

6450-01-P

DEPARTMENT OF ENERGY

Notice of Request for Information (RFI) on Ensuring the Continued Security of the United States Critical Electric Infrastructure

AGENCY: Office of Electricity, Department of Energy (DOE).

ACTION: Request for information.

SUMMARY: The United States Government recognizes the immediate imperative to secure our electric infrastructure. The electric power system is vital to the Nation's energy security, supporting national defense, emergency services, critical infrastructure, and the economy. Preventing exploitation and attacks by foreign threats to the U.S. supply chain is the focus of this Request for Information (RFI). On January 20, 2021, Executive Order 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis* (E.O. 13990), suspended Executive Order 13920, *Securing the United States Bulk-Power System* (E.O. 13920), for 90 days and directed the Secretary of Energy and the Director of the Office of Management and Budget (OMB) to consider whether to recommend that a replacement order be issued. In the process of developing such recommendations, the Department of Energy (DOE or the Department) identified opportunities to institutionalize change, increase awareness, and strengthen protections against high-risk electric equipment transactions by foreign adversaries, while providing additional certainty to the utility industry and the public. As the United States Government considers whether to recommend a replacement Executive Order that appropriately balances national security, economic, and administrability considerations, the Department is

seeking information from electric utilities, academia, research laboratories, government agencies, and other stakeholders on various aspects of the electric infrastructure.

DATES: Comments must be received on or before [*INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER*]. If you anticipate difficulty in submitting comments within that period, contact the person listed in **FOR FURTHER INFORMATION CONTACT** as soon as possible.

ADDRESSES: Interested persons are encouraged to submit written comments to ElectricSystemEO@hq.doe.gov. All comments will be posted and available to the public www.energy.gov/oe/securing-critical-electric-infrastructure. Written comments may also be delivered by conventional mail to Michael Coe, Director, Energy Resilience Division of the Office of Electricity, U.S. Department of Energy, Mailstop OE-20, Room 8H-033, 1000 Independence Avenue, SW, Washington, DC 20585. In light of the national emergency concerning the coronavirus disease 2019 (COVID-19) pandemic and personnel limitations, commenters are encouraged to submit comments electronically. Commenters are further cautioned that all conventional mail to the Department is subject to an automatic security screening process that may take several weeks and sometimes renders mailed material illegible.

FOR FURTHER INFORMATION CONTACT: Michael Coe, Director, Energy Resilience Division of the Office of Electricity, U.S. Department of Energy, Mailstop OE-20, Room 8G-042, 1000 Independence Avenue, SW, Washington, DC 20585; (202) 287-5166; or ElectricSystemEO@hq.doe.gov.

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I. Introduction

A. Background

The Nation's energy infrastructure is fundamental to national security, the continuity of our economy, and our way of life. Adversarial nation-state actors are targeting our critical infrastructure, with increasing focus on the energy sector. The Federal Government and industry stakeholders have endorsed the need to strengthen supply chain risk management with respect to the electric power system and recognize the threat our foreign adversaries pose to our critical infrastructure.

The Administration is addressing critical infrastructure security through various actions and considers the protection and resilience of energy infrastructure to be a part of that comprehensive strategy. To strengthen the resilience of America's critical

infrastructure, the Administration recently issued Executive Order 14017, *America's Supply Chains*,¹ which, among other things, directs the Secretary of Energy, in consultation with the heads of appropriate agencies, to, within 100 days, identify and make recommendations to address risks in the supply chain for high-capacity batteries and, within one year, review and make recommendations to improve supply chains for the energy sector industrial base. The electricity subsector industrial control systems cybersecurity initiative "100-day sprint" announced by the Department is intended to enhance the integrity and security of priority sites' control systems by installing technologies and systems to provide visibility and detection of threats and abnormalities in industrial control and operational technology systems.

To further secure the Nation's electric grid, the Department is developing recommendations to strengthen requirements and capabilities for supply chain risk management practices by the Nation's electric utilities. These recommendations are intended to enable an approach that builds on, clarifies, and, where appropriate, modifies prior executive and agency actions.

E.O. 13920, *Securing the United States Bulk-Power System*,² issued on May 1, 2020, authorized the Secretary of Energy (Secretary) to work with Federal partners and the energy industry to take actions to secure the Nation's bulk-power system (BPS). Most significantly, E.O. 13920 authorized the Secretary to prohibit the acquisition, transfer, or installation of certain BPS electric equipment sourced from foreign adversary countries.³ Informed by a July 8, 2020 request for information on implementation of E.O. 13920,⁴ on December 17, 2020, the

¹ Executive Order 14017, *America's Supply Chains*, 86 FR 11849 (Mar. 1, 2021).

² Executive Order 13920, *Securing the United States Bulk-Power System*, 85 FR 26595 (May 4, 2020).

³ *Id.* at 26595-26596.

⁴ *Securing the United States Bulk-Power System: Request for Information*, 85 FR 41023 (July 8, 2020).

Secretary issued a Prohibition Order invoking the authority of E.O. 13920 (December 2020 Prohibition Order).⁵ Pursuant to the December 2020 Prohibition Order, a limited number of utilities⁶ were prohibited from acquiring, importing, transferring, or installing certain BPS electric equipment.⁷ That order targeted select equipment manufactured or supplied by persons owned by, controlled by, or subject to the jurisdiction or direction of the People’s Republic of China.⁸

On January 20, 2021, Executive Order 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, was issued, which suspended E.O. 13920 for 90 days.⁹ As the December 2020 Prohibition Order is predicated on the authorities delegated to DOE by E.O. 13920, the Prohibition Order was also suspended during this same time period. The E.O. 13920 suspension has expired and effective April 20, 2021, the Secretary revoked the December 2020 Prohibition Order to allow for the Department to conduct this Request for Information to develop a strengthened approach to address the supply chain security of the U.S. electricity subsector.

E.O. 13990 also directed the Secretary and the OMB Director to “jointly consider whether to recommend that a replacement order be issued.”¹⁰ In the process of developing such recommendations, the Department identified opportunities to strengthen protections against high-

⁵ Prohibition Order Securing Critical Defense Facilities, 86 FR 533 (Jan. 6, 2021).

⁶ The December 2020 Prohibition Order defined “Responsible Utility” as “an electric utility that owns or operates Defense Critical Electric Infrastructure (DCEI), as defined by section 215A(a)(4) of the Federal Power Act (FPA), that actively serves a CDF, as designated by the Secretary under section 215A(c) of the FPA.” *Id.* at 534.

⁷ *Id.*

⁸ *Id.*

⁹ Executive Order 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, 86 FR 7037, 7042 (Jan. 25, 2021).

¹⁰ *Id.*

risk electric equipment transactions, while providing additional certainty to the utility industry and the public.

To ensure that the Department's considerations for a replacement Executive Order appropriately balance national security, economic, and administrability considerations, the Department is seeking information from electric utilities, academia, research laboratories, government agencies, and other stakeholders.

Adversarial nation-state actors are targeting our critical infrastructure, with increasing focus on the energy sector. For example, the government of People's Republic of China is equipped and actively planning to undermine the electric power system in the United States. The growing prevalence of essential electric system equipment being sourced from China presents a significant threat, as Chinese law provides opportunities for China to identify and exploit vulnerabilities in Chinese-manufactured or supplied equipment that are used in U.S. critical infrastructure that rely on these sources. Accordingly, the Department expects that, during the period of time in which further recommendations are being developed, utilities will seek to act in a way that minimizes the risk of installing electric equipment and programmable components that are subject to foreign adversaries' ownership, control, or influence.

II. Request for Information

Based on the Department's experience implementing E.O. 13920 and feedback from stakeholders, the Department seeks additional public input on several issues set forth below. Please carefully read Section III of this RFI regarding the public nature of submissions. As explained in detail, any information that you do not want to be publicly viewable should not be included in your comment, nor in any document attached to your

comment. Instructions regarding how to provide Confidential Business Information are also provided. To the extent possible, please reference the question being addressed in your response. Respondents are not required to address all questions.

A. Development of a Long-Term Strategy

While immediate security concerns associated with foreign ownership and control may be addressed through time-limited emergency authorities, addressing pervasive and ongoing grid security risks requires a comprehensive long-term strategy. The Department is interested in recommendations for how to best exercise its role as the Sector Risk Management Agency to inform and coordinate with the utility industry and appropriate regulators at all levels of government, including state Public Utility Commissions and the Federal Energy Regulatory Commission (FERC), to ensure their procurement practices and requirements evolve to match changes in the threat landscape and best protect critical infrastructure. The Department is also interested in how to enable better testing of critical grid equipment, encourage better procurement and risk management practices, and develop a strong domestic manufacturing base with high levels of security and resilience. Attention is also needed to the challenge of how to mitigate the risks associated with potentially compromised grid equipment that is already installed on the system, along with the potential costs and benefits of addressing such equipment. The Department also recognizes innovative approaches will be needed to thwart continually evolving threats.

1. What technical assistance would States, Indian Tribes, or units of local government need to enhance their security efforts relative to the electric system?

2. What specific additional actions could be taken by regulators to address the security of critical electric infrastructure and the incorporation of criteria for evaluating foreign ownership, control, and influence into supply chain risk management, and how can the Department of Energy best inform those actions?
3. What actions can the Department take to facilitate responsible and effective procurement practices by the private sector? What are the potential costs and benefits of those actions?
4. Are there particular criteria the Department could issue to inform utility procurement policies, state requirements, or FERC mandatory reliability standards to mitigate foreign ownership, control, and influence risks?

B. Prohibition Authority

Immediate threats to the Nation’s electric grid must be addressed. By declaring a national emergency under the International Emergency Economic Powers Act in E.O. 13920, the President authorized the Secretary to prohibit the acquisition, transfer, or installation of certain bulk-power system equipment sourced from foreign adversary countries. The December 2020 Prohibition Order applied to utilities that own or operate Defense Critical Electric Infrastructure (DCEI), as defined by section 215A(a)(4) of the Federal Power Act (FPA), that actively serves a “critical defense facility (CDF)”, as designated by the Secretary under section 215A(c) of the FPA, at a service voltage of 69 kilovolts and above, from the point of electrical interconnection

with the CDF up to and including the next “upstream” transmission substation (Responsible Utilities).¹¹

Due to the interconnected nature of the U.S. transmission and distribution networks across the U.S., the Department is requesting comment on the advisability and feasibility of an expanded approach that would cover distribution facilities that serve CDFs.

Additionally, while threats to electric equipment serving CDFs pose a unique national security risk, the electric system serves numerous types of critical infrastructure and enable the national critical functions.¹² Prohibition of the installation of at-risk electric equipment that serves any critical infrastructure facility may further enhance the Nation’s national and economic security.

1. To ensure the national security, should the Secretary seek to issue a Prohibition Order or other action that applies to equipment installed on parts of the electric distribution system, i.e., distribution equipment and facilities?

2. In addition to DCEI, should the Secretary seek to issue a Prohibition Order or other action that covers electric infrastructure serving other critical infrastructure sectors including communications, emergency services, healthcare and public health, information technology, and transportation systems?

¹¹ See December 2020 Prohibition Order, *supra* note 4.

¹² “National Critical Functions’ means the functions of government and the private sector so vital to the United States that their disruption, corruption, or dysfunction would have a debilitating effect on security, national economic security, national public health or safety, or any combination thereof.” Executive Order 13865, Coordinating National Resilience to Electromagnetic Pulses, 84 FR 12041 (Mar. 29, 2019).

3. In addition to critical infrastructure, should the Secretary seek to issue a Prohibition Order or other action that covers electric infrastructure enabling the national critical functions?
4. Are utilities sufficiently able to identify critical infrastructure within their service territory that would enable compliance with such requirements?

III. Submission of Comments

DOE invites all interested parties to submit in writing by **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, comments and information on matters addressed in this RFI.

Submitting comments via email or postal mail. If you do not want your personal contact information to be publicly viewable, do not include it in your comment or any accompanying documents. Instead, provide your contact information on a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. The cover letter will not be publicly viewable as long as it does not include any comments.

Include contact information each time you submit comments, data, documents, and other information to DOE.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format. Provide documents that are not secured, are written in English, and are free of any defects or viruses. Documents should not contain special characters or any form of encryption and, if possible, they should carry the electronic signature of the author.

Campaign form letters. Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

Confidential Business Information. According to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email two well-marked copies: one copy of the document marked confidential including all the information believed to be confidential, and one copy of the document marked “non-confidential” with the information believed to be confidential deleted. Submit these documents via email. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

It is DOE's policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

Signing Authority

This document of the Department of Energy was signed on April 19, 2021, by Patricia A. Hoffman, Acting Assistant Secretary, Office of Electricity, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document on publication in the *Federal Register*.

Signed in Washington, DC, on April 19, 2021.

Patricia A. Hoffman
Acting Assistant Secretary
Office of Electricity