March 7, 2018

William B. “Brock” Long, Administrator
Federal Emergency Management Agency
500 C Street S.W.
Washington, D.C. 20472

Goals: 1. Building a culture of preparedness in the United States  
2. Bringing back “civil defense” and local pre-disaster mitigation

Dear Mr. Long,

Both of these goals are interrelated, and achievable. The purpose of this letter is to offer you a way forward to achieve them. I am a national expert on preparedness and for years have been advocating a return to local civil defense. It has been refreshing to hear you speak to Congress and the media about civil defense, local pre-disaster mitigation and the need to build a culture of preparedness in the United States.

First, here are the two things that we are doing that haven’t worked.

1. Nobody has ever heard of Citizen Corps.

Try this: Ask the next 10 citizens you meet on the street “do you know what Citizen Corps is?” They don’t know. The few who might attempt to answer will confuse Citizen Corps with the Peace Corps. Our attempt since 9/11/2001 to engage citizens on community preparedness has been a dismal failure. The failure is partly due to the fact that this has been a top-down approach – from FEMA to the citizens, John and Jane Smith. Yet, the Smiths have never heard of Citizen Corps and after 16 ½ years, we have not been able to reach them with our message. The Smiths in 2018 are still complacent and unprepared.

The only reason that I know about Citizen Corps is because I ran into it when I was researching community preparedness for the book I was writing. To the extent that anybody thinks that Citizen Corps is making our communities more prepared, it is not. A bureaucracy like Citizen Corps is not what we need to reach people.¹ (If people don’t know what it is and can’t understand it, it is not going to work.) If we want to reach people, we need to change our paradigm to a bottom-up, grassroots approach to preparedness.

¹ In fact the, the program is so unloved, even by FEMA, that today while going to the Citizen Corps website, I received the error message that www.citizencorps.fema.gov’s “security certificate expired 216 days ago.” When I proceeded on the website anyway (“not recommended”), there is a message that “a new website is coming soon.”
2. The flaw of the emergency management system.

Our emergency management system has actually contributed to our lack of a culture of preparedness – not through lack of effort or dedication, but through a basic design flaw. We are not ready for a “worst case scenario” because we always rely on outside resources. In other words, somebody is going to rescue us. In this context, Hurricane Katrina and Hurricane Maria were actually “best-case scenarios” because in both cases, they were “regional” events where massive outside resources were available.2

Because of emergency management’s design – specifically, the ability to expand (or “scale up”) when the scope of the disaster overwhelms local resources, emergency managers are wired to rely on the availability of outside resources for anything bigger than usual. This is literally a tenet of their thinking. (No matter how bad it is, resources will always be available from “above” our level and we can always “scale up”.)

There are 35,000 towns and cities in the United States. If a cyber-attack or a geomagnetic disturbance (GMD) took down the electric grid nationwide, right now we would have 35,000 towns and cities looking to their states and FEMA for resources. They would not be looking internally at their own civil defense plan because they don’t have one. This is what we need to fix.

The stakes are dangerously high. On March 28, 2017 the Senate Committee on Homeland Security and Governmental Affairs reported this about the critical infrastructure:

“The United States depends on its critical infrastructure, particularly the electric power grid, as all critical infrastructure sectors are to some degree dependent on electricity to operate. A successful nuclear electromagnetic pulse (EMP) attack against the United States could cause the death of approximately 90 percent of the American population. Similarly, a geomagnetic disturbance (GMD) could have equally devastating effects on the power grid.”3

Something needs to get the attention of the 35,000 cities and towns so that they see the need to be prepared to be on their own for an extended period of time – and not, as is the case now, always put their hope on the cavalry’s arrival.

What Does Work?

Let’s back up and look at what does work. Every community in the U.S. has a fire department and has emergency medical services. In most communities, these are volunteer organizations.4 Communities are not “required” by the federal government to have these services – the communities feel that they need these services, so over the years they made sure that, in some way, they had them. Some of these

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4 According to FEMA’s website, 70.8% of the fire departments in the U.S. are volunteer organizations. See: https://apps.usfa.fema.gov/registry/summary/ (accessed march 5, 2018). According to USA.gov, one-third of the States indicated that the majority of EMS agencies that respond to 911 emergencies with transport capability are considered to be volunteer agencies. See: https://www.ems.gov/pdf/National EMS Assessment Demographics 2011.pdf (accessed March 5, 2018).
are set up as non-profit organizations. Some are set up as governmental organizations. There is no one
size fits all; rather, each community has developed a system and resources that worked for them. They
may have been able to get grants to assist them with buying equipment, or for training, but ultimately,
the people in the community did the work to develop the system. Nobody in DC set it up for them.

A local civil defense organization needs to be developed the same way – from the bottom-up, based on
the community’s needs. It can be a non-profit or a governmental organization. But the community
needs to see that they need it and have some support in organizing and setting it up. This should be
FEMA’s role – providing the leadership, and then the support for the locally executed efforts.

In most places, the cost to get a lawyer or accountant to draft and file the papers to start a non-profit
organization is under $1000. This is an incredible pre-disaster mitigation investment with a potential
for massive return. If we can help communities to do this, it would likely be the best possible use of
pre-disaster mitigation funds.

As you testified to Congress on November 30, 2017 “it is important to point out that an optimal
response and recovery process should be federally supported, state managed and locally executed.”5 I
would also point out, that this should apply to pre-disaster mitigation – e.g., civil defense – as well.

So how do we get the communities to want to set up a local civil defense organization?

**Getting our communities to see the need for civil defense.**

The National Defense Authorization Act for Fiscal Year 20176 requires that the Secretary of the
Department of Homeland Security:

(1) include in national planning frameworks the threat of an EMP or GMD event; and7
(2) conduct outreach to educate owners and operators of critical infrastructure, emergency
planners, and emergency response providers at all levels of government regarding threats of
EMP and GMD.8 [Emphasis added.]

This new law gives us the authority and obligation to educate our local communities about the need for
civil defense. FEMA should develop a community-level EMP/GMD local tabletop exercise (TTX).
The purpose of this exercise is for the local government to see what would happen if their community
was on its own for months or longer after a catastrophic failure of the national electric grid. No outside
resources will be available to the town – what they have is what they have. This will prove very eye-
opening for the majority of communities.

This exercise is purposely designed to “fail” (because through failure, comes learning). It is designed
to teach the local government, emergency managers, and citizens what would happen as time went on
during a long-term outage. In order for communities to plan meaningful pre-disaster mitigation, they
have to see the “reality” in the TTX of the horrible loss of life their community would encounter if

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5 “FEMA Administrator Brock Long: Time to hit the reset button on resiliency.” December 9, 2017.
6 Public Law 114-328, enacted December 23, 2016. Note: Section 1913. EMP and GMD Planning, Research and Development,
March 7, 2018).
they were unprepared. By thinking about the long term effects of a loss of the critical infrastructures during the TTX, the community will “experience” starvation, disease, collapse of their local medical system (if their community even had one), inability to protect citizens from crime and, ultimately, good people doing bad things as we saw in Katrina, Andrew and the 1977 New York blackout.

After going through this exercise, it will be very clear to each community what would happen. The question then becomes, what can we do to mitigate ahead of time? Building a civil defense organization is the answer. It is a resource multiplier for the community. It is the only logical conclusion.

And in preparing for a “worst case” disaster, the community is preparing to be more self-reliant in any scale disaster. There is no downside to preparing for the worst.

Meanwhile, FEMA should develop a similar “worst-case” EMP/GMD TTX for the state and federal level which will reveal the problems the higher levels will face. For example, there are 99 nuclear reactors in 30 U.S. states – and they all have only a limited quantity of back up fuel for their generators. What is the plan to cool the spent fuel rods after 3 months and 6 months?9 Another example, federal and state employees will stop showing up to work if they feel their families are endangered, so the resources we think we have may not be there.

The 6 U.S.C. § 321P (national planning and education) TTX is necessary if we are to have stronger and more resilient communities – as well as collectively become more resilient as a country. Presently few, if any, would argue that the United States is prepared for a long term EMP or GMD grid outage. The vast majority of our communities and local governments have never even thought about it.

I believe that your vision of having a preparedness culture in the United States is achievable. It is not only achievable, but it is necessary for the safety of our communities and the national security of our country.

The only thing stopping most communities, local governments and local emergency managers from starting or supporting local civil defense organizations is that they don’t know that they should. Everybody is waiting for FEMA to tell us what we should do.

Recommendations.

We can vastly improve local level pre-disaster mitigation and lead the nation towards a true culture of preparedness by doing the following:

1. FEMA needs to tell us that starting a local civil defense program (either non-profit10 or government sponsored organization) is a good idea. Even better, tell us that it is what we should do. Communities are literally waiting for this guidance.

2. I have attached a proposed bi-partisan Congressional resolution (H. Res. 762) which contains language which is very useful. It would be of great educational value and assistance to local

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governments to see something like this from Congress – or at least as a statement to this effect from FEMA. Although this resolution never made it out of committee, a good idea does not need to pass Congress to be a good idea. Encouraging communities to develop their own “civil defense” program is just a good idea.

3. FEMA should create a local EMP/GMD TTX scenario with the goal of teaching communities what could happen in a worst case national scale emergency in accordance with 6 U.S.C. § 321P(1) and (2).

4. FEMA should create a state and national level EMP/GMD TTX scenario with the goal of informing higher levels of government what could happen in a worst case national scale emergency in accordance with 6 U.S.C. § 321P(1) and (2).

5. As you mentioned in your November 30, 2017 testimony to Congress, we need to partner with the Department of Education to start the preparedness culture with our children. This needs to be implemented at a local level – civil defense subjects for students should be taught, including survival skills, first aid, etc.

6. Citizen Corps should be replaced by a simple structure to support building local civil defense organizations. (As streamlined and unbureaucratic as possible.) This support structure should help communities start an organization, apply for grants and support their efforts.

The Secure the Grid Coalition\textsuperscript{11} and InfraGard\textsuperscript{12} are two groups FEMA could partner with. They have many experts and large quantities of research materials available on EMP, GMD as well as other electric grid threats and security. These groups may be of assistance in developing the 6 U.S.C. § 321P TTXs.

I would be happy to meet with you to further discuss how we can build a true culture of preparedness in the U.S.

Sincerely,

Michael Mabee

\textsuperscript{11} Secure the Grid Coalition. \url{https://securethegrid.com/} (accessed March 5, 2018)
\textsuperscript{12} InfraGard. \url{https://www.infragard.org/} (accessed March 5, 2018).
Expressing the sense of the House of Representatives regarding community-based civil defense and power generation.

Whereas the United States has become increasingly more dependent on electronic delivery systems to power daily needs and provide for the common defense;

Whereas these systems would be rendered useless or their functions significantly reduced in the event of a “high impact low-frequency” event such as a cyber attack, coordinated physical attack on electric grid and communications assets, or the electromagnetic pulse (EMP) effects of either a 100-year solar storm or high-altitude nuclear burst;
Whereas the 2010 North American Electric Reliability Corporation (NERC) report, “High-Impact Low-Frequency Vulnerabilities to the Bulk American Power System”, discusses the wide range of threats that could disrupt, damage, or destroy sufficient amounts of the power grids to cause widespread death and economic disruption;

Whereas the January 2010 Federal Energy Regulatory Commission (FERC) report, “Electromagnetic Pulse: Effects on the U.S. Power Grid”, provides detail into the vulnerability of power grids from the electromagnetic pulse (EMP) effects of extreme space weather and high-altitude nuclear effects and intentional electromagnetic interference;

Whereas the Congressional EMP Commission reports of 2004 and 2008 outline the interdependent nature of all critical infrastructure, especially to power and telecommunications and their vulnerability to the EMP effects of extreme space weather and high-altitude nuclear bursts;

Whereas the National Defense University hosted a series of workshops and an energy security exercise in October 2011 with broad participation of Federal, State, local government, and the private sector highlighting the need for greater local sustainability in light of a prolonged nationwide power loss;

Whereas the Hoover-Brookings joint report on distributed power shows that the value of local power generation for security applications is either cost competitive or approaching competitiveness as new innovations come to market;

Whereas, on March 30, 2012, the United States Department of Homeland Security published the “National Prepared-
Whereas the Federal Emergency Management Agency (FEMA) was assigned as the National Preparedness Report Coordinator, “Efforts to improve national preparedness have incorporated the whole community, which includes individuals, communities, the private and nonprofit sectors, faith-based organizations, and Federal, State, local, tribal, and territorial governments.”;

Whereas the “National Preparedness Report” focuses on a catastrophic planning framework known as “Maximums of Maximums”, which centers on collaborative, whole community planning for worst-case scenarios that exceed government capabilities and therefore focus on more local and individual efforts for survival and recovery;

Whereas these high-impact, low-frequency events would cause regional or nationwide collapse of critical infrastructure that could last months or longer, it is incumbent on the Federal Government to reassess its civilian civil defense strategies to include local governments and individual citizens; and

Whereas it is in the interest of national security and local community viability that every community and institution begin to reestablish its ability to generate at least 20 percent of its own power for its critical infrastructure and services in order to provide its citizens with food and water: Now, therefore, be it

1 Resolved, That the House of Representatives—

2 (1) encourages every community to develop its

3 own “civil defense program” working with citizens,

4 leaders, and institutions ranging from local fire
halls, schools, and faith-based organizations, to create sustainable local infrastructure and planning capacity so that it might mitigate high-impact scenarios and be better prepared to survive and recover from these worst-case disaster scenarios and be better able to affordably and sustainably meet the needs of the community in times of peace and tranquility;

(2) encourages every citizen to develop an individual emergency plan to prepare for the absence of government assistance for extended periods;

(3) encourages each local community to foster the capability of providing at least 20 percent of its own critical needs such as local power generation, food, and water, while protecting local infrastructure whenever possible from the threats that threaten centralized infrastructure, and do so with the urgency and importance inherent in an all-of-nation civil defense program developed by citizens and their local communities; and

(4) encourages State governments and Federal agencies to support the ability of local communities to become stronger, self-reliant, and better able to
assist neighboring communities in times of great need.