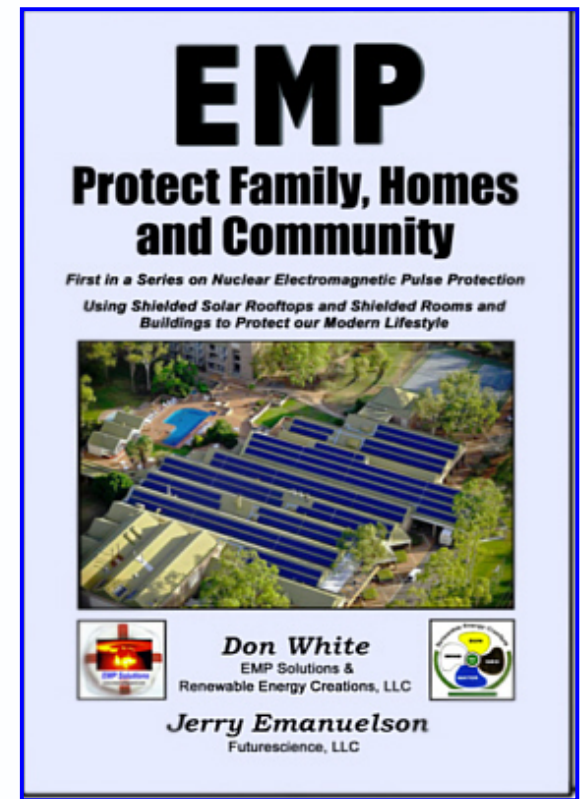




SITE MAP of EMP PAGES



[Critical National Infrastructures Report](#)

[EMP - Protect Family, Homes and Community](#)

- [General Introduction to Nuclear Electromagnetic Pulse.](#)
- The [EMP personal protection page.](#)
- A comprehensive and well-referenced page at this site with extensive details about the [1962 Soviet nuclear EMP tests over Kazakhstan](#), which resulted in extensive damage to the electrical and communications infrastructure.
- Additional details about [EMP effects on motor vehicles.](#)
- The [Operation Fishbowl](#) series of high-altitude nuclear tests by the United States in 1962 over the mid-Pacific. This article includes extensive references.

- A heavily-referenced page about [**General EMP History**](#), including details on the balloon-launched Hardtack-Yucca nuclear test. A link to the video of the helium-balloon-launched nuclear weapon is included. (A regional EMP attack could be launched today with a large helium balloon, although it would probably be launched at night. There is a separate page about [**the possibility of Balloon-Launched EMP Attacks**](#)).
 - The critical difference between the [**E1, E2 and E3**](#) components of nuclear EMP.
 - A very important page on common [**EMP Myths**](#) which cause an enormous amount of confusion.
 - [**Notes and Technical References on Nuclear Electromagnetic Pulse**](#) (and on solar storms)
 - [**U.S. EMP Commission Critical National Infrastructures Report**](#)
 - [**New Book: EMP - Protect Family, Home and Community**](#)
 - [**Collateral Satellite Damage from a High-Altitude EMP attack**](#)
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In September, 2010, Oak Ridge National Laboratory published a series of reports for the Federal Energy Regulatory Commission, the Department of Energy and the Department of Homeland Security on the effects of electromagnetic disturbances on the United States electric power grid. The reports were written by the Metatech Corporation, and they provide an updated and comprehensive view of how electromagnetic disturbances such as nuclear EMP are likely to affect the United States electrical power grid.

Many people will only be interested in the [**Executive Summary**](#). Some of the other reports are hundreds of pages long.

- [**Executive Summary**](#)
 - [**Meta-R-319: Geomagnetic Storms and Their Impacts on the U.S. Power Grid**](#) by John Kappenman
 - [**Meta-R-320: The Early-Time \(E1\) High-Altitude Electromagnetic Pulse \(HEMP\) and Its Impact on the U.S. Power Grid**](#) by Edward Savage, James Gilbert and William Radasky
 - [**Meta-R-321: The Late-Time \(E3\) High-Altitude Electromagnetic Pulse \(HEMP\) and Its Impact on the U.S. Power Grid**](#) by James Gilbert, John Kappenman, William Radasky and Edward Savage
 - [**Meta-R-322: Low-Frequency Protection Concepts for the Electric Power Grid: Geomagnetically Induced Current \(GIC\) and E3 HEMP Mitigation**](#) by John Kappenman
 - [**Meta-R-323: Intentional Electromagnetic Interference \(IEMI\) and Its Impact on the U.S. Power Grid**](#) by William Radasky and Edward Savage
 - [**Meta-R-324: High-Frequency Protection Concepts for the Electric Power Grid**](#) by William Radasky and Edward Savage
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