



August 19, 2020

U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585

Regarding: BCSE Response to the Request for Information regarding Executive Order 13920 issued  
May 1, 2020, *Securing the United States Bulk-Power System*

On behalf of the [Business Council for Sustainable Energy](#) (BCSE), the coalition appreciates the opportunity to respond to the Request for Information (RFI) related to Executive Order 13920 signed on May 1, 2020, *Securing the United States Bulk-Power System* (BPS).

The BCSE is a coalition of companies and trade associations from the energy efficiency, natural gas and renewable energy sectors. Its members include investor-owned utilities, public power, independent power producers, project developers, equipment manufacturers, and environmental and energy market service providers. Established in 1992, the Council advocates for policies that expand the use of commercially available clean energy technologies, products and services to ensure a reliable, secure and sustainable energy system. Please see the BCSE's current membership list [here](#).

The Council appreciates the intent of the *Securing the United States Bulk-Power System Executive Order* and the federal government's interest in maintaining a safe and secure bulk power system. Our review of the Executive Order has raised questions about its scope and implementation process. The RFI is helpful in that it provides clarification in a number of areas, but concern remains that the Executive Order creates substantial uncertainty in the sector due to its potentially far-reaching implications. Without timely clarifications, the Executive Order could result in delay or cancellation of equipment orders as well impede investment in energy projects and infrastructure.

Please see several areas of interest to the BCSE below. Again, thank you for the opportunity to respond to the RFI.

Sincerely,

Lisa Jacobson  
President

**Business Council for Sustainable Energy's Response to the RFI regarding  
Executive Order 13920, Securing the United States Bulk-Power System**

August 19, 2020

The Business Council for Sustainable Energy is pleased to share the following feedback on the RFI related to Executive Order 13920, *Securing the United States Bulk-Power System (BPS)*.

**BCSE Observations and Recommendations:**

- **The U.S. Department of Energy (DOE) should encourage flexibility when implementing the BPS Executive Order (EO):** DOE should allow for differences within supply chains among the industry. Specifically, generation of older technology vintages (like hydroelectric plants) have limited number of suppliers and any mitigation protocols of existing equipment should include options beyond replacement. In addition, DOE should consider impacts on smaller equipment vendors who focus on unique and out of production components.
- **DOE should clearly define and appropriately prioritize equipment:**
  - The EO is creating significant uncertainty and therefore, equipment that is covered and is not covered by the EO should be clearly defined. While the EO does include definitions of bulk-power system electric equipment and configurations in Sections 4(a) and 4(b), the EO leaves open a wide range of potentially covered equipment that may ultimately be included in compliance requirements The EO defines BPS electric equipment under the broad category of “items used in bulk-power system substations, control rooms, or power generating stations.” While the EO states, “items not included in the preceding list and that have broader application of use beyond the bulk-power system are outside the scope of this order,” little clarity remains as to how DOE will make such a determination. This approach imposes significant regulatory uncertainty and cost of compliance on U.S. businesses.
    - The consequence of a broad definition of included items and ambiguous definition of excluded items is that businesses will seek to reduce risk by presuming that all potentially eligible equipment is included in the compliance requirements until DOE explicitly determines what equipment is excluded.
  - The DOE, in implementation of the EO, should develop a phased approach where the highest-risk equipment is addressed first. Further, DOE should assign risk levels of the equipment at the point of assembly. DOE should also take into consideration the time needed to replace high-risk equipment as well as the capacity of the suppliers.
- **DOE should create clear and specific rules to determine what “compound” BPS electric equipment is included in the compliance requirements implemented pursuant to the EO:** BPS electric technologies, even if well-defined in regulatory language, vary significantly in the extent to which they integrate multiple technologies. “Compound” technologies, for example, may incorporate multiple types of hardware and may or may not include electronics components that are programmable. For example, a battery energy storage installation connected to the BPS can include battery cells, battery management systems, power control systems, and thermal management systems within integrated units. Compound BPS electric equipment can have various components sourced from different countries, and these specific components do not necessarily reflect vulnerabilities of the fully operational unit. To continue the example, battery cells lack any communications capability and are used widely beyond just BPS energy storage installations, and battery management systems include only sensors and slave controllers incapable of function without external instructions. These components do not present the vulnerabilities that, for example, power control systems with integrated software may confer.

- To ensure that compliance requirements are commensurate with BPS electric equipment vulnerabilities, the level of integration for compound equipment triggering compliance must be clearly identified for the purposes of identifying risks of importation from a designated foreign adversary. Industry strongly recommends that DOE clearly identify such levels. For example, battery packs used in BPS battery energy storage facilities contain only battery cells, battery management systems and physical enclosures, and so do not present vulnerabilities that the EO is concerned with.
- **DOE should implement the BPS EO equitably across all major players:** Any rules adopted by the EO should be applied equitably among impacted entities, including the Power Marketing Administrations, the transmission owners, the utilities, and the merchant generators.
- **DOE should utilize existing standards and protocols to ensure efficient and transparent implementation of the EO:** The RFI asks several questions around vendor practices regarding enterprise risk management, cybersecurity, and supply chain risk management. As a general matter, many of the BCSE member companies have robust practices in these areas and leverage existing international/national standards and best practices as a guide. Some examples include: NIST Framework for Critical Infrastructure Protection (overall enterprise risk management); ISO 27000 and IEC 62443 suites of standards and NIST SP 800-171 (cybersecurity); and NIST SP 800-161 (supply chain risk management).
- **Overall context of EO implementation:** The EO can be viewed as intended to maximize the newest U.S. technologies to compensate for deficiencies of technologies or over reliance on foreign-. This context should orient DOE's implementation of the EO.

#### Areas Needing Additional Clarification

- **What information is sought in the areas of foreign ownership, control, and influence (FOCI):** FOCI mitigation describes a series of actions, processes, and policies that a non-U.S. entity deploys to mitigate potential foreign ownership when such entity does business with certain federal agencies. The RFI asks how vendors mitigate and assess FOCI within their suppliers (e.g., section A-2 of the RFI). It would be helpful to better understand the specific information DOE seeks in this area.
- **Request for additional time to reply to questions on the economic impact of the EO:** Understanding that full scope of the products that will be involved in the pre-qualification process (i.e., those that will be pre-qualified and those that won't) or the details of the ongoing risk identification/mitigation process that was alluded to in the EO (aka "rip and replace" orders), the industry cannot provide a full assessment of the economic impact of the EO. Industry requests the opportunity to reply to these questions at a later date.
- **What are the implications for natural gas systems:** While this EO was issued as a bulk power system security order will this extend to equipment and control systems that move natural gas across the U.S.?
- **What are the implications for military onsite generation:** The EO specifically states this is intended as a cyber security concern and for bulk power operating at 69 kVA and above. Many of the military bases, federal facilities, hospitals and research universities have their own onsite generation that is operating at distribution levels well below the 69 kVA voltage. Will the EO apply to these facilities?
- **The role of specific systems:** Uncertainty remains on the implications of the EO on "smart grid" sensors, controls, microgrids, artificial intelligence, that can compensate for deficiencies in discrete technologies and systems. These are sectors where the U.S. is a global leader.