Executive Order on Securing the United States Bulk-Power System

Frequently Asked Questions

May 2020

Why this Executive Order and why now?

The bulk-power system is the backbone of our Nation's energy infrastructure. It is fundamental to not only national security, but to the American economy and our way of life. The 2019 Worldwide Threat Assessment[1] and the 2020-2022 National Counterintelligence Strategy[2] describe in detail the threat our foreign adversaries pose to our critical infrastructure and the importance of energy to the United States. Accordingly, it is imperative we work quickly to protect the U.S. bulk-power system from potential devastation.

What specific threat examples can you provide?

The Ukraine power grid attack is one such example. On December 23, 2015, attackers remotely accessed the control centers of three Ukrainian electricity distribution companies, which gave the attackers access to the centers' control systems. Ultimately, the attackers were able to manipulate breakers at roughly 30 distribution substations, resulting in approximately 225,000 customers losing power for between one and six hours.[3] The attackers also used malware to erase selected files and corrupt the master boot record, rendering some of the utilities' systems

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[1] Office of the Director of National Intelligence, Statement for the Record: Worldwide Threat Assessment of the US Intelligence Community, (Jan. 29, 2019), https://www.dni.gov/files/ODNI/documents/2019-ATA-SFR---SSCI.pdf.

[2] National Counterintelligence and Security Center, National Counterintelligence Strategy of the United States of America 2020-2022 (Jan. 7, 2020), https://www.dni.gov/files/NCSC/documents/features/20200205-National_CI_Strategy_2020_2022.pdf.

[3] Department of Homeland Security Cybersecurity and Infrastructure Agency, *ICS Alert (IR-ALERT-H-16-056-01): Cyber-Attack Against Ukrainian Critical Infrastructure*, last revised Aug. 23, 2018, available at https://www.us-cert.gov/ics/alerts/IR-ALERT-H-16-056-01; Kim Zetter, "Inside the Cunning, Unprecedented Hack of Ukraine's Power Grid," Wired, Mar. 3, 2016, available at https://www.wired.com/2016/03/inside-cunning-unprecedented-hack-ukraines-power-grid/.

inoperable.[4] While power was restored relatively quickly, all of the affected utilities were still running on constrained operations as of August 2018.[5]

Why was the Department of Energy made the lead agency?
The Department of Energy is the sector-specific agency for the energy sector and it owns and operates a significant portion of the bulk-power system's transmission assets (and markets power using these assets) through three of the four Power Marketing Administrations—the Bonneville Power Administration, the Western Area Power Administration, and the Southwestern Power Administration.[6] The Department of Energy also draws on extensive expertise, both through decades of research and development, as well as membership in the Intelligence Community, to identify risks to the bulk-power system and craft solutions to manage those risks.

What statutory authorities will the Department of Energy rely upon to carry out the duties in the Executive Order?
The President declared a national emergency with respect to the threat to the bulk-power system, using the powers vested in him in the International Emergency Economic Powers Act (50 U.S.C. 1701 *et seq.*) and the National Emergencies Act (50 U.S.C. 1601 *et seq.*). Pursuant to Section 301 of title 3, United States Code the President is authorized to delegate any function vested in him by law to department and agency heads.

What steps should stakeholders take in the coming days and weeks as the Department of Energy works to implement the Executive Order?
Stakeholders do not need to take immediate steps at this time. The Executive Order is focused on ensuring the national security of critical infrastructure within the United States' bulk-power system, which is just a portion of the country's entire energy infrastructure. Further, before DOE could prohibit actions involving the equipment identified in the Executive Order, there would need to be a nexus between a foreign adversary and an undue risk to the BPS, critical infrastructure, the economy, the security and safety of Americans, or national security. Thus, for many stakeholders, there will be no impact. And even for affected stakeholders, DOE will consider procedures for mitigation measures that may allow for the use of equipment that would otherwise be prohibited.

What actions do stakeholders need to take regarding equipment listed in the Executive Order that is already in the bulk-power system? In other words, is this a "rip and replace" directive?
As of today, no equipment is prohibited. The Executive Order is focused on ensuring the national security of critical infrastructure within the United States' bulk-power system, which is just a portion of the country's entire energy infrastructure. As such, any immediate steps by owners or operators would not only be premature, but may be unnecessary.

How does this Executive Order impact federal procurement?
To protect and enhance the security of the Nation's bulk-power system, the Executive Order established a *Task Force on Federal Energy Infrastructure Procurement Policies Related to National Security*. The Task Force will develop recommendations on energy infrastructure

[4] Ibid.
[5] Ibid.
[6] Presidential Policy Directive – Critical Infrastructure Security and Resilience, (Feb. 12, 2013), https://obamawhitehouse.archives.gov/the-press-office/2013/02/12/presidential-policy-directive-critical-infrastructure-security-and-resil.

procurement policies to ensure national security considerations are fully integrated into government energy security and cybersecurity policymaking. The Federal Acquisition Regulatory (FAR) Council shall consider proposing an amendment to the applicable provisions in the FAR based on recommendations from the Task Force.

What organizations are part of the Task Force on Federal Energy Infrastructure Procurement Policies Related to National Security? Will there be industry involvement?
As the task force relates to federal procurement policies, it includes the heads of several federal agencies, specifically the Departments of Energy (Chair), Defense, Homeland Security, Interior, Commerce, the Director of National Intelligence, the Director of the Office of Management and Budget, and any other agency head that the Chair may designate after consultation with the Departments of Defense and Interior. Given the implications that changes to federal procurement policies related to the bulk-power system may have on the private sector, and recognizing that stakeholders and industry may begin to revise their own procurement policies, the task force will coordinate closely with both the Electricity Subsector and Oil and Natural Gas Subsector Coordinating Councils.

What type of, if any, generation is covered by the Executive Order?
The Executive Order covers "bulk-power system electric equipment," which, as a defined term, includes equipment used in bulk-power system substations, control rooms, or power generating facilities owned or operated by public- and private-sector entities.

Why was 69-kV selected as the delineation between transmission and distribution for the purposes of the Executive Order rather than the more traditional 110-kV?
For the purposes of this Executive Order, transmission lines rated at 69-kilovolts (69-kV) or more are included, and facilities used in the local distribution of electric energy are excluded. Distribution line voltage typically does not exceed 69-kV in the United States; the Executive Order's definition is designed to cover transmission lines including those operating in the lower voltage range of 69-kV to 110-kV. The Department's Power Marketing Administrations, as well as some smaller utilities, utilize 69-kV lines for transmission.

While the focus of the Executive Order seems to be on transmission and generation, the definition of bulk-power system electricity systems includes distribution side equipment terms such as "metering." Does this Executive Order have a hard jurisdictional "stop" at all electrical equipment below 69-kV?
The Executive Order delineates over 20 bulk-power system components to which the Executive Order specifically applies. The items not included in the list and that have broader application of use beyond the bulk-power system are outside the scope of the order.

How far down does the Executive Order go regarding bulk-power system equipment; does it apply down to the component level?
The Secretary of Energy, in consultation with the Secretary of Defense, Secretary of Homeland Security, the Director of National Intelligence, and the heads of other agencies as appropriate, will propose rules and regulations to carry out the authorities contained within the Executive Order. During the rulemaking process, the Department of Energy will work closely with stakeholders to further clarify the equipment covered by the Executive Order.

What if the manufacturer is an American subsidiary of a company based in a non-foreign adversary country? For a foreign adversary country?
The Secretary of Energy, in consultation with the Secretary of Defense, Secretary of Homeland Security, the Director of National Intelligence, and the heads of other agencies as appropriate,

will propose rules and regulations to carry out the authorities contained within the Executive Order. During the rulemaking process, the Department of Energy will work closely with stakeholders to address this issue.

Does the Executive Order apply to an American-owned and -operated company domestically manufacturing electrical products with components from foreign suppliers? If so, is there a percentage content threshold or specific components that are not allowed?
The Secretary of Energy, in consultation with the Secretary of Defense, Secretary of Homeland Security, the Director of National Intelligence, and the heads of other agencies as appropriate, will propose rules and regulations to carry out the authorities contained within the Executive Order. During the rulemaking process, the Department of Energy will work closely with stakeholders to address this issue.

How will the Department of Energy define a "pre-qualified" vendor?
This process will be established in the Department of Energy rulemaking.

With respect to Section 1(b) of the Executive Order, what sort of measures can be designed to mitigate concerns resultant from Section 1(a)? May these measures be taken in order to include vendors on the pre-qualified vendor list who would otherwise be ineligible?
Examples of mitigation measures may include testing components and addressing vulnerabilities or inspecting manufacturing plants. Such measures may be used as a pre-condition to allow a transaction (or class of transactions) that otherwise would have been prohibited.

Will Power Marketing Administration (PMA) customers see higher rates due to any changes in PMA bulk-power system procurement policies?
Not necessarily. While Federal procurement policies currently award contracts to the lowest-cost bidder, the Executive Order does not prohibit the PMAs from continuing to do so if done in compliance with the Executive Order. Further, procedures for mitigation measures may be adopted in the Executive Order's rules and regulations that would allow for transactions to occur that would otherwise be prohibited. Additionally, the potential for new manufacturers to enter the market as a result of this Executive Order could potentially lower procurement costs due to increased competition.

Given their explicit mention, what role will the Electricity Subsector Coordinating Council (ESCC) and the Oil and Natural Gas Subsector Coordinating Council (ONGSCC) play in implementation of the Executive Order?
The Task Force on Federal Energy Infrastructure Procurement Policies Related to National Security created by the Executive Order will focus on Federal energy infrastructure procurement policies. The task force will consult with the ESCC and ONGSCC to conduct evaluations and develop recommendations to improve these policies.

Will the Department of Energy's National Laboratories be involved in the implementation of this Executive Order?
Yes, the National Laboratories will be important partners for implementing many aspects of this Executive Order, including supply chain testing and evaluation.

How does this Executive Order compare to the May 2019 Executive Order 13873, Securing the Information and Communications Technology and Services Supply Chain? Is there any overlap? How will DOE work with the Department of Homeland Security?

This Executive Order covers bulk-power system electrical equipment, not information technology equipment. However, both Executive Orders cover control systems, e.g., supervisory control and data acquisition (SCADA) systems. The Department of Energy will work closely with Departments of Homeland Security and Commerce during implementation of this Executive Order to ensure consistency with and avoid any duplication of Executive Order 13873.

Will funding will be required to implement this Executive Order?
Yes, funding will be required for the Task Force on Federal Energy Infrastructure Procurement Policies Related to National Security, supply chain testing and evaluation, and identifying pre-qualified equipment and vendors.

What impact will this Executive Order have on the adoption of renewable energy in the United States?
Renewables play a very important role in the country's energy infrastructure and the Administration supports an "all of the above" approach to generation. This Executive Order applies only to the bulk-power system, which would include electric energy from generation facilities needed to maintain transmission reliability.

The Department of Commerce recently launched a Section 232 investigation into transformers and related components. How is the Department of Energy involved?
The Department is currently working with the Department of Commerce's Bureau of Industry and Security at the leadership and staff levels to avoid duplication of effort as well as for each organization to leverage the work of the other.