

Maine's Battle to Save America

by DR. PETER VINCENT PRY March 13, 2013

Your life may depend upon what happens in Augusta, Maine on March 21. Please bear with me patiently a little, as some background is needed to explain why. But first and foremost, no surprise, it has to do with the ineptitude of Washington.

Yet another symptom that Washington is broken, perhaps beyond repair, is that the federal government is now failing in its most basic function--"to provide for the common defense" of the American People. Exhibit Number One proving the incompetence and dereliction of Washington is its failure to protect the people from the genocidal consequences of a natural or nuclear electromagnetic pulse (EMP).

The EMP Threat--and Solutions

For nearly a decade, the Congressional EMP Commission and other responsible expert bodies of the U.S. Government have been warning that terrorists or rogue states--armed with a single crude nuclear weapon--could use a missile or balloon or other delivery system to loft a warhead to high-altitude, 30 kilometers or more anywhere over the United States, to inflict an EMP catastrophe. Any nuclear weapon detonated at high-altitude will generate a powerful electromagnetic pulse that will fry electronics and cause cascading failures that would collapse the electric power grid and other critical infrastructures--communications, transportation, banking and finance, food and water--that make possible modern civilization.

The Sun can cause an even worse EMP catastrophe. Roughly every century, the Sun causes a geomagnetic super-storm on Earth, so powerful that it would collapse electric grids and life-sustaining critical infrastructures everywhere, plunging the entire world into a protracted blackout--perhaps permanently. The last such geomagnetic super-storm happened in 1859, called the Carrington Event. The Carrington Event made telegraph wires burst into flame causing forest fires, burned down telegraph stations, and fried the newly laid intercontinental telegraph cable, miles down at the bottom of the Atlantic Ocean. Fortunately, in those horse and buggy days, electricity was still a novelty, and not the foundation of civilization, as it is today.

The Congressional EMP Commission estimated, given the nation's current utter unpreparedness, within a year of a natural or nuclear EMP catastrophe, about two of every three Americans would perish. EMP by destroying the high-tech foundations of civilization, kills millions of people the old fashioned way--through starvation, disease, and societal collapse. In the aftermath of an EMP, America's over 300 million people would find themselves, virtually overnight, confronted with exactly the same structural deficiencies that in underdeveloped nations cause mass famines--too many mouths, not enough resources.

Yet there is no excuse for the United States to be vulnerable to EMP. The Department of Defense has known for 50 years how to protect military forces from EMP. Technologies currently exist to protect the national electric grid--the most important of the critical infrastructures. The Congressional EMP Commission concluded that, if the electric grid is protected from EMP, the other critical infrastructures can also be quickly recovered--but the electric grid must be protected if there is to be any hope for recovery.

Nor would it be costly to protect the national electric grid from EMP.

Estimates range from a high of \$2 billion to less than \$100 million, depending upon the technology used and the hardness level desired, to protect the entire contiguous United States. \$2 billion is what the United States spends on foreign aid to Pakistan every year. The U.S. Federal Energy Regulatory Commission estimates that protecting the national electric grid from EMP can be accomplished at a cost to the average rate payer of merely 20 cents annually.

EMP protection of the grid would also mitigate all other threats--including cyber attack, sabotage, and natural disasters like hurricanes.

Scientific and Strategic Consensus

A scientific and strategic consensus exists among all official U.S. Government studies that natural and nuclear EMP poses a catastrophic threat to the nation, and that the electric grid must be protected. So says the Congressional EMP Commission in its two unclassified reports (2004 and 2008), NASA and the National Academy of Sciences (2008), the Congressional Strategic Posture Commission (2009), the U.S. Department of Energy and North American Electric Reliability Corporation (2010), and the U.S. Federal Energy Regulatory Commission (2010).

In December 2012, the National Intelligence Council, that writes the National Intelligence Estimates and speaks for the entire U.S. Intelligence Community, in their unclassified report Global Trends 2030 warns that EMP is one of only eight possible "Black Swan" events that could by or before 2030 change the course of global civilization.

A February 2013 report by the White House "A Policy Framework For The 21st Century Grid" calls for protecting the national electric grid from EMP. A Strategic National Risk Assessment performed by direction of the White House likewise warns that a geomagnetic super-storm threatens the nation. The Obama administration's U.S. Department of Homeland Security in testimony to Congress on September 12, 2012 warned about EMP threats from natural, nuclear, and non-nuclear sources--and that the electric grid must be protected. President Obama, in his Presidential Policy Directive 8 "National Preparedness" calls upon all levels of government--including state governments—to undertake initiatives to protect the critical infrastructures, including the electric grid.

Washington Fails to Act

So is Washington crashing on a program to protect the national electric grid, and the American people, from an EMP catastrophe? The short answer is--no.

"Sequestration" and the endless politics of the federal budget and--above all--the 2014 congressional elections, are the only "crises" visible to most in Washington.

However, there are a valiant few in Washington who have tried to protect the nation from a looming EMP catastrophe. Rep. Trent Franks (R) has formed the bipartisan Congressional EMP Caucus, co-chaired with Rep. Yvette Clarke (D). Franks and Clarke for two years have tried to pass the SHIELD Act, which would grant the federal government the necessary legal authorities to require the electric power industry to protect the national grid from EMP. It is the absence of these authorities that has been the chief obstacle to achieving national EMP preparedness.

Earlier, when Democrats controlled the House, Rep. Edward Markey and Rep. Henry Waxman succeeded in passing the GRID Act--a bill virtually identical to the SHIELD Act--with unanimous bipartisan support, only to have the bill blocked from a vote by a single Senator. Strangely, in a Congress bitterly polarized on almost everything, the media have shown no interest in the strong bipartisan virtual unanimity on the singular issue of national EMP preparedness. If the GRID or SHIELD Acts are allowed to come to the floor, one of them would pass overwhelmingly.

But the electric power industry has very deep pockets, and an army of K Street lobbyists, and so far has always been able to buy just the right member of Congress to keep GRID or SHIELD locked-up in committee. Consequently, after nearly a half decade of trying, the Congress has been unable to implement the most important recommendation of the EMP Commission--protection of the electric grid.

Maine to the Rescue?

Enter Maine State Rep. Andrea Boland (D). Boland learned about EMP from the struggle over the SHIELD Act, and visited Washington to urge the Maine delegation to support SHIELD. Frustrated with the lack of progress in Washington, Boland introduced a bill in the Maine legislature--LD-131 "An Act To Secure the Safety of Electrical Power Transmission Lines" that would have the practical effect of protecting the Maine electric grid from EMP.

Boland reasons, correctly, that if Washington will not protect the American people from an EMP catastrophe, then it is the obligation of state governments to step into the leadership breach and protect at least the citizens of their state. Although states tend to be part of a larger regional electric grid, it is technically possible, at low cost, to "island" that portion of the electric grid within a state, so that it is protected from EMP. Not only would this spare the citizens of that state from the probably fatal

consequences of a protracted blackout from a natural or nuclear EMP event--but it would very significantly increase the energy security of neighboring states.

If Maine is protected from EMP, it would greatly facilitate the repair and restoration of neighboring states belonging to the New England grid. Nothing is harder, it may not even be possible, to "black start" a national or regional electric grid that has collapsed into complete blackout. If the lights stay on in Maine, it will be much easier to bring them back on in Massachusetts, Connecticut, Vermont, New Hampshire and Rhode Island.

Maine and New England have special reasons to be concerned about becoming the victims of an EMP catastrophe. All of these states are at relatively high northern latitudes, and most of them have granitic soil geology, which makes them more susceptible to geomagnetic storms. New England is in a neighborhood known to be dangerous for geomagnetic storms. In 1989, the Hydro-Quebec geomagnetic storm damaged and blacked out the electric grid of eastern Canada, causing billions of dollars in economic losses.

The 1989 Hydro-Quebec Storm also destroyed an extra high voltage transformer at the Salem nuclear power reactor in New Jersey. One of the more worrisome consequences of a natural or nuclear EMP is the protracted blackout resulting in meltdown of nuclear reactors or of their fuel rods in cooling ponds, as happened at the Fukushima nuclear reactors in Japan. A Carrington Event would probably be one hundred times more powerful than the Hydro-Quebec Storm.

Moreover, Maine and New England are in a dangerous neighborhood for nuclear EMP attack because of their proximity to New York City. Terrorists have a demonstrated preference for attacking New York. A nuclear EMP attack centered on New York City would encompass all of New England too.

Finally, there are non-nuclear EMP devices, more commonly known as Radio Frequency Weapons, that are becoming increasingly available and common in the activities of terrorists, criminals, and even disgruntled individuals. Indeed, it is possible to build a Radio Frequency Weapon using design information available on the internet and parts purchased from Radio Shack or any electronics store. A Radio Frequency Weapon does not have the range or power to threaten the entire nation. But we have arrived at a place where, for the first time in history, a lunatic armed with an RFW could topple the technological pillars of an entire metropolis, and blackout a major city.

Decision in Augusta: LD-131

Underdog Rep. Andrea Boland is in a showdown against the entire electric power industry in Maine over her bill for protecting the electric grid. Beginning virtually alone, Boland is garnering significant support among her colleagues.

Maine's Joint Committee on Energy, Utilities and Technology deserves high praise for learning quickly and showing grave concern about the EMP threat, that has been dropped in their laps because of paralysis in Washington. The Joint Committee has displayed professionalism and competence worthy of such a grave issue, asking excellent and exhaustive questions of both EMP experts and the electric power industry.

Boland's bill has survived intense scrutiny before the Maine legislature, where her bill LD-131 has been under debate since February. Boland has brought in scientific and strategic experts from Washington and around the nation to testify in support of her bill in Augusta, the Maine state capitol.

Boland herself has spoken with the eloquence of common sense to her colleagues, which has contrasted very favorably with the arrogance and misrepresentations of the electric power lobby that they are prepared for all contingencies. Every legislator in the State of Maine knows that if ISO New England, the regional electric utility, cannot keep the lights on during normal bad weather, like blizzards, how can they honestly claim to be prepared for another Carrington Event, or even another Hydro-Quebec Geo-Storm?

Also impressive to some members of the Maine legislature is the modesty of Boland's LD-131, which is by no means a radical bill, but cautious and perhaps even too conservative in its solution to the EMP threat. LD-131 does not call for federal or outside intervention, does not propose reorganizing the administration or regulation of the electric power industry, but trusts industry and existing regulatory authorities to act responsibly against the EMP threat. Nor does LD-131 require industry to protect the existing grid, but only projects already underway and new grid construction. Nor does LD-131 appropriate money or require industry to invest any specified amount in EMP protection.

Yet given the magnitude and proximity of the natural and nuclear EMP threats, LD-131 would be entirely justified to be far more ambitious in securing the Maine electric grid against EMP. For example, the Maine legislature would be entirely justified establishing a Maine EMP Commission, comprising experts drafted from Maine universities and high-tech industries, to serve as an independent watchdog on the electric power industry's plans to protect the electric grid. The Maine EMP Commission could impose transparency on industry by independently collecting and analyzing data on grid vulnerabilities, and formulate alternative or competitive plans for grid protection--instead of just trusting industry. The Maine legislature would be entirely justified to require the electric power industry to spend money on EMP protection--especially when ISO New England is already spending \$1.5 billion on new grid construction without any EMP protection, yet it would cost only \$2 billion to protect the entire U.S. national grid from EMP.

Typically, if EMP protection is designed into new construction, it adds merely 1-3 percent to total costs.

LD-131 proposes none of these more ambitious but perfectly justified measures. The Boland bill merely asks the electric power industry to protect the Maine grid from EMP, and trusts that they will do so. Yet ISO New England opposes even this modest bill. This strongly suggests that the electric power industry cannot be trusted to do anything for EMP protection.

As Rep. Andrea Boland's bill to protect Maine from an EMP catastrophe draws closer to a vote, the electric power lobby is growing more frantic in its opposition, hoping to duplicate in Maine the success they had in Washington blocking the bipartisan GRID and SHIELD Acts. They are on the hunt for that one politician or influential official in Maine who can save their day by derailing or defeating LD-131.

Other states are looking to Maine to see if it is politically possible to bypass Washington and launch their own initiatives to protect their electric grids and their people from EMP. Alaska, New York, North Carolina, Texas, and Utah all have groups interested in "islanding" their state grids to protect their families and communities from an EMP catastrophe.

If Andrea Boland succeeds in Maine, other states will follow, and the bureaucratic logjam that has for so long impeded national EMP preparedness in Washington will at last be broken.

The Hinge of History?

Historians often note that one prominent symptom of the decline and fall of the Roman Empire was the rise of walled cities--because Rome could no longer protect its citizens from raiding barbarians. Now that Washington is so broken that Maine and other states must resort to "islanding" their grids to protect them from a possible terrorist EMP attack--does this signify that America has entered the "walled city" phase of our decline and fall? Or is this a healthy restoration of our Republic as envisioned by the Founders, who certainly did NOT believe that all solutions must come from Washington, who certainly DID believe that the States should play a much more prominent and active role than they do today? I wonder.

What I do not wonder about, having been to Maine to speak for LD-131, having met the peoples representatives there, they and Augusta are very much closer to the vision intended by the Founders than is Washington. LD-131 could be the Battle of Gettysburg in the long struggle to protect America from an EMP catastrophe, and Andrea Boland and her colleagues the 20th of Maine, the "Iron Brigade" of Little Round Top, coming again to America's rescue.

If LD-131 passes and an EMP catastrophe befalls the nation, threatening liberty and life everywhere, to paraphrase Coolidge, "it could all be replenished from the generous store held by the people of this brave little State of Maine."

And so your life, and the nation's, may hinge on what happens in Augusta, Maine on

March 21--the next working session on LD-131, when the bill is likely to come to a vote.

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