

# Incompetency on EMP endangers America

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Washington is so dishonest and incompetent that it may not be able to save itself — and the American people — from the existential threat that is electromagnetic pulse (EMP). The Congressional EMP Commission has warned that millions of Americans could perish from natural EMP from a solar super-storm, or from a nuclear EMP attack causing a year-long nationwide blackout.

Now the EMP commission has 14 new reports, and just published three unclassified reports. But Obama-era holdovers in the Department of Defense (DOD) are sitting on the seven other unclassified reports; these were supposed to be through the security review process and published in December 2017.

An example of Washington's dishonesty is described in the just-published EMP Commission Executive Summary.

The Obama administration's U.S. Government Accountability Office tried to give the impression that much has been done to protect the nation from EMP in a report with a highly misleading title, "Critical Infrastructure Protection: Federal Agencies Have Taken Actions To Address Electromagnetic Risks, But Opportunities Exist To Further Assess Risks And Strengthen Collaboration" (March 2016).

However, buried in an appendix of the above report, is a table proving the Obama administration implemented none of the EMP commission's recommendations:

- Recommendation: Expand and extend emergency power supplies. Action: None.
- Recommendation: Extend "black start" capability. Action: None. (Black start involves recovering an electric power grid or a major portion from a blackout.)
- Recommendation: Prioritize and protect critical nodes. Action: None.
- Recommendation: Expand and assure "intelligent islanding" capability. Action: None.
- Recommendation: Assure protection of high-value generation assets. Action: None.
- Recommendation: Assure sufficient numbers of adequately trained recovery personnel. Action: None.

The EMP commission recommends acting on the above to protect the nation's power grid, and makes additional recommendations, such as:

- 1) "The President establish an Executive Agent with the authority, accountability, and resources to manage U.S. national infrastructure protection and defense against the existential EMP threat."

- 2) “Strongly recommends that implementation of cybersecurity for the electric grid and other critical infrastructures include EMP protection.”
- 3) “Encourages the President to work with congressional leaders to establish a joint Presidential-Congressional Commission, with its members charged with supporting the Nation’s leadership to achieve, on an accelerated basis, the protection of critical national infrastructures.”
- 4) “Government agencies and industries adopt new standards to protect critical national infrastructures from damaging E3 EMP heave fields, with more realistic standards of 85 V/km.”
- 5) “DOD and Department of Energy provide expedited threat-level, full system testing of large power transformers in wide use within the bulk electric system and share key findings with the electric utility industry.”
- 6) “Director of National Intelligence circulate to all recipients of the 2014 Joint Atomic Energy Intelligence Committee (JAEIC) EMP report the EMP Commission critique and direct a new assessment be prepared that supersedes the 2014 JAEIC EMP report.” The Obama administration’s classified JAEIC EMP report is erroneous and has done great damage to national EMP preparedness.

An important finding of the EMP commission is that the Defense Department is overclassifying data and reports on nuclear EMP effects. DOD is doing nothing to help the utilities defend themselves; instead, industry-supported researchers — who have no access to classified information and no real expertise on EMP — have produced “junk science” reports grossly underestimating the EMP threat. These “happy face” reports justify the utilities doing little or nothing, like hardening transformers to survive EMP.

Amazingly, these bogus studies are taken seriously by many policymakers and regulators — which is a lot like trusting the 1960s cigarette industry for expertise on lung cancer.

Consequently, the U.S. Federal Energy Regulatory Commission approved a standard for E3 EMP that is only 8 Volts/kilometer. Yet the EMP commission succeeded in declassifying actual data from Soviet nuclear tests proving that the E3 EMP standard should be 85 Volts/kilometer — more than ten times higher than the existing standard, stating:

— “This EMP Commission Report, utilizing unclassified data from Soviet-era nuclear tests, establishes that recent estimates by the Electric Power Research Institute (EPRI) and others that the low-frequency component of nuclear high-altitude EMP (E3 HEMP) are too low by at least a factor of 3.”

— “Moreover, this assessment disproves another claim — often made by the U.S. Federal Energy Regulatory Commission (FERC), the North American Electric Reliability Corporation (NERC), EPRI and others — that the FERC-NERC Standard for solar storm protection against geo-magnetic disturbances (8 Volts/kilometer, V/km) will also protect against nuclear E3 HEMP.”

— “While the military has developed worst-case HEMP waveforms (E1, E2, and E3) for its purposes, these are not available for commercial use. Therefore in this report openly available E3 HEMP measurements are evaluated from two high-altitude nuclear tests performed by the Soviet Union in 1962.”

— “A realistic unclassified peak level for E3 HEMP would be 85 V/km for CONUS as described in this report.”

New studies by EPRI and others are unnecessary, since the Defense Department has invested decades producing accurate assessments of the EMP threat environment and techniques for cost-effective protection. DOD should share information with industry to protect electric grids and other critical infrastructures that are vital both for military missions and for the survival of the American people

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