China. At least 200 and possibly 300 are installed in our Grid. Mysteriously, the government seized one transformer and took it to Sandia National Laboratories for examination. Hardware was found that allowed someone in China to switch it off. ~ *CSM Michael Mabee*

There is *no requirement anywhere that anyone examine* these Chinese transformers for cyber security. Our government reports that China is hacking our Grid, while we buy unexamined critical components from China and work with Chinese entities who aid Grid companies with compliance issues. And we citizens pay for it. This is insane. ~ *CSM Michael Mabee*

THE OBSTACLES

Why hasn't the Grid been hardened?

THERE IS NO PLAN ~ “Current planning does not include any contingencies for very longterm or extremely widespread power outages.” ~ *FEMA, National Preparedness Symposium, May 24, 2018*

The **Chinese and Russians** are both inside the U.S. electric utilities **lobbying** organizations, the **Edison Electric Institute (EEI)** and the **Electric Power Research Institute (EPRI)**, with intent that our Grid remains vulnerable, helping to shape the findings of these research entities and influencing our legislators. ~ *Frank Gaffney*

EPRI ~ Investor owned large utilities, municipally owned utilities, and smaller cooperatives pooled resources for research and development into a non-profit called **Electric Power Research Institute (EPRI)**. It has done a lot of good work, *but*, with respect to the *EMP threat, the research done by EPRI was catastrophically, dangerously erroneous*. This is what is provided to legislators by the lobbyists. ~ *Lt. Col. Tommy Waller*

EPRI had no EMP physics experts or access to classified data to accurately assess EMP threats. Grossly lowballed both nuclear and solar EMP threats, basically trying to dismiss both. EPRI *gets money from both China and Russia*. EPRI is not an American institution. ~ *Dr. Peter Pry*

EPRI ~ Members in more than 35 countries, comprising more than 1,000 organizations. Most members are electric utilities, but others are businesses, *government agencies, regulators* and public or private entities engaged in some aspect of the generation, delivery, or use of electricity. ~ *CSM Michael Mabee*

For more on why EPRI and EEI are obstacles to securing the Grid, and why the **Federal Energy Regulatory Commission (FERC)** and industry self-regulating non-profit **North American Electric Reliability Corporation (NERC)** have failed to protect the Grid, including covering up many violations of Critical Infrastructure Protection (CIP) standards, see Michael Mabee's website:

<https://michaelmabee.info/dr-george-baker-speaks-truth/>

<https://michaelmabee.info/thomas-popik-should-be-ferc-commissioner/>

<https://michaelmabee.info/cybersecurity-incident-shell-game/>

In procurement wars, the Chinese are underbidding everyone else dealing with the 3,000 public and private companies involved in the Grid. For public companies, shareholder value is foremost. For all companies, being competitive is the bottom line, not security. Government entities normally require acceptance of the lowest bid.

Mantra that "we can't afford to harden the Grid." The actual cost of doing this is extremely low. ~ *Dr. Peter Pry*

Texas Governor Abbott keeps talking about the importance of hardening the Grid. But he thinks it's already been done. It hasn't. ~ *Frank Gaffney*

Over the past three Legislative Sessions, bills have made it through the Senate, with support from Lt. Gov. Dan Patrick, but the bills were all killed in the House. The power companies have a great deal of influence. ~ *Texas State Senator Bob Hall*

Adamant opposition by the electric utilities to "fiddling" with a system that works "pretty well." Every single elected official in U.S. and Texas has at least one electrical utility in their district, and they are very reluctant to cross them. ~ *Frank Gaffney*

Small cooperatives just don't want to deal with it. ~ *Texas State Senator Bob Hall*

\$1.2 billion in just federal (not state) lobbying by **electric utility industry** over the past decade, and hundreds of millions in contributions to elected officials, all from our electric bills. We fund the lobbyists that advocate against protecting our families. Though a handful of companies are stepping up to do the right thing. ~ *CSM Michael Mabee, Lt. Col. Tommy Waller*

Continue to check for more information at

COOKECONSERVATIVES.COM

GridDownPowerUp.com

SecuretheGrid.com