

September 29, 2011

The Honorable Roscoe G. Bartlett
United States House of Representatives
Washington, D.C. 20515

Dear Congressman Bartlett:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter of August 12, 2011, regarding concerns about the potential threat to U.S. nuclear reactors from an electromagnetic pulse (EMP) incident.

The NRC is aware of the potential significance of EMP to the nation's critical infrastructure and has reviewed the "Report of the Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack," issued in 2004. Beginning in the late 1970s, the NRC undertook a research program to study the effects of a high-altitude EMP on nuclear power plant safe-shutdown systems. From a series of reports, the last of which was completed in 2010, we concluded that reactors can achieve safe shutdown following a man-made EMP event or a solar or geomagnetically-induced current event.

Regarding the potential damage to the electric grid from an EMP event, the NRC does not have direct regulatory authority over electric transmission systems, except with regard to nuclear power plants. However, we do collaborate closely with the Federal Energy Regulatory Commission and the North American Electric Reliability Corporation on electric grid reliability and cyber security issues, including their EMP research and related activities.

The NRC is reviewing a petition for rulemaking that seeks a change in NRC regulations to require extended operation of nuclear power plant emergency power systems because of the possibility of a widespread and long-term loss of the electric power grid due to natural geomagnetic disturbances.

Enclosed for your information is the NRC's detailed response to the letter I received directly from Dr. William R. Graham and Dr. Peter Vincent Pry, which also was enclosed with your letter. This is a topic that has long been of interest to the NRC. I would be happy to discuss it further with you at any time. The NRC's Office of Congressional Affairs will contact your office to make arrangements for the NRC staff to receive the briefing offered in your letter.

Sincerely,

/RA/

Gregory B. Jaczko

Enclosure: As stated