EDO Principal Correspondence Control

FROM:	: ]	OUE: 09/01	/11			CONTROL: ( DOC DT: AL REPLY:	G20110613 08/12/11
Repre	esentative Rosco	e G. Bartl	ett				
TO:							
C	Chairman Jaczko						
FOR S	SIGNATURE OF :		** PRI	**		CRC NO:	11-0479
C	Chairman Jaczko						
DESC:	:					ROUTING:	
Safeguarding Nuclear Reactors from Natural and Manmade Disasters and Electromagnetic Pulse (EMP) (EDATS: SECY-2011-0468)					Borchardt Weber Virgilio Ash Mamish OGC/GC		
DATE: 08/15/11					Leeds,	Leeds, NRR Sheron, RES	
ASSIC	GNED TO:	CONTACT:					s, NSIR
	EDO	Rihm				Schmid	
SPECI	IAL INSTRUCTIONS	OR REMARK	(S :				

E-RIDS: SECY-01

Ref. G20110584/LTR-11-0471. Please prepare response in accordance with OEDO Notice 2009-0441-02 (ML093290179). NRR, RES and NSIR to provide input to Roger Rihm/Glenn Elmers, OEDO, if required. OEDO will coordinate response with OGC and OCA.

Template: SECY-017

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# EDATS Number: SECY-2011-0468

#### **General Information**

Assigned To: OEDO

Other Assignees:

Subject: Safeguarding Nuclear Reactors from Natural and Manmade Disasters and Electromagnetic Pulse (EMP)

**Description:** 

CC Routing: NRR; RES; NSIR; OGC; OCA

## ADAMS Accession Numbers - Incoming: NONE

**Other Information** 

Cross Reference Number: G20110613, LTR-11-0479

**Related Task:** 

File Routing: EDATS

## **Process Information**

Action Type: Letter

Signature Level: Chairman Jaczko

Approval Level: No Approval Required

**OEDO Concurrence:** YES

**OCM Concurrence: NO** 

OCA Concurrence: NO

Special Instructions: Please prepare response in accordance with OEDO Notice 2009-0441-02 (ML093290179). NRR. RES and NSIR to provide input to Roger Rihm or Glenn Elmers, OEDO, if required. OEDO will coordinate response with OGC and OCA.

Ref. G20110584/LTR-11-0471

#### **Document Information**

Originator Name: Representative Roscoe G. Bartlett

**Originating Organization:** Congress

Addressee: Chairman Jaczko

Incoming Task Received: Letter

**Priority:** Medium Sensitivity: None

Staff Initiated: NO

**Recurring Item: NO** 

Date of Incoming: 8/12/2011 Document Received by SECY Date: 8/15/2011 Date Response Requested by Originator: NONE

Urgency: NO

**OEDO Due Date:** 9/1/2011 11:00 PM

SECY Due Date: 9/6/2011 11:00 PM

Source: SECY

Response/Package: NONE

Agency Lesson Learned: NO

**OEDO Monthly Report Item:** NO

#### OFFICE OF THE SECRETARY CORRESPONDENCE CONTROL TICKET

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Date Printed: Aug 15, 2011 10:48

PAPER NUMBER: ACTION OFFICE:	LTR-11-0479 EDO	LOGGING DATE:	08/12/2011		
AUTHOR: AFFILIATION:	REP Roscoe Bartlett CONG				
ADDRESSEE:	CHRM Gregory Jaczko				
SUBJECT:	Provides a letter from Dr. Grahar an electromagnetic pulse inciden	n and Dr. Pry addressing the threat t	at to our nuclear reactors from		
ACTION:	Signature of Chairman				
DISTRIBUTION:	RF, OCA to Ack.				
LETTER DATE:	08/12/2011				
ACKNOWLEDGED	No				
SPECIAL HANDLING:	Commission Correspondence Ref: LTR-11-0471				
NOTES:					
FILE LOCATION:	ADAMS				
DATE DUE:	09/06/2011	DATE SIGNED:			

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ROSCOE G. BARTLETT 6TH DISTRICT, MARYLAND

2412 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515 (202) 225-2721



# UNITED STATES HOUSE OF REPRESENTATIVES

August 12, 2011

COMMITTEES: ARMED SERVICES SUBCOMMITTEES:

CHAIRMAN TACTICAL AIR AND LAND FORCE: SEAPOWER AND EXPEDITIONARY FOI

SCIENCE, SPACE, AND TECHN( SUBCOMMITTEES: ENERGY AND ENVIRONMENT RESEARCH AND SCIENCE EDUCATIC

> SMALL BUSINESS subcommittee: Agriculture, energy and trai

The Honorable Gregory B. Jaczko Chairman U.S. Nuclear Regulatory Commission Mail Stop O-16G4 Washington, D.C. 20555-0001

Dear Chairman Jaczko:

Please find the attached letter from Dr. William R. Graham and Dr. Peter Vincent Pry addressing the threat to our nuclear reactors from an electromagnetic pulse (EMP) incident.

I echo their concern and would request that as your form plans to address the U.S. nuclear reactors vulnerabilities as a result of a Fukushima-type disaster that you also plan for the very real threat of an EMP incident which could be produced by a terrorist attack on our country or by solar storms.

While I will not reiterate the details of their letter, I would like to offer you a comprehensive briefing which would answer many of the questions you or your staff are sure to have.

Thank you for your attention to this matter. Please contact Sallie Taylor, my legislative assistant, (202-225-9386 or <u>sallie.taylor@mail.house.gov</u>) to set up the briefing or with any questions you might have.

Sincerely

Member of Congress

RGB:sbt

 7360 GUILFORD DRIVE SUITE 101
FREDERICK, MD 21704 (301) 694-3030 1800 DUAL HIGHWAY SUITE 301 HAGERSTOWN, MD 21742 (301) 797-6043 I FREDERICK STREET SUITE 2 CUMBERLAND, MD 21502 (301) 724–3105

412 MALCOL SUITE 20 WESTMINSTER. (410) 857-1

#### Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack

Established by Congress through Title X, National Defense Authorization Act for Fiscal Year 2006

The Honorable Gregory B. Jaczko Chairman U.S. Nuclear Regulatory Commission Mail Stop O-16G4 Washington, D.C. 20555-0001

#### Dear Chairman Jaczko:

I am writing you as the Chairman of the Congressionally mandated Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack as well as the former Science Advisor to the President and Director of the Office of Science and Technology Policy in the Executive Office of the President from 1986 to 1989. This letter is to urge you, as you form plans to protect U.S. nuclear reactors from Fukushima-type disasters where electric power to support nuclear plant operations is lost for a protracted period, to take account of the very real threats from a great geomagnetic storm and from a nuclear EMP attack.

An EMP can be generated naturally by a solar flare or coronal mass ejection from the Sun, which can produce a great geomagnetic storm on the Earth similar to some aspects of an EMP attack from a high-yield nuclear weapon, with similar catastrophic consequences. A great geomagnetic storm could cause the collapse of the electric grid and other critical infrastructures-transportation, communications, banking and finance, food and water--for a protracted period of months or years. A study by the National Academy of Sciences independently confirmed the EMP Commission's assessment that, if a great geomagnetic storm like the 1859 Carrington Event recurred today, recovery of the national electric power grid would take 4 to 10 years.

Such an event could also cause operators of the 108 nuclear plants in the United States to lose the ability to perform a safe, controlled shutdown of their power reactors, producing a Fukushima-like disaster on a large scale.

Although great geomagnetic storms are rare, estimated to occur about once a century, most experts assess that we are probably overdue. Indeed, many scientists are concerned that the approaching solar maximum in 2012-2013, characterized by increased solar flares and coronal mass ejections, may produce great geomagnetic storms. The solar maximum recurs every eleven years.

Moreover, there is no doubt that all the capabilities exist for an EMP to be generated by a terrorist or rogue state nuclear-armed missile, perhaps launched off a ship near our shores to preserve anonymity, and burst at high-altitude over the United States. In this manner, a single crude nuclear weapon, lofted by a primitive short-range missile, could generate an EMP that would disable and/or destroy electronics and electric power systems across large, highly populated areas of the continental United States, where many more nuclear power reactors are located than found at Fukushima. Such an attack would also collapse the critical infrastructures, leaving nuclear power plants isolated from external support, including from the electric power grid, for a protracted period of at least months and probably years. Given the current state of unpreparedness, a nuclear EMP attack could cause Fukushima-like disasters nationwide.

Therefore, I urge you to implement the policies, planning, emergency control system protection, and technical safeguards that are so urgently needed to protect nuclear reactors from natural and manmade disasters--including EMP events.

Please inform me of the response you and the NRC plan to take in response to this letter and the threat of both natural and adversary-induced EMP damage to the nuclear power reactors of the United States.

Sincerely,

Dr. William R. Graham Chairman Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack

co-signed by Dr. Peter Vincent Pry President EMPact America 301-481-4715

cc: The Honorable Steven Chu, Secretary of Energy

The Honorable John P. Holdren, Director, Office of Science and Technology Policy, The White House

Thomas E. Donilon, National Security Advisor to the President

Senator Jeff Bingaman, Chairman, Committee on Energy and Natural Resources

Senator Lisa Murkowski, Ranking Member, Committee on Energy and Natural Resources

Senator Joseph Lieberman, Chairman, Committee on Homeland Security and Governmental Affairs

Senator Susan Collins, Ranking Member, Committee on Homeland Security and Governmental Affairs

Senator Carl Levin, Chairman, Senate Armed Services Committee

Senator John McCain, Ranking Member, Senate Armed Services Committee

Rep. Fred Upton, Chairman, Committee on Energy and Commerce

Rep. Henry Waxman, Ranking Member, Committee on Energy and Commerce

Rep. Peter King, Chairman, Committee on Homeland Security

Rep. Bennie Thompson, Ranking Member, Committee on Homeland Security

Rep. Buck McKeon, Chairman, House Armed Services Committee

Rep. Adam Smith, Ranking Member, House Armed Services Committee

Rep. Roscoe Bartlett, Co-Chair, Congressional Caucus on EMP

Rep. Trent Franks, Co-Chair, Congressional Caucus on EMP

Rep. Yvette Clarke, Co-Chair, Congressional Caucus on EMP