

What's a nation to do?

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Warning: The following column may contain offensive or disturbing ideas to your otherwise pre-conceived notions of safety.

We Americans pride ourselves on our democracy, and for good reason: It's the best system of governance, full of individual liberties and freedoms, known to have ever existed on planet Earth. We know we are a system of governance in which all people are collectively involved in making decisions about our government's affairs, yet we probably think that group exercise only happens on election days and then we go back to our otherwise individual lives.

Yet, beyond the obvious shared public road that one may drive to get to that polling place, most Americans overlook the

greatest socialistic aspects of all of our daily lives: electricity.

We are the second largest total consumer of electricity of any country in the world, second only to China. The U.S. ranks seventh in actual energy consumption per-capita after Canada and a few smaller nations. The enormous amount of electricity available in this country is perhaps one of the greatest ways we are connected as a nation. That connectedness is both a strength and weakness.

From an economic standpoint, America's socialized grid provides energy across each state and into most every American home and business at a cost that many otherwise couldn't afford to do on our own. Oklahomans (as energy producers) at 7.54 cents per kilowatt hour pay slightly less than the regional average and a good deal less than the national average of 9.84 cents/kWh, according to the Energy Information Administration.

The electricity sector includes a huge system of generation, transmission and distribution, from both public and private entities, producing and balancing power across the national grid, essentially from a large power plant somewhere all the way to your back yard meter and into your home. This happens each hour of each day, typically without incident or interruption, sans the occasional winter ice storm.

Yet, this massive grid is also perhaps one of the greatest vulnerabilities to your family's safety and to America's homeland security. That's why, since the attacks of 9/11, American utilities, co-ops, transmission organizations and others along this supply chain have been investing billions of dollars, at a cost to each of us, to provide safety and security measures to prevent against a terrorist attack of our electric system. So far so good, but the attacks are underway.

U.S. law enforcement officials recently announced proof that

ISIL/ISIS is beginning to launch cyberattacks against the grid, but perhaps because they aren't yet using the latest hacking tools they haven't been successful to date. According to a new book by former Nightline anchor Ted Koppel, "Lights Out: A Cyberattack, A Nation Unprepared, Surviving the Aftermath," America has long known that the Russian and Chinese governments have penetrated our electric system and have the ability to wreak havoc today.

It's likewise understood that agents of our government are currently inside those countries' systems, and perhaps others, with the same ability to disrupt, impact their economies and their citizens' lives. But between countries, perhaps there is some comfort in the notion of mutually assured destruction. With roving, non-nation actors like ISIL, there is less predictability and perhaps less prevention.

Some predictions (from sources like the CIA) about surgical grid attacks suggest that even a very small and unsophisticated attack could plunge parts of America into darkness, for prolonged periods of time, without heat, cooling and water systems, thereby creating massive risk of death from disease, starvation, exposure or violence caused by social breakdown.

So what's a nation to do? Continue to invest, continue to protect, continue to be vigilant, continue to grow awareness and perhaps begin to become less-socialized in that massive vulnerability. Our future resilience against these growing threats may come from our ability to plan, cope and create a new system of mini grids, distributed grids or even a purposeful deployment of individual and community-based distributed generation. Distributed generation is power generation at the point of consumption, such as a small-scale wind turbine at your business or a roof-top solar installation on your home.

Self-reliance has always been an American ideal and virtue and

it most likely is also going to be a key part of national security in our creation and consumption of energy. Stay safe.